“DOING WHAT NEEDS TO BE DONE”:

AN ETHNOGRAPHIC STUDY OF THE ROLES AND WORK

OF MONGOLIAN MEDICAL-SURGICAL WARD NURSES

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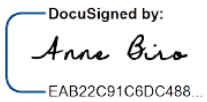
A thesis submitted in partial fulfilment of the Doctor of Philosophy degree

April 2021

Declaration

I declare that this dissertation is my own work and that it has not been submitted in whole or part for any other degree application.

Signed: 

Dated: 9 April 2021

Word Count: 78,584

Acknowledgements

This dissertation would not have been possible without a large community of family, friends, and colleagues from around the world who have supported, encouraged, and shared their lives with me from my childhood to adult years. I am thankful for each one of you.

I am grateful to the Mongolian nurses and hospital directors who allowed me to conduct research in their hospitals. The openness of Mongolian nurses to let me observe them as they went about their daily work, and their patience and graciousness with me as I shadowed them and asked a multitude of questions made this research possible. I have been inspired by the dedication and hard work of nurses in serving the Mongolian people in their times of need.

I am grateful to my supervisors, Professor Wilfred McSherry and Professor Peter Kevern, who I greatly respect for their academic excellence, professionalism, and kindness. Your guidance was invaluable, and I have learned much through you.

There are many who have been directly engaged with me throughout the different phases of the research and contributed in unofficial ways:

- To my Mongolian nursing friends: Your willingness to listen, gently correct my misunderstandings, and share your experiences has contributed greatly to this thesis. A special thank you to the three nurses who diligently read my findings and provided feedback that helped to refine the dissertation.
- To those who prayed and encouraged me on what seemed like a long journey: Your perseverance and support helped to keep me going.
- To my parents whose love and support have nurtured me: I am grateful for the opportunities you provided that shaped my life and career.
- To my husband who has always been supportive of me in my work and spent endless hours listening and discussing this research with me: I am thankful for your partnership, sacrifice, and love.
- To God the creator and source of all knowledge – I'm thankful for the gifts of curiosity and wonder, and the opportunity to discover and write about it.

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List of Abbreviations

(Alphabetical Order)

ADB	Asia Development Bank
AN	Assistant Nurse
BID	Twice daily
CA	Care Attendant (‘*caxuyp’*, usually a volunteer family member)
EHR	Electronic Health Record
ICN	International Council of Nurses
ID	Intradermal
IM	Intramuscular
IV	Intravenous
MD	Medical Doctor, Physician
Med	Medication
MNUMS	Mongolian National University of Medical Sciences
MOH	Ministry of Health (Mongolia)
NMDS	Nursing Minimum Data Set
NSO	National Statistical Office (Mongolia)
OR	Operating Room
PPE	Personal Protective Equipment
PRN	As needed (“pro re nata”)
QID	Four times daily
RN	Registered Nurse (nursing diploma or nursing bachelor’s degree)
SC	Subcutaneous
TID	Thrice daily
WHO	World Health Organization

Notes on Terms and Formats

- Names used in this thesis are all fictional and were created from either Mongolian or Latin names for plants and birds indigenous to Mongolia.
- Different terms are used in this thesis to describe the work of Mongolian nurses which include responsibilities, work, activities, tasks, and scope of practice. Although it can be argued that there are differences in meaning and usage, the use of multiple terms was chosen as there are aspects in each of these terms that are relevant, even though they are not fully explored in this work.
- The term ‘medical-surgical’ in this thesis refers to medical, surgical, or a combination of medical and surgical as it relates to nurses’ areas of specialty or as it refers to the type of hospital ward. Medical-surgical wards in this thesis are considered as acute care wards.
- The term ‘nurses’ is normally used in this thesis as it relates to registered (licensed) acute care nurses working on medical and surgical wards. While assistant nurses (ANs) are recognized members of the nursing team, in this thesis, the primary focus is on registered (licensed) nurses.
- The term ‘ward’ is used to refer to inpatient units. Use of the term ‘ward’ was chosen to differentiate it from ‘department’ or ‘unit’ as the latter two terms often include ambulatory services which were not a part of this research.
- The term ‘nursing post’ is used in this thesis to refer to the central area where ward nurses do their administrative work. It is termed a ‘post’ because this word closely approximates the Mongolian term ‘Пост’. Examples of similar terms used in other countries include ‘nursing station’ or ‘nursing unit desk’.
- Fieldnote and interview transcript excerpts are indented and single-spaced. Fieldnotes are in normal font and interviews are in italics.
- In quotes from transcripts, three dots after a phrase indicates that some words have been left out of the original transcript for the purpose of clarity or for excluding reflective notes as written verbatim in fieldnote transcripts. Square brackets within quotations are used to explicate implied conversation consistent with original transcripts.
- Occasionally words or phrases written in the Mongolian language using Mongolian Cyrillic script are included. These are either italicized in quotation marks or bracketed with square brackets.

Abstract

Purpose: The purpose of this research is to identify the roles and work activities of nurses working in Mongolian public hospitals and to compare it to what is known about nurses' work in other countries in order to inform policy and service development within the Mongolian health system.

Design: An ethnographic methodology, viewed through the lens of critical realism, was used to develop a description of medical and surgical ward nursing in public hospitals in Mongolia.

Procedure: 208 hours of participant observation and 9 semi-structured interviews were used to generate data from one medical ward in a secondary level care hospital and a medical and a surgical ward at a tertiary level care hospital in Ulaanbaatar. Constant comparison was used to identify activities nurses do and the roles they fulfill. To facilitate comparison with findings from other countries, an integrative literature review was undertaken to identify nursing work activities from an international perspective.

Findings: A model of Acute Care Nursing Work was developed that describes the work of medical and surgical ward nurses according to three core nursing functions: patient care, ward functioning, and professionalism. While these core functions are present both internationally and in Mongolia, Mongolian nursing was assessed as having more ward functioning activities than in many other countries.

Conclusions: Medical-surgical nurses on Mongolian public hospital wards are responsible not only for patient care, but for ensuring the ward functions in a way that meets patient needs. While some of these expectations have their roots in the Soviet model of nursing on which Mongolian nursing was founded, many work activities are the pragmatic result of nurses doing what needs to be done to facilitate the carrying out of doctors' orders. As many of nursing's roles and work activities are shaped not only by nursing policies and practices, but by medical practices, hospital funding, staff-mix, and government leadership, proposed changes to nurses' work should done in concert with government, education, and health sectors. The Model of Acute Care Nursing Work can help with assessment and understanding of the roles and work activities of nurses and the factors that influence it.

Chapter 1: Introduction

Background to the Research

In 2010 I attended an international nursing conference with two nursing colleagues from Mongolia. Although they had studied some English, it was not enough to understand the proceedings which were in English. As a result, I helped with translation from English into Mongolian. In the process, I realized that literal translation did not always convey the intent of the speaker. When a nurse from one country talked about specific clinical skills, procedures, or the workplace environment, the details of what nurses did was assumed to be understood. Yet, having lived in both Canada and Mongolia, I knew that differences existed. While sometimes these differences were not important to the point being made, there were other times when the context needed to be described so that my Mongolian colleagues could better understand the intention of the speaker.

The benefit of understanding differences and similarities in nursing roles and responsibilities is not limited to Mongolians nurses attending international meetings. Local and foreign educators, consultants, and policy makers can also benefit from a deeper understanding of nursing work in Mongolia. A colleague from North America recently taught an advanced nursing course in Mongolia. After she finished, she commented that she wished she had been better prepared to address the local context. She realized that she had taught the course according to North American worldviews and nursing norms. As a result, she felt she had not been able to teach in a way that was relevant and useful for Mongolian nurses. As a nurse with experience teaching at the university level and as someone who has lived and worked as a nurse in more than one country, I echo my colleague's desire to have sufficient understanding of local nursing practice in order to minimize assumptions and provide more relevant contributions and realistic expectations for teaching and consultations.

Having a good understanding of the local reality is not only beneficial for foreigners coming to Mongolia, but also for local policy makers, administrators, and

educators. In 2012, following consultations with Mongolians and foreigners, the Mongolian Ministry of Health developed job descriptions for various types of nurses as part of an initiative to scale-up the work of nurses. However, as one Mongolian medical administrator told me in 2017, the impression by many is that there has been little change in the day-to-day work and attitudes of nurses. Initially it was assumed that lack of significant change in the nursing profession was due to power issues, with physicians holding most of the power. However, as time has gone on, she told me that some people wonder if the problem lies with nurses themselves and a lack of interest in changing.

My interest in developing an in-depth understanding of the work of Mongolian nurses has therefore evolved over time. Conversations with Mongolian nurses, doctors, and the average citizen have left me with the impression that nursing in Mongolia is different from what I experienced in Canada. What I identified as the responsibility of the nurse was often considered in Mongolia to be the role of the doctor, e.g., patient and family teaching, and what I considered to be the role of a hospital pharmacy technician, e.g., distributing medications to the ward, was often work done by nurses. In the early 2000s, I was surprised that most of the nursing instructors I met in Mongolia were physicians or scientists with doctorates (e.g., physiology) rather than nurses. Social esteem for nursing as a profession seemed lower in Mongolia than in Canada as nursing was seldom a first-choice career. When I asked nurses and nursing students why they chose nursing, the majority said they had wanted to become a doctor but because of low academic grades or lack of finances they had settled for nursing.

When discussing this research interest with a Mongolian doctor, she commented that such research would be helpful as she and others were stymied as to why nursing practice didn't seem to be advancing to the level of nursing in western countries. For these reasons, I have set out to provide a rich description of the work of Mongolian nurses. It is my hope that these detailed descriptions will contribute to a better understanding of what nurses do and the context in which nursing occurs, so that people

can better communicate and work with Mongolian nurses in meaningful ways – whether they are foreigners or Mongolians, nurses or non-nurses.

Outline of the Thesis

This thesis is comprised of 8 chapters. This introductory chapter (Chapter 1) provides reasons for why this research was undertaken and outlines each of the subsequent chapters contained within the thesis. A literature review that gives an overview of the context of Mongolian nursing, specifically the historical development of nursing, the Mongolian health system, and dominant Mongolian worldviews comprises Chapter 2. In the summary of Chapter 2, rationale is given for the importance of studying Mongolian nursing practice and the purpose for this research is stated. The three research objectives that guided the research are identified at the end of this chapter.

Chapter 3 describes the research methodology and process. Reasons for selecting ethnography are described in light of conclusions from Chapters 1 and 2: (i) Mongolian nursing may be different because of unique influences in its development as a profession, (ii) there is a paucity of published research on the work of Mongolian nurses, and (iii) an observational, ethnographic approach may be helpful in addressing some of the limitations of quantitative research, including the use of self-report, that to date has been the primary research approach in Mongolia. Descriptions of the research process include philosophical underpinnings, ethical considerations, translation issues, methods, analysis, and rigor.

The findings from field observations and interviews are presented in Chapters 4 and 5. These findings correspond to the first research objective. Chapter 4 describes the participants and setting. Chapter 5 is the longest of all the chapters as it contains detailed descriptions of the work of Mongolian medical-surgical nurses and presents a list of nursing roles as conceptualized from the nursing activities described in Chapter 4 and Chapter 5.

Chapter 6 reports the findings from an integrative review and an analysis of Mongolian medical-surgical job descriptions. The purpose of the integrative review was to find descriptions of nursing in other countries that could be compared to the findings presented in Chapters 4 and 5. The integrative review findings are central to the comparative analysis on similarities and differences in the work of Mongolian and international nurses discussed in Chapter 7. An analysis of the Mongolian Ministry of Health's medical and surgical ward nurse job descriptions is reported in the final section of Chapter 6.

Research findings are discussed in Chapter 7. The discussion is organized according to (1) differences and similarities between the ethnographic findings and findings from the integrative literature review and job descriptions and (2) factors that impact the work of Mongolian nurses. The Model of Acute Care Nursing Work initially conceptualized in Chapter 6 is further developed and discussed in this chapter, with a focus on explanations for differences in nursing practice between Mongolia and other countries.

Chapter 8 is the final chapter. It begins with a summary of how the research objectives were met. Key implications and recommendations of the research findings relevant to nursing and the Mongolian healthcare system are highlighted. Limitations of this research are identified along with recommendations for future research. The chapter finishes with concluding thoughts on the outcomes of the research. Supporting documents are included in the appendices.

Chapter 2: Historical Overview of Mongolian Nursing

Introduction

To understand nursing in Mongolia today, it is helpful to know about Mongolia's historical roots of nursing and healthcare, as well as its more recent socio-political history. History shapes people's worldviews, values, and traditions. History gives us an understanding of how nursing has developed and can provide insights into current contexts (Fealy 2004). This section includes an overview of history as it relates to the development of nursing and nursing education in Mongolia, descriptors of the current health system, and a brief summary of dominant religious worldviews. There is a significant amount of Mongolian history that can be explored for how it has influenced Mongolian society, however, this overview of Mongolian history only covers 100 years as these are the years since nursing was first introduced into Mongolia.

Nursing as a Political Mandate

Nursing as a distinct occupation[1] was first introduced into Mongolia in the 1920s (Dashnyam 2012). Because of the need to treat war casualties during Mongolia's fight for independence from China, the newly established government of Mongolia requested Russia's help with the setting up of military hospitals, including the recruitment of doctors and nurses. Thus, the nursing profession in Mongolia was initially established through government mandates during a time of political upheaval. Since this time, the government of Mongolia has been primarily responsible for nursing regulation, governance, and education (WHO 2013a).

[1] The Mongolian term used to describe a person's occupation is '*мэрэгжил'*. Unlike the terms used in English, Mongolians do not use terms that distinguish between an occupation, vocation, or profession. However, Mongolians differentiate between high, mid, and low-level occupations with nursing categorized as 'mid-level'. A description of mid-level occupations is provided later in this chapter.

Prior to the establishment of the military hospital in 1923, healthcare had been provided by Buddhist lamas, shamans, and traditional healers (Rossabi 2005, Academy of Sciences 1990). Although the change to a biomedical model of healthcare in Mongolia took root in the 1920s, the introduction of non-traditional ways of healing had begun at the turn of the 20th century. This was during a time of political upheaval beginning in the early 1900s when the Chinese Manchu dynasty which had ruled Mongolia since 1691 collapsed, and Mongolia declared its independence in December 1911 (Buuma 2001). However, this independence was short-lived and a new government in China declared Mongolia to be a Chinese territory (Buuma 2001). As Mongolians did not have the military capability to resist, and as there was no political support for Mongolia from other nations, a treaty was signed in 1915, recognizing Mongolia as an autonomous region of China (Buuma 2001).

During this period, healthcare from non-traditional sources was introduced to Mongolians. Dr. Lee, a Korean medical doctor trained in a western medical school in Korea, worked to decrease communicable diseases in Mongolia from 1914 until his death in 1921 (Taejun Lee Memorial Park 2001). In 1919, the Scandinavian Mission opened a small, charitable medical clinic in the capital city of Mongolia (Tiedeman 2016). However, traditional medicine was still dominant and well entrenched in society. Thus, the main clients of the Scandinavian mission clinic were the poor because they did not have sufficient funds to pay the fees charged by Buddhist lamas (Kemp 2000). However, once the Mongolian government began receiving support from the Soviets, the shift from traditional medicine to a Soviet model of medicine happened relatively quickly (Bekker 1992). It was in this political context that nursing as a profession was first introduced into Mongolia.

In 1921, after a joint Mongolian-Russian Bolshevik army obtained power in 1921 and re-claimed Mongolia as an independent nation (Academy of Sciences 1990), one of the first initiatives of the government was to provide medical services for the military. In

August 1921 the government issued an order (Government Order #5) inviting Russian physicians to come to Mongolia (MNUMS 2014). In October 1922, a clinic was set up and staffed by the Russian physician, Dr. Shastin and in 1923, the government advisory council issued Order #719 for the building of a military hospital (Dashnyam 2012, Mongolian Nursing Association 2016, MNUMS 2014). The first Mongolian nurses were recruited to work with the doctors staffing these facilities.

Following the death in 1924 of Mongolia's religious-political leader, the Bogd Khan, the Soviet model of healthcare became increasingly entrenched in Mongolian politics and society. The Bolshevik-dominated Mongolian government forced the Swedish clinic to close and evicted the missionaries (Kemp 2000). The government also increased political opposition to traditional religious medical practitioners. In 1926 several Buddhist lamas who practiced Tibetan medicine were retrained in the biomedical model (MNUMS 2016, Jerryson 2007). However, during Mongolia's political purges from the 1930s-1950s, most lamas were executed or went into hiding (Jerryson 2007). As a result of an anti-religious stance taken by the government, most shamans and traditional healers either retreated to remote areas of Mongolia or stopped their practices (Bekker 1992). Shamanism was eventually banned in the 1940s during a period in which communist policies controlled almost every aspect of Mongolian society (Becker 1992).

The first nurses who were recruited in 1923 to work in the Russian-led clinics were young, literate, unmarried males and females (Mongolian Nursing Association 2016). They received on-the-job training from Russian medical doctors. However, it was soon recognized that nurses were not only needed for treatment of ill and injured military personnel, but also to address significant public health needs. During the first part of the century, there were reports of widespread sexually transmitted infections, as well as high rates of tuberculosis, tetanus, smallpox, rabies, and the bubonic plague (Montagu 1956). In 1914, Russians estimated the Mongolian mortality rate for infants under the age of 3 was approximately 48%, and in 1928 the Soviets reported the Mongolian infant mortality

rate was 44.5% (Montagu 1956). To help address the problem of communicable diseases, a six-month health sanitation programme was developed and produced four graduates. These graduates functioned as nurses who were trained to administer vaccinations and to give basic health information for mothers and children (MNUMS 2016).

Nursing Education

The first public hospital opened in Mongolia's capital city in 1925 and was called the 'Citizens' Hospital' (Academy of Sciences 1990). To meet the growing need for nurses, in 1926 the government ordered the establishment of a formal nurse training programme (MNUMS 2016, MNUMS 2014). According to records from the Mongolian National University of Medical Sciences (MNUMS), the duration of the first nursing course was two years and 20 students were enrolled (MNUMS 2014). The nursing instructors were Russian physicians. This nursing education programme was modeled on the Soviet system of nursing; a system that was developed and overseen by medical doctors (Murray 2004). In 1931, the government of Mongolia changed the name of the nursing course to 'Medical Technician' and it was offered through the Hospital Patient Technician School along with the 'Little Doctor' [бага эмч] programme (Mongolian Nursing Association 2016). Since then, the names of the nursing programme and the institution in which it is situated has changed several times, including recent changes that saw the programme name changed in 2011 (Health Technology School) and again in 2013 (Nursing School). Nursing branch schools were also set up in some rural provinces.

When a medical programme to train doctors was introduced in 1942, it was created as a branch of the Mongolian State University (MNUMS 2016). In 1961, the medical school was separated from the Mongolian State University. The medical school was granted university status and the nursing programme became a branch within it (Montagu 1956). Anecdotal information from Mongolian contacts suggest that it was

common for people to be allocated to occupational programmes based on school grades. If one had high grades, one could take medical training to become a doctor. After the quota for doctors was filled, the group with the next highest grades enrolled in ‘Little Doctor’ training, and those with lower grades entered nursing.

In 1967, the government of Mongolia renamed the nursing programme, calling it the ‘Technical Nursing School’ (MNUMS 2016). The programme was again renamed in 1972 as the ‘Specialized Secondary School for Nurse Training’ (MNUMS 2016). In 1985, the nursing programme was made independent from the medical programme and a separate institution was created (MNUMS 2016). Students could choose between general nursing and pediatric nursing, and either a 2-year certificate or a 3-year diploma. During the 1980s, as the medical profession began to branch into specialties, the number of nursing specialties also expanded, some of which included surgical, pediatric, breastfeeding, rehabilitation, and equipment sterilization (Mongolian Nursing Association 2016).

In 1997 a medical science college was created as a branch of the medical university and the nursing programme was moved back under the medical university (MNUMS 2016). At the time of this research, the nursing programme was a branch of the Mongolian National University of Medical Sciences (MNUMS) and called the ‘School of Nursing’. The School of Nursing has 11 different programmes for mid-level professions including nursing, midwifery, physical therapy, and laboratory, dental, and pharmacy technicians. Mid-level health professions, also referred to as paramedical professions, was a term used by the Russians (Academy of Sciences 1990) whose influence continues to permeate Mongolia’s health and educational systems. Mid-level professions are considered more technical than theory-based and therefore taught at college or vocational schools rather than at universities (NORRIC 2005).

When Mongolia became a member of the United Nations in 1961, it created opportunities for Mongolian medical professionals to be supported through the WHO

(Mongolian Nursing Association 2016). Most of the international trainings and exchanges were with other communist or socialist countries. Mongolian medical doctors who had responsibility for training Mongolian nurses were sent for further education primarily in socialist countries within the Soviet sphere of influence. One exception to this was an early director of the Mongolian nursing school who received training in India (Mongolian Nursing Association 2016).

In the mid-1960s, nursing instructors from Poland came to Mongolia to assist with revising the Mongolian nursing curriculum (Mongolian Nursing Association 2016). In the late 1960s, the WHO facilitated a 10-year project for Mongolian nursing instructors to receive further training in Poland (MNUMS 2016). In 1969, a 2-year nursing instructor programme was initiated in Mongolia, with medical doctors recruited to teach nurses. Many of these advances were made with the support of the World Health Organization as part of their mandate to promote international health and provide technical advice for strengthening national health systems (WHO 2020a).

In 1990, Mongolia changed from a communist form of government to a democratic republic and adopted a market economy. These changes resulted in significant restructuring of the health system and a review of human resources (WHO 2012). A Bachelor of Nursing degree programme was started in 1993 (Mongolian Nursing Association 2016). In 1998, nurses began studying at the Masters degree level (MNUMS 2016). In 2001, the government ordered a revision of the nursing curriculum and nursing leaders were recruited to be the first students in a new post-RN degree programme (Mongolian Nursing Association 2016). Although the Mongolian National University of Medical Sciences started a PhD program in 2004 that nurses could enroll in, the curriculum was medically focused. At the time of writing this thesis, work is underway to develop a nursing PhD program (Dr. Wonhee Lee, personal communication, 3 December 2019).

As Mongolia increasingly opened its doors to non-communist countries in the early-mid 2000s, foreign nurses began coming to Mongolia to assist in teaching nursing, teaching English, and providing consultation for nursing curricula and policies (Mongolian Nursing Association 2016). Numerous international collaborations with a variety of countries have taken place for the purpose of exchanges, joint research, training, and conferences (MNUMS 2020). Nursing education programmes are no longer the sole domain of the national university as private universities and colleges began their own nursing programmes (MNUMS 2016). As part of professional development, nursing instructors (both medical doctors and nurses) have taken courses on nursing management and leadership (Mongolian Nursing Association 2016). The number of nurses with post-graduate degrees has risen since the early 2000s and as a result, the numbers of nurses hired as nursing faculty has also increased. However, at the time of this research, senior administrative positions such as the heads of nursing branch schools were usually still held by medical doctors.

Nursing and Mongolia's Health System

In the early years following Mongolia's independence from China, Mongolia adopted the centrally administered Semashko model of healthcare as originally conceived in communist Russia (World Bank 2007). In this model, the national government took responsibility for the organization and financing of the health system. The Semashko model was a multi-tiered system with a focus on disease prevention (WHO 2013b, World Bank 2007). Medical services across the country were organized at administrative levels of state (uls), provincial (aimag), district (soum), and micro-district (bagh), resulting in an extensive network of hospitals and clinics. Today, the provincial and urban district hospitals are considered as secondary level facilities, while national hospitals are tertiary level facilities. Many of the public hospitals constructed during the communist era are still in use today. In the early years, running water and electricity were not widely available, especially in the rural areas. Most facilities have since undergone

renovations and have regular access to electricity, water, and sanitation. However, some of the rural baghs (outposts) still don't have running water.

Montagu (1956) recorded that in 1951 there were significantly more nurses than doctors working at each of the three levels, especially at the bagh centres. Senior healthcare providers at the soum clinics/hospitals were medical assistants ('*бага эмч*' /'little doctors'). Medical doctors were the senior staff at 48 designated medical points across the nation and worked primarily in the provincial (aimag) and national (uls) hospitals (Montagu 1956).

The early focus on disease prevention helped to rapidly improve the health of the population through vaccinations and other health promotion activities (Dashnyam 2012). Nurses would have been expected to reinforce the extensive health promotion media campaigns promoting lifestyles to decrease sexually transmitted diseases and tuberculosis, improve hygiene, and increase the number of hospital births (Montagu 1956). Local clinics at the bagh and soum level, provided immunization and basic screening, health promotion, and antenatal and postnatal visits (WHO 2012). Outpatient clinics, often adjacent to a hospital, provided ambulatory services and referrals to hospitals (WHO 2013).

Health services in the capital city (urban) and in the rest of the country (rural) were administered separately. When someone in a rural area required hospitalization, they were referred to the district or inter-district hospital (soum) or the provincial hospital (aimag). If a person required hospitalization in Ulaanbaatar for a standard or simple condition, they were sent to the district level hospital (duureg). If they required more specialized, tertiary level care, they were referred to one of the national hospitals [uls] (WHO 2012). The primary, secondary, and tertiary levels for medical care are still in place today, although many Mongolians try to bypass the primary level and go directly to hospitals and specialists (WHO 2012).

When newer, more expensive medical technologies began to proliferate in the 1970s, the Semashko model no longer met the needs of Mongolia (WHO 2013). Public demand for new technology increased and there was a corresponding shift away from primary care services to care by specialists. In 1990, following the adoption of democracy and transition to a market economy, it became evident that the Semashko model was not sustainable (WHO 2013a). Mongolia received assistance from the Asia Development Bank for health system reforms and in 1994 the country adopted a national insurance programme. Mongolians were required to make regular contributions to receive healthcare services for free at the primary level, while having to pay a portion of costs at the secondary and tertiary levels (WHO 2012, World Bank 2007). According to the World Bank, even with a co-pay system, Mongolia spent about 75% of all health expenditures on hospital care (World Bank 2007). This is reflective of the high value Mongolians place on hospital care.

Prior to 1990, the Mongolian health system was highly centralized. As part of health system restructuring since 1990, decentralization to local governments occurred and decision making at the national level was divided among various government ministries and departments (WHO 2013). At times, this decentralization has made it challenging for policy development and implementation (World Bank 2007).

The number of hospital beds per 1,000 people has decreased from 11.5 in 1991 to 8.0 in 2017 (The World Bank 2020). Simultaneously there has also been a proliferation in the number of private hospitals and clinics. In 2017 there were 240 private hospitals with beds and 85 public hospitals in Mongolia (ADB 2018). Despite the increase in numbers of private hospitals, public hospitals continue to provide the majority of inpatient care as private hospitals account for only 24.1% of all hospital beds in Mongolia (ADB 2018).

When nursing was first introduced in the 20th century, infectious disease and treatment of war injuries were the primary health issues. However, non-communicable

diseases are now the primary cause of death in Mongolia, with cardiovascular disease and cancer being the leading causes (Figure 1) (NSO 2021). Respiratory and gastrointestinal disorders are the leading causes of morbidity (ADB 2018).

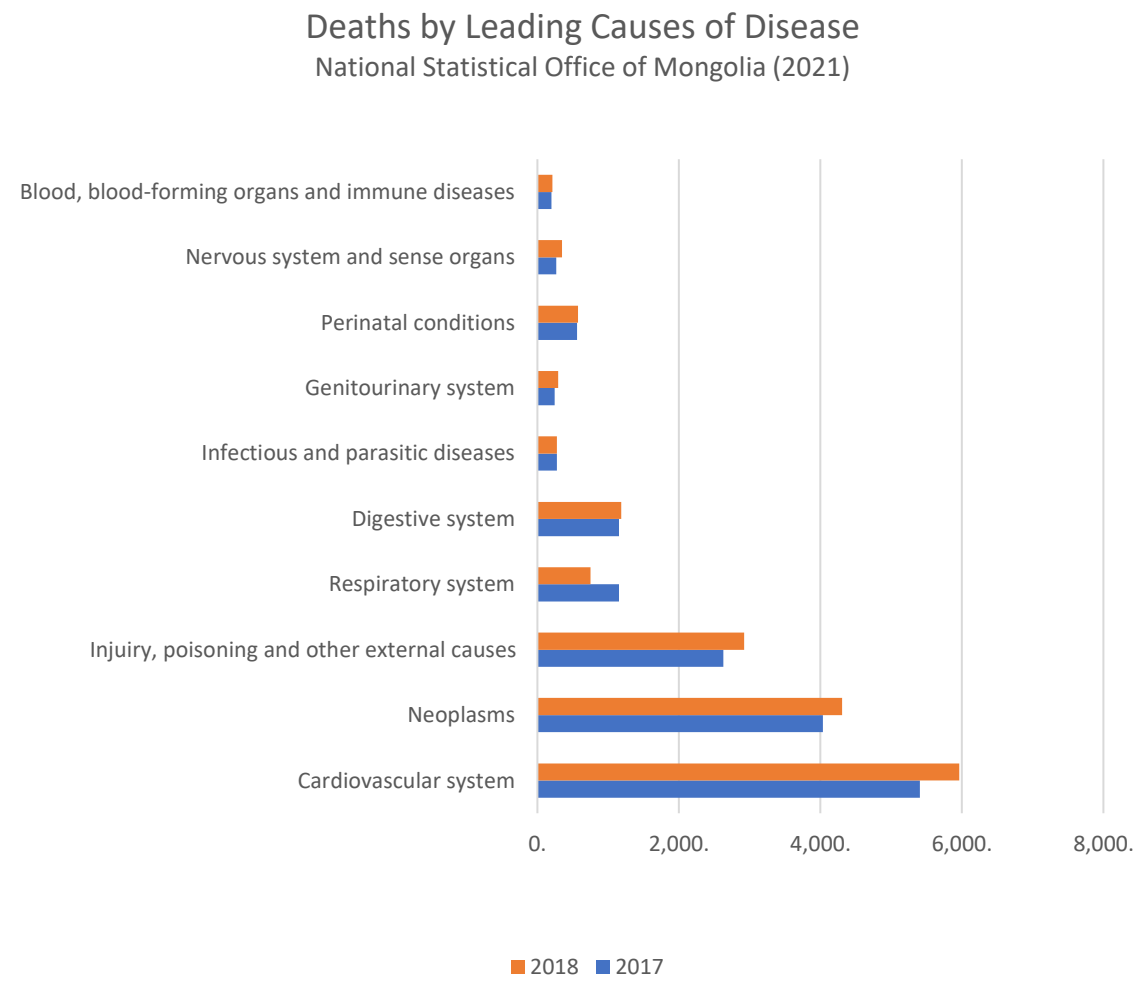

Figure 1. Leading Causes of Morbidity

Reflecting a young population where only 62% of the population are aged 19 and above, with an average life expectancy of 70 years (NSO 2021) and consistent with disease patterns noted above, most nurses are employed in adult medical and surgical nursing, or in pediatrics (Figure 2).

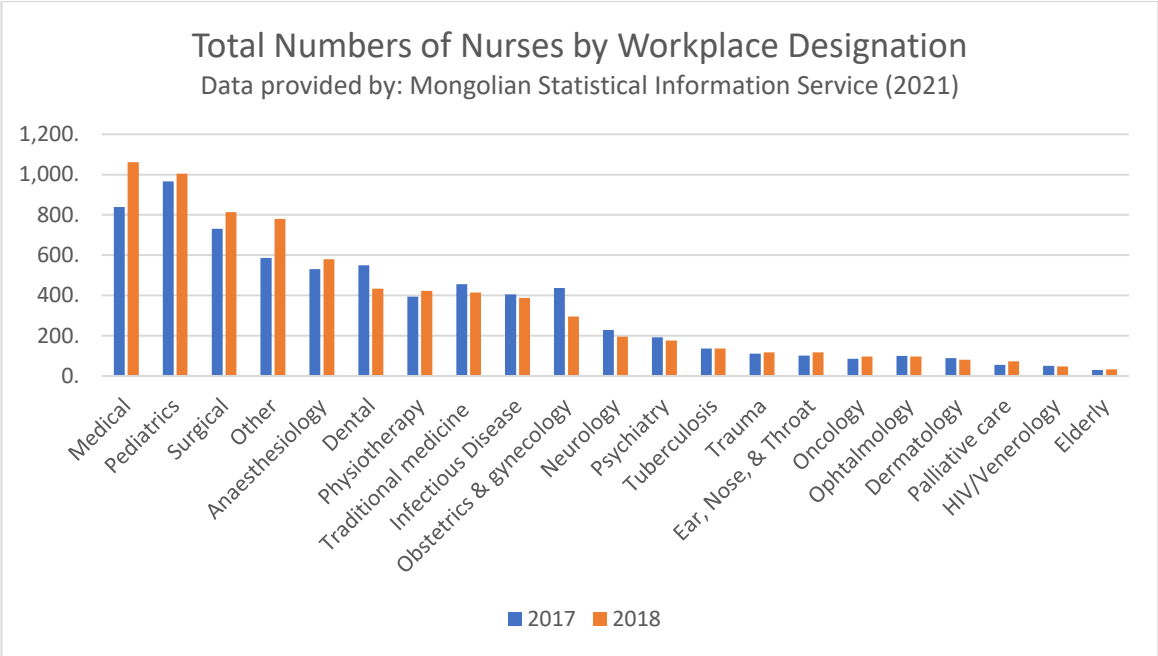

Figure 2. Nursing Workplaces According to Specialty

In 2017, in the capital city of Ulaanbaatar where I conducted my research, the average length of stay in a secondary (district) level public hospital was 6.7 days and 8.6 days in a tertiary level public hospital (Center for Health Development 2018). Almost half of the Mongolian population resides in Ulaanbaatar (NSO 2021). In 2018, almost 2/3 of all doctors (61.7%) were in the capital city, with a ratio of 208 people/physician, while the ratio per nurse in Ulaanbaatar is almost the same at 218 people/nurse (NSO 2021). The similar proportions of doctors and nurses in urban areas (Figure 3) may result in task allocations different from other countries where trends of task-shifting from doctors and other healthcare workers to nurses has been observed (Grosso et al. 2019).

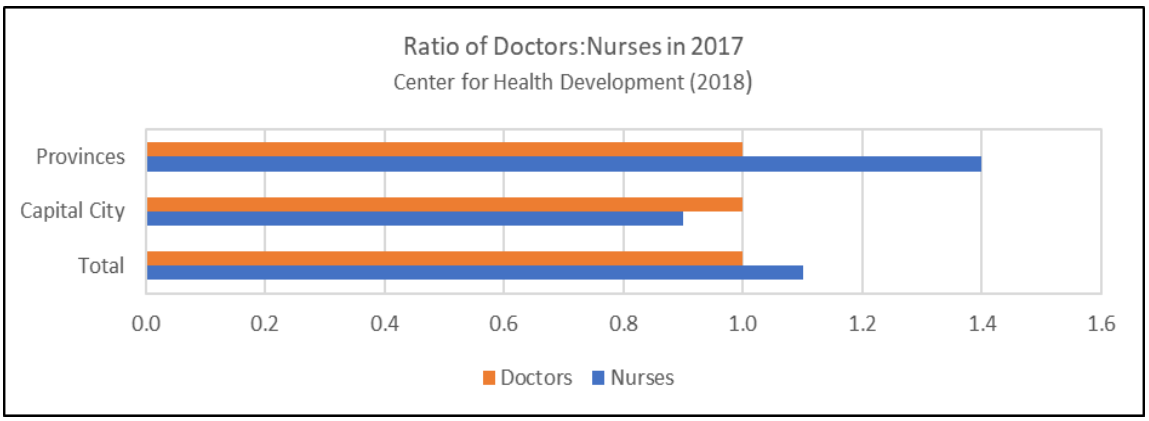

Figure 3. Ratio of Doctors to Nurses

Mongolia has a high number of healthcare workers in comparison to countries also ranked as lower-middle income countries (Center for Health Development 2018, WHO 2012, World Bank 2021). For every 10,000 people there is an average of 32.4 doctors and 37.2 nurses, while in Ulaanbaatar the numbers are 42.2 and 41.6 respectively (ADB 2018). In countries with high-income economies such as the U.K. and Canada, the ratio of doctors to 10,000 people is 28.2 and 24.1 respectively, while the ratio of nurses to 10,000 people is 78.6 in the U.K. and 77.4 in Canada (Nuffield Trust 2019, Canadian Institute for Health Information, 2020). Both the nursing and medical profession in Mongolia are female dominated with 97.2% of nurses and 76.8% of physicians identifying as female (Center for Health Development 2018).

The nursing profession is regulated by the Mongolian government rather than being a self-regulating professional organization as is the model in many western nations. One nurse is appointed as an officer in the Ministry of Health and works under the direction of a physician in the Medical Services division. A non-governmental organization, the Mongolian Nursing Association, serves as an advisory body and is recognized by the International Council of Nurses as the official representative of Mongolian nurses (International Council of Nurses, 2021). In 2012, the Mongolian Ministry of Health ordered the adoption of new job descriptions that outlined the responsibilities of nurses and their employers (Order #183) and a career development pathway for nurses (Order #168). At the time of this thesis, there was no known assessment as to how reflective these job descriptions were to current nursing practice.

In the hospitals, there are usually two nursing shifts: an 8-hour day shift and a 16-hour night shift (Damiran 2014). In some hospitals, there are also 24-hours shifts. (See Ch.4, pp. 68-69.) Nursing workload is considered heavy with many nurses working unpaid overtime (Bagaajav et al. 2011). It is not uncommon for a nurse on day shift to have responsibility for 15-25 patients, while a night shift nurse can have a significantly

higher patient load (Damiran 2014). In one study, 80.6% nurses described their main work as giving injectable medications (Nemekhee 2014).

For nurses who are the sole income earners in their families, the Mongolian nursing salary is often insufficient to cover expenses. In 2017-2018, when I was conducting field observations, the average full-time ward nurse's gross salary was less than Tg480,000/month (less than GBP £150/month). This was about 50% of the average Mongolian household earning (NSO 2018). In contrast, nurses in the UK and Canada earned approximately the same as the average national wage in their respective countries. Purchasing power parity (PPP) is another measure that has been advocated as a better way to compare wages as it accounts for cost of living. According to PPP, Mongolians have a significantly lower standard of living than in the UK or Canada. Appendix 1 (p. 306) shows this data in table format and includes citation of sources.

Basic nursing workforce indicators are published by the Mongolian government and international organizations such as the WHO and World Bank. However, accessing research on Mongolian nursing is challenging. At the beginning of 2021, there were no nursing journals included in Mongolia's scientific community's online journal listings (www.mongoliajol) and only 6 abstracts for nursing theses had been entered into the national database (Science and Technology Foundation, 2017). While major libraries in Mongolia are cataloguing their holdings electronically, according to the Mongolian Library Association, none of the catalogues are linked together (D. Myagmar, personal communication, 12 January 2021). Smaller libraries, including libraries at hospitals are not well developed. Thus, there is no comprehensive listing of Mongolian publications or authors. Nursing research is presented at conferences as posters and papers. Nursing research is also published as articles in some of the non-catalogued Mongolian nursing or hospital journals and conference proceedings, many of which are only available in hardcopy.

Mongolian World Views on Healthcare and Illness

During the 70 years of communism, an atheistic worldview guided the development of the Mongolian health system. There was clear separation between what was considered secular and religious. Healthcare was viewed as non-religious. Some of this mindset remains, as spiritual or pastoral care services are not permitted in healthcare facilities. However, personal religious beliefs influence how nurses view their role as they work and interact in the healthcare setting (Van Leeuwen, Tiesinga et al. 2006) and religious worldviews can also impact how patients view their illness and interact with nurses and other caregivers.

Fifty-five percent of Mongolians self-identify as Buddhist (PEW Research Center 2016), however Shamanism (3.5%) (PEW Research Center 2016) also has a significant influence as Mongolian Buddhism has been heavily influenced by Shamanism (Jerryson 2007). Even among the 35% of Mongolians who do not affiliate with a specific religion (PEW Research Center 2016), many are still influenced by the Mongolian Buddhist and Shamanist culture present since the 1200s. As beliefs and worldviews tend to influence people's behaviours – whether they are patients or healthcare providers, atheist or theist, a summary of the dominant Mongolian worldviews is warranted.

Prior to modern medicine, health and healing in Mongolia was closely associated with religious beliefs and practices. In Mongolia, animistic worship has existed as far back as recorded history. Mongolian's great leader Chinggis Khan (sometimes written as 'Genghis Khan') worshiped the 'god of the sky' and acknowledged the presence of many other spirits (Onon 2001). Today, a term commonly used to describe this ancient religion is 'Shamanism'[2]. In Mongolia's Shamanistic society, bonesetters and midwives had healing roles and provided complementary services to the shamans (Humphrey 1995).

[2] Note: Some Mongolians believe that the ancient form of religion is more accurately called Tengrism or 'worship of the Sky God' rather than Shamanism.

The shamans believed that the spirit world had a direct influence on a person's life and health, thus the role of the shaman was often one of mediating with the spirits either to advocate healing or to inflict trouble. Shamanism dominated the political, social, and religious life of Mongolians up until the mid-1200s when Buddhism began to make inroads. When Mongolia decided to adopt Buddhism as a national religion, they did so with the expectation that Buddhism would incorporate traditional Mongolian beliefs and Shamanistic practices (Kemp 2000).

Mongolian Buddhism stems from the Tibetan Buddhist tradition, also referred to as the Vajrayana tradition (Jerryson 2007). Buddhist lamas practice Tibetan medicine which is based on Ayuverdic medicine that uses naturally occurring herbs, oils, and plants as well as lifestyle interventions to help rebalance the body and spirit (Sharav 2012, John Hopkins Medicine 2020). Although Mongolian Buddhism is placed within the Tibetan Buddhist tradition, it is unique as Mongolian Buddhist beliefs incorporate many beliefs from Shamanism (Jerryson 2007).

Rituals are important and many Mongolian Buddhists will wear amulets or strings for protection from evil influences and spirits[3]. The advice of a lama is sought to determine which days are favorable for doing things, including which days are better for a person to die. Many people believe in the predictive power of words and are thus sometimes reluctant to give or receive a negative diagnosis or prognosis. Instead, many people will speak positively with the hope that good things will result.

Understanding some of the Mongolian Buddhist beliefs and practices are important as some Mongolian patients use Ayuverdic treatments alongside western medicine. Sensitivity to superstitious beliefs in Mongolian Buddhism often results in

[3] The statements in this paragraph and the following paragraph are summaries from observations and conversations that have taken place over a period of 15 years since I first came to Mongolia. Field observations and discussions from this research are also reflected in these statements.

nurses, doctors, and family members being reluctant to communicate poor prognoses to patients because of the belief in the predictive power of words. In addition, the concept of spiritual care as understood in western contexts would be perceived differently in the Mongolian Buddhist worldview.

Although the majority of Mongolians hold to some type of religious belief, the constitution of Mongolia has a policy of separation of religion and state, with health, education, and business sectors prohibited from engaging in religious activities. Jerryson (2007) attributes the policy of separation of state and religion as a desire to prevent political leadership by religious authorities. This results in the continuation of the atheistic tradition on which Mongolia's health system and nursing educational programmes were developed and it means that spiritual care, as conceived and practiced in other countries, is not recognized as part of nursing care in Mongolia.

Summary and Statement of Purpose for Research

Nursing in Mongolia was first developed in the 1920s during the communist era and closely followed the Soviet model of nursing both in its organization and in its atheist, non-religious approach to health and healing. In this system, nursing was designated as a mid-level profession. Regulation of nurses' work and education was the role of the Mongolian government. For most of nursing's history in Mongolia, nurses have been supervised and taught by physicians. Nursing was largely considered to be a technical role with much of the learning occurring through memorization. A core function of the hospital nurse was to implement doctors' treatment orders. As doctors' orders were primarily prescriptions for injectable medications, most Mongolians, including nurses themselves, still think of nurses' work as primarily giving injections (Luvsantsend 2016, Nemekhee 2014).

Due to Mongolia's relatively remote, land-locked geographical location between Russia and China, influences from non-communist countries were minimal during the

first 50 years of Mongolian nursing. With the change of government in 1990, Mongolia became a social democracy and adopted a market economy. This had a profound impact as Mongolia was introduced to models of nursing and nursing education from a wider variety of nations. Since 1990, the health system was restructured and there have been many international aid and development projects to improve healthcare delivery and education. Baccalaureate, Masters, and PhD programmes for nurses were introduced and there is a transition from physicians teaching nurses to nurses teaching nurses. Nursing job descriptions and career pathways have been updated at the national level. In many hospitals, the nursing department has been separated from the medical department to increase the autonomy of nurses.

Even with these changes, Mongolia's health system still retains influences from the communist era. Mongolia has a large network of hospitals. The ratio of Mongolian doctors to nurses is 1:1.1 (ADB 2018) which differs significantly from the average ratio of 1:2.8 among OECD nations or 1:3.9 in Canada (OECD 2017). Mongolia has a high ratio of hospital beds for its population (8 beds/1,000 population as compared with 2.5 beds/1,000 population in the U.K. and Canada) (The World Bank 2020). There is a high consumption of antibiotics, many of which are prescribed as injectables in the hospital setting (WHO 2018). As a mid-level profession, nursing salaries are relatively low (Abramov 2016). Most nurses are enrolled in diploma rather than degree programmes and are functionally unilingual, limiting access to knowledge available in languages other than Mongolian. At the time of this research, the senior administrators for nursing education programs were most often physicians.

WHO has stated that the working conditions of nurses in Mongolia are difficult (WHO 2013) however, descriptions were not provided on the working conditions and responsibilities of nurses. Nurses have reported high workloads and one research study found that nurses were highly overcommitted (Bagaajav et al. 2011). Research from other countries suggests that overwork can contribute to nursing turnover and

subsequent nursing shortages (Tourangeau et al. 2010). In addition, high workloads are associated with missed care which can negatively impact patient care (Kalisch, Landstrom and Hinshaw 2009). Therefore, research that identifies details of Mongolian nursing work and the environment in which it occurs can provide insights helpful for addressing high workloads and overcommitment.

With the development of nursing education in Mongolia, there has been an increase in research on Mongolian nursing through the work of nursing graduate students. While increasing the opportunity to gain insight into the working conditions of nurses, evaluation and access to this research is challenging as there are very few peer-reviewed articles on Mongolian nursing that have been published in international journals. Anecdotal reports from nursing faculty indicate that most Mongolian nursing researchers choose questions that are answered through quantitative methodologies, most often self-report. One of the limitations of self-report in Mongolia is a concern that the findings may not be representative of reality as Mongolia's worldview highly values honour and nurses may respond according to expectations rather than reality (Gaalan et al. 2019)

History and worldview shape nursing roles and activities (Fealy 2004). Mongolian nursing history is unique in that since it was first introduced almost 100 years ago, it has had three major influences. Mongolia's nursing education and services were established and developed during the era of Soviet communism. They were characterized by a lack of professional independence and a strong technical focus. Democracy and globalization that resulted in restructuring of the healthcare system and brought about changes in nursing policies, practice, research, and education and is the second major influence. The third influence, Mongolia's traditional cultural and religious worldviews, has unique aspects that may result in nurses having beliefs and behaviours that differ from nurses in countries with different worldviews.

While acknowledging these unique influences on nursing's development, there is little known about the actual work of Mongolian nurses. Research is therefore needed to develop a better understanding of the roles and work responsibilities of Mongolian nurses and the ways in which Mongolian nursing might be unique. As most Mongolian nurses work in public, acute care hospitals on medical and surgical wards, and as the majority of patients are admitted to public hospitals (Center for Health Development 2018), research in this setting is an appropriate place to begin developing an understanding of the work of Mongolian nurses.

Therefore, the research question explored in this thesis is:

> 'What are the roles and work activities of Mongolian ward nurses working in acute-care public hospitals and the reasons they engage in these roles and activities?'

The specific research objectives are to:

1. Describe the roles and work-related activities of nurses working in medical-surgical wards in Mongolian public hospitals.
2. Compare the findings from Mongolia to research from other countries where the roles and work of nurses has been documented.
3. Propose reasons for differences found in acute-care ward nursing between Mongolia and other countries.

Chapter 3: Methodology

Introduction

In the previous chapter, an overview of the historical, political, and cultural background of Mongolian nursing was provided. Due to a paucity of peer-reviewed, published research on Mongolian nursing, exploratory research is needed that will result in a description of nursing as it is practiced in Mongolian hospitals. This type of description is important for informing Mongolian policy, service, and educational development. In this chapter, the methodology chosen to answer the research question will be described, including research assumptions, ethical considerations, research methods, and issues of rigor. Reasons for choosing ethnography as the research design are outlined and descriptions are provided for research methods used in data collection and analysis.

To answer the research question, '*What are the roles and work activities of Mongolian ward nurses working in acute-care public hospitals and the reasons they engage in these roles and activities?*', three research objectives were identified at the end of Chapter 2. The research methods used for each objective are outlined as follows:

- The methods for the first research objective are described in detail in this chapter.
- The second research objective was answered through two steps. First, an integrative literature review was undertaken to identify the roles and work activities of acute-care ward nurses from other countries. The methodology for the integrative review is detailed in Chapter 6. In the second step, findings from the integrative review were compared to findings from the first objective. The method used for comparing these two data sets is described in the data analysis section of this chapter.
- The third objective was met through synthesis of findings from the first two objectives with knowledge from nursing literature and is presented in Chapter 7.

Research Design

A qualitative design using ethnography was chosen to answer the research question as to the roles and work activities of Mongolian nurses and the reasons they engaged in these roles and activities. Qualitative designs are appropriate for exploring phenomena from the perspective of the people being studied (Beck 2016). A condensed summary of the goals for qualitative designs (Munhall 2007) indicate that ethnography is a good fit for answering the research question seeking to identify and describe the roles and work activities of Mongolian ward nurses (Table 1).

Table 1. Qualitative Research Designs

Research Design	**Goal**
Action Research	Investigate and solve problems/issues
Case Study	Understand a phenomenon within a specific context
Ethnography	Describe a culture including structure & function
Grounded Theory	Interpret and explain experiences
Narrative Inquiry	Describe how people make sense of their personal experiences
Phenomenology	Understand the meaning of experiences

An ethnography, broadly understood by the Greek root words of “ethno” (people/culture) and “graph” (writing), is a description of a culture (Wolf 2007). The culture in this research was that of medical and surgical ward nurses working on Mongolian acute-care wards in public hospitals. Medical and surgical ward nurses were selected as they make up the largest proportion of nurses working in any specialty area in Mongolia (see Figure 2, p. 18).

Ethnography is a valued methodology for nursing research of hospital wards as it results in rich descriptions of actions and behaviours that contribute to knowledge and understanding of what happens from both an insider and outsider perspective (Morse 2012, Morse 2016a). Ethnographic designs are important not only because of the insights they bring through descriptions of what and why things are done (which can also

be considered as a form of evaluation), but also because they identify phenomena useful for subsequent research which can contribute to development of theory and its applications (Morse 2016b).

In every culture, people have roles. Along with these roles are expectations for what each role entails, i.e., their scope. However, roles and expectations often vary between cultures. As outlined in the second chapter, the development of nursing in Mongolia has had unique influences that reflect Mongolia's political history, worldview, and geography. The choice of an ethnographic method provides an opportunity to both experience and record observations of nurses' work and roles in the clinical setting and to hear through formal and informal conversations how people in practice understand the work of the nurse (Wolf 2007).

Ontology

Ethnographic research first developed within the discipline of anthropology whereby researchers studied a foreign culture by living, observing, and interacting with people over time as they went about their daily lives (Brink 2016). This method results in an in-depth description of a culture, including the values and beliefs that influence behaviours (Higginbottom, Pillay and Boadu 2013). Ethnographers in the early 20th century presented their research through a philosophic lens that viewed research findings as objective descriptions of a universal reality (Hammersley and Atkinson 2007). However, critics argued that these findings did not fully represent reality because the researcher's own background influenced what was observed and how the findings were presented (Hammersley and Atkinson 2007). Since then, ethnographers have acknowledged the subjective and interpretive nature of both how people understand reality and of the research process itself (Hammersley and Atkinson 2007). Various philosophical positions have been taken by ethnographers ranging from belief in a universal and objective truth, to the belief that there is no absolute reality but only relative truth (Hammersely and Atkinson 2007).

This research was viewed from the philosophical perspective of critical realism whereby reality is understood as existing, although only partially perceived and experienced (Schiller, 2015). Roy Bhaskar, who advanced critical realism, described three layers of reality: (1) that which is real and which generates phenomena, regardless of whether or not it is perceived by humans, (2) that which is actual, meaning all events and phenomena that occur, and (3) that which is empirical and can be perceived and experienced by humans (Schiller, 2015). As the empirical is only a subset of the total reality, experiences and perspectives of reality are acknowledged as partial and sometimes distorted (Hammersley and Atkinson 2007).

Conducting ethnographic research on inpatient wards was important due to the belief that observing nurses in their natural setting, where they carry out their daily activities, contributes to a broader understanding of reality in that context than that of data solely collected in contrived arrangements (e.g., an interview room) (Hammersley and Atkinson 2007). However, as critical realism recognizes the subjective interpretation of people's perceptions of reality, including that of the researcher, obtaining people's perspectives through additional methods such as interviews and reflexivity is also important in the process of piecing together reality (Hammersley and Atkinson 2007).

Ethnographies are described as naturalistic, systematic, and interpretive (Wolf 2007) and therefore fit well when viewed through a critical realism lens. It is naturalistic in that the research takes place where people live out their daily lives and as such can be observed and experienced (Hammersley and Atkinson 2007). It is systematic in the methods used for collecting and analysing data. The interpretive aspect understands human actions as based on and permeated with socially and culturally constructed meanings (Hammersley and Atkinson 2007). Examples of socially constructed cultural understandings relevant to this research include the history of nursing in Mongolia,

dominant Mongolian worldviews, the structure of the Mongolian healthcare system, informants' perspectives, and the researcher's own perspectives.

Epistemology

The realist approach was advocated by Bhaskar and others for the study of social situations due to its acknowledgement of complex, open systems whereby phenomena are accepted as real although the causative factors of the phenomena (generative mechanisms) are not always predictable, controllable, or known (Williams et al., 2017). According to the realism lens, reality can be inferred both through observed events and through the experiences and the perceptions of participants (Hammersley and Atkinson 2007).

Streubert and Carpenter (2011) observed that in ethnography, the researcher and participants together construct meaning through an interactive process (Streubert and Carpenter 2011). In this approach, the researcher acknowledges that the outcomes of research, while capturing reality, will never fully capture truth. For example, material actions may have gone unnoticed by the researcher due to lack of awareness or because the researcher's presence on the ward changed the routine behaviours and actions of nurses. It is also possible that participants will tell the researcher what they want the researcher to hear or what they think the researcher wants to hear. Thus, while I[4] have attempted to construct a description that is reflective of the culture of ward nursing in Mongolia, there are undoubtedly some descriptors of actions, behaviours, and beliefs that are not included in my account or that could be perceived differently by others.

[4] Personal pronouns are sometimes used when referring to my role and decisions in this research.

Conducting cross-cultural research often highlights the subjective nature of reality perception as different cultures can view the same phenomena differently (Nesbitt, 2003). I was especially aware of this when my assumptions were challenged because of listening to Mongolian nurses and their interpretation of what they did, for example how and why nursing assessments were carried out. Alternately, in discussions with non-Mongolians, I realized they sometimes interpreted my descriptions in ways that were different to how I had interpreted them. For example, an action I perceived primarily as an adaptive nursing practice was perceived by some colleagues as primarily poor practice (e.g., repurposing a plastic bag as a hanging device for an IV bottle).

To address the inherent potential for incomplete or inaccurate social construction of descriptions of nursing work, Chapters 4 and 5 present significant amounts of details from the ethnographic findings with the intention that others can review the descriptions of observations and recorded words of participants, thus giving opportunity for alternative or additional interpretations. The process that invites reflection on the influence of one's background and the tensions between being both the researcher and a part of the group one is researching is called 'reflexivity' (Streubert and Carpenter 2011) and is further described in this chapter (pp. 40-44).

Different types of data were gathered and analysed resulting in findings consistent with Morse's view that ethnographic findings can be presented as material observations, interpretations, and explanations (Morse 2016b). Real-time, material observations and data such as the length of shifts, ratios of patients to nurses, and physical actions such as giving medication are examples of material observations. Participant and personal perceptions are examples of interpretations and explanations.

An interpretivist epistemology using symbolic interactionism was used to understand and categorize work activities according to their purpose and to develop

explanations for perceived differences between Mongolian nursing and nursing in other countries. Symbolic interactionism posits that people learn about and understand reality through interacting with other people (Streubert and Carpenter 2011). Thus, actions contain meaning (i.e., symbol) and knowledge is socially constructed (Hammersley and Atkinson 2007).

Symbolic interactionism as articulated by Blumer has three main assumptions about how knowledge is conveyed (Wuest 2007). The first is that people act based on the meanings they have developed of other people (Wuest 2007). For example, observing how patients and other health professionals interacted with nurses gave me insight into the meaning of the nursing role from the perspective of the nurses and from those with whom they interacted.

The second assumption is that meanings emerge through interacting with others (Wuest 2007). By interacting with nurses and participating in some of their work activities, it gave me deeper understanding of the experience of Mongolian ward nurses. Asking questions about what happened and why, as well as reading about Mongolian history and worldviews, are examples of how interacting with others contributed to my understanding. The third assumption is that meanings can be modified through an interpretive process for making sense of one's world (Wuest 2007). For example, my initial impression that nurses didn't do nursing assessments changed over time as I interacted with nurses and learned how they assessed patients. These examples illustrate how symbolic interactionism was key to the process of constructing descriptions of Mongolian nursing roles and activities.

Ethnographic Methods

Traditional ethnography is inductive in its approach (Roper and Shapira 2000). Researchers develop an in-depth understanding of the culture by participating in daily life, gradually piecing together a written description of what happens, how people make sense of it, and the characteristics of the context in which it occurs (Hammersley,

Atkinson 2007). However, with limits of time, money, and requirements of funding agencies, many ethnographers now use focused ethnographies which identify specific issues to be explored within a culture (Brink 2016). Examples of focused ethnographies include nursing handovers or medication administration.

Depending on the narrowness of the research question and the number of sites where fieldwork occurs, ethnographies have been described according to a continuum between micro (focused) and macro (traditional) ethnographies (Streubert and Carpenter 2011). Traditional ethnographies focus on describing and explaining behaviours and actions (Morse and Field 1995). Focused ethnographies seek to study a specific issue, usually in a single context and with limited numbers of people (Roper and Shapira 2000). Brink (2016) advocates traditional ethnography as one of the best ways for developing a broad understanding of the work done by nurses and why they do what they do.

In my research, the culture of interest is Mongolian acute-care public hospital ward nurses, and my aim is to develop a description of nurses' roles and work-related activities, a purpose that fits with traditional ethnography. However, according to some researchers, identification of a subculture and specific research questions lends itself to a focused ethnography (McFarland 2016). Higginbottom, Pillay and Boadu (2013) state that differentiation between the methods is based on the design of the research. Others state that a significant difference between traditional and focused ethnographies is the time spent in the field (Knoblauch 2005).

Even with descriptions and guidelines, the differences between traditional and focused ethnographic approaches are not always clear. Some ethnographies such as Germain's 'Ethnography of a Cancer Unit' have been identified by Brink (2016) as a traditional ethnography because the purpose was to describe behaviours and actions and Germain used multiple data collection methods,

participant-observation, and descriptions of context, including mapping. However Keen & de Chesnay (2015) identified it as a focused ethnography because they considered the focus (i.e., a cancer ward) to be a specific description within a wider culture. Thus, there seems to be a variety of conflicting or overlapping descriptions of criteria differentiating traditional and focused ethnographies.

The research I have undertaken includes characteristics of descriptions used for both traditional and focused ethnographies. Research on the sub-culture of Mongolian acute-care medical and surgical ward nurses could be argued as being a focused ethnography. However, prolonged time in the field and multiple data collection methods with the goal of providing an overview of nursing roles and responsibilities fits the traditional ethnographic approach. Regardless of whether an ethnography is classified as traditional or focused, it is important that the purpose for the research guide the research process (Mannay and Morgan 2015) and that the researcher remain open and flexible throughout the process as to the questions, direction, and outcomes of the research (Roper and Shapira 2000).

Ethnographic research incorporates three main methods for collecting data: participant observation, interviews, and document analysis (Roper and Shapira 2000). In a traditional ethnography, the researcher spends a significant amount of time immersed in the setting, usually in a culture different from their own (Richards and Morse 2007). In ideal conditions, the actual time spent in the culture is not pre-determined but based on when the research questions have been answered (Roper and Shapira 2000). Likewise, the number of interviews and questions are not fully pre-determined as the purpose of interviews in an ethnographic study is to explore observations or validate findings (Roper and Shapira 2000).

The goal of a traditional ethnography to elicit a description of a culture was felt to be more appropriate for this research study than a critical ethnography. Although traditional and critical ethnographies both consider the influence of history, politics, and

worldview on a culture, the goals of critical ethnography include identification of social oppression and advocacy for action mitigating perceived injustices (Streubert and Carpenter 2011, de Chesnay 2015). This approach assumes that there are unequal power relationships (Breda 2016). As there is a paucity of descriptions in the public domain regarding acute-care nursing in Mongolia, making assumptions about power relationships and areas for change could create blindness to data that might reveal power relationships and contexts differing from those hypothesised. In addition, while a critical ethnography approach may be useful for developing an understanding of why nurses engage in various roles and activities, a traditional ethnography is better suited to developing detailed descriptions of nursing roles and activities.

A core value of ethnography is the merger of two sets of perceptions: those from the participants and those of the researcher. The people (participants) in the culture being studied bring an insider (emic) view whereby descriptions and meanings are shared from their perspective (Roper and Shapira 2000). The outsider (etic) perspective is brought by the researcher who tries to make sense of what has been seen and heard according to their own cultural background (Roper and Shapira 2000).

Translation

Undertaking this research in Mongolia has meant that different languages were used for data collection and for analysis and writing. The Mongolian language is used in Mongolian public institutions and everyday life, whereas the primary language of the researcher is English. Thus, translation was a key tool used for understanding conversations and observations, including documents. Translation takes something that occurs in a particular cultural and linguistic context and places it into a different cultural and linguist context (Wolf 2017). The

choices made for how one translates are based on philosophical assumptions and values about meaning.

A literal translation attempts word-for-word equivalence (Wolf 2017). The research practice of back-translations is an example of literal translation methods, whereby a document is translated from one language to another, and the veracity of the translation is checked by translating it back into the original language with the aim of exact replication (Wolf 2017). In contrast, the purpose of a paraphrase or dynamic translation is to convey the meaning of the words in a manner that will be understood by someone who is not from the place where the words were first produced (Wolf 2017). Instead of back-translations, this method is frequently checked through expert review. There are strengths and limitations to both approaches and different people take different positions as to which approach is best (Wolf 2017). In practice, there is a continuum between literal and dynamic translations that reflects the degree to which translators attempt either to keep the original wording or convey the sense of what was originally intended.

In this research I have translated some discourses according to dynamic translations, while others were closer to literal translations. Decisions were based on practicality as well as philosophy. In the field, conversations were conducted in Mongolian without the use of a translator. However, as I was more fluent in English than Mongolian, it was easier and faster to record these conversations in English. Thus, although I tried to translate exact words, the practicality of recording field conversations meant that they were dynamic translations. Research information sheets, consent forms, and questionnaires that were distributed in the field used a more literal translation approach with a back-translation undertaken for the ward nurses' information and consent forms (Appendix 5). Due to challenges in time and budget, I chose to check equivalency for the interview information sheet through experts rather than back-translation. Either is considered acceptable providing there is confidence in the

translators being able to convey the intended information (Wolf 2017). Experts who translated and checked forms for this research were those who had responsibilities for translation in their workplaces and were found through personal networks.

Formal interviews involved three types of translations: (1) my own internalized translation of what was being said in Mongolian, (2) oral translation by a third-party translator, and (3) translation of interview transcripts. Translations that occurred during the interview were dynamic paraphrases of the conversation. This was for practical reasons that improved the flow of conversation. Three translators, previously known to me, alternated in providing translations for oral interviews as fit their schedules. Two were health professionals who did translation in their workplaces and one was a lay translator who was occasionally contracted to help with translation for an international development organization. All translators signed a confidentiality agreement (Appendix 3). The licensed transcriptionist and translator of transcripts (Appendix 4) was recommended by a fellow researcher.

Translations of interview transcripts were closer to literal translations than was translation during the interviews, however for the purpose of readability, there is a degree of dynamic equivalence to the structure of the translation. When there was a Mongolian term for which the English meaning was unclear, the transcriptionist/translator would put the Mongolian word or phrase in quotations. If an explanation was added in order to convey meaning, it would be placed in brackets so as to differentiate it from the more literal translation.

Immediate debriefing with the translator was used as a strategy following oral interviews to help make sense of verbal and non-verbal communication, including clarification of topics or contexts which were felt to be important (Wolf 2017). After the interviews had been transcribed and translated, I reviewed the

interview transcripts. I first by listened to the audio recording to ensure accuracy in the transcriptions. As someone with partial fluency in Mongolian, I checked equivalency of meaning between the Mongolian and English transcripts by reading the transcripts side-by-side (Appendix 6). When there were questions regarding the translation, these were discussed with the transcriptionist-translator. As an additional step, the translator checked the accuracy of interviewee quotations presented in the findings chapter.

Translation of Mongolian job descriptions were done by the licensed translator who translated the interview transcripts (Appendix 4). The translation was verified by reviewing notes made during a meeting with a Mongolian nurse who had verbally summarized the content of the job description (Appendix 18).

In summary, the aim for translation in this research was to be faithful to the intention of the original words (Wolf 2017). Use of multiple strategies such as back-translation and expert translation for information and consent forms, debriefs following interviews, hiring of a licensed transcriptionist-translator, audio and written transcript comparisons, side-by-side transcript translation comparisons, discussion of translation questions with the translators, and validity checks with reviewers, all contributed to the goal of being faithful to the original words (Wolf 2017).

Reflexivity

One of the weaknesses in the traditional positivist approach to ethnography was the lack of insight and acknowledgement regarding the influence of the researcher on the group being studied as well as the influence of the researcher's beliefs and experiences on the collection and analysis of data (Hammersley and Atkinson 2007). To address this, reflexivity has become a standard component in most ethnographies. Reflexivity is a process whereby researchers reflect on their own values and biases and how these may have influenced their reactions and perceptions (Arber 2006).

Reflexivity provides data that helps to establish the researcher's integrity regarding decisions that are made throughout the research project (Arber 2006). In this research, notes of my impressions and thoughts were recorded during data collection and analysis (Appendices 7-8) thus providing records that can be reviewed as to how I interpreted data and made decisions. Additional reflections regarding the influence on the research of my own background, presence, and thoughts are outlined in the remainder of this section.

As a foreigner having lived in Mongolia for over a decade, I am aware that my beliefs, values, and knowledge often differ from that of my Mongolian friends and colleagues. I have had a rich variety of nursing experiences that included hospital wards and home care nursing in Canada, international consulting work with the WHO, teaching Canadian nursing students, and working in nursing education administration and curriculum development. A significant part of my life has been spent living and working in countries outside of Canada, including Mongolia. These experiences and my worldview shape how I interpret and process interactions, decisions, and observations. Thus, I seldom view things through a monocultural lens; interpretation is instead influenced by several different cultures.

I have found that Mongolians interact with me as someone who is both foreign and local. Being able to converse in Mongolian is not common among foreigners and having learned the language, albeit incompletely, it provided common ground that contributed to their acceptance of me as someone who had a degree of 'localness'. Knowledge and habits obtained from living in Mongolia for over 10 years also facilitates the perception of my being somewhat 'local' in my interactions with people in everyday situations.

Mongolians place a high value on education and teachers. As a foreigner I am usually greeted with respect and called a teacher. As a researcher this presented both an opportunity and a challenge. It was an opportunity as the Mongolians who I interacted

with were willing to participate and trustful of me in undertaking this research. It was a challenge in that as someone seen as an authority (i.e., foreign teacher), it can be difficult for Mongolians to share openly with me and let me experience their everyday realities. There were several times in the process of data collection when I wondered if nurses were being more attentive to doing things according to protocol and engaging more with patients simply because of my presence.

As a result of these challenges, I felt I had to work to cultivate trust that would allow deeper sharing and openness. This meant that I tried to maintain a non-judgmental approach, accepting what was shown or communicated to me at face-value. Sometimes, when I shared my perceptions with Mongolian nurses, I would be surprised with their interpretation of the situation. This type of interaction was helpful not only for my understanding of nursing work on Mongolian nursing wards and incorporation of their perspective into the research (emic view), but it also affirmed that I was able to remain open and see things in new ways.

A few long-time Mongolian colleagues and friends helped by contributing as key informants. In meeting with them, I strove to keep the location of my fieldwork vague to maintain confidentiality. They would comment on experiences I had and answer questions I posed to them. Because we have an open and honest relationship that has developed and matured over the years since I came to Mongolia, inclusion of them in this research process was helpful in my processing of observations and experiences. I trusted these key informants to give honest feedback rather than telling me what they think I wanted to hear or what they wanted to be put in the best light. In turn, I feel that they trusted me with respecting the Mongolian people and culture; a trust I hope I have upheld.

I am cognizant that what I observed and chose to record are filtered through my own experiences and understandings. I also know that it was impossible to capture every detail that could have helped with making sense of the data. For example, in this

research I recorded actions (e.g., walking, injecting medication, removing IVs) and fragments of conversations during nursing shifts. However, I was not able to write down all the minutia of details for each observation, nor was I able to observe and record all associated verbal and non-verbal responses. I am also aware that, for the most part, I have not noted what was not observed.

Making note of what was not observed requires both an assumption of what is expected of nurses and a familiarity of what nurses do in those contexts to which one is comparing. For example, in my field observations, I recorded a situation when a patient was having difficulty breathing and had an audible wheeze, yet the nurse did not auscultate the lungs. For me to note that the nurse did not auscultate the lungs meant that I had previous knowledge and different expectations as to the roles and responsibilities of the nurse. As I have not been a ward nurse for over 25 years, I was hesitant to make too many observations as to what was not done, and except for a rare note as in the above example, I refrained from making those reflections. In some ways, this may strengthen my observations in that I tried to avoid judging what a nurse should or shouldn't do, and simply documented what was observed.

There were many decisions about what to include and what to exclude in the write-up of the thesis. There are both conscious and unconscious reasons for what is presented and how it was presented. Decisions were influenced from my personal values, beliefs, and experiences as a nurse, as well as my impressions from field observations, interviews, and the process of data analysis that pointed to areas of greater data saturation while still covering a breadth of nursing activities and the context in which they occur.

Throughout the research process I was constantly reflecting on how what I present will be interpreted by Mongolians and by those in the UK and other countries. Robinson-Pant and Wolf (2017) acknowledge that knowledge construction is inherently political, especially when it is constructed inter-linguistically and cross-culturally.

Consideration of this is reflected in my efforts to present a detailed report of my observations so that others have the opportunity to make their own interpretations of the data.

Ethical Considerations

Background

In conducting research, advantages and disadvantages to those participating in and being impacted by research must be considered (Johnson and Long, 2010). This is important for safeguarding the wellbeing of those involved (Johnson and Long, 2010). Various ethical codes and guidelines for research have been adopted at international and country levels. In this research, the four biomedical principles articulated by Beauchamp and Childress (Beauchamp, 2003) was the ethical framework used to guide decision-making for safeguarding those impacted by this research (Table 2).

Table 2. Ethical Framework

Biomedical Principle	Ethical Considerations for Research
Autonomy: Respecting the right to choose	• Free and Informed Consent
Non-maleficence: Avoiding harm	• Privacy and Confidentiality • Reporting of unsafe practices • Participant-observation boundaries of researcher • Integrity of the research project
Beneficence: Provision of Benefits	• Advancement of knowledge • Opportunity for participants to share experiences and perceptions • Volunteer services of the researcher
Justice: Fairness	• Representativeness of participants • Representativeness of findings

Permission to Conduct Research

Permission to conduct this research was granted by Staffordshire University's Health Ethics Review Panel and Faculty of Health Sciences (Appendix 9). The American Center for Mongolian Studies (ACMS) agreed to be my host organization in Mongolia and a letter of support was provided from the initial research site (Appendix 10). Access

to the hospital was facilitated by a senior Mongolian medical researcher who had become aware of my proposed research through ACMS and arranged for me to discuss this research with the nursing director. A translated copy of the executive summary of my research (Appendix 11), together with translated copies of information and consent forms and the questionnaire (Appendix 2) were submitted to the nursing director. The nursing director and senior researcher subsequently received permission from the hospital director permitting me to conduct this research. This was communicated to me verbally and permission to go onto the wards was only granted once they had received the hospital director's permission.

To increase the degree of anonymity within the hospital and to enhance the opportunity for observing a broad scope of work activities and ward dynamics, I chose to conduct field observations on two different units. At the urging of Mongolian nursing colleagues who felt I should also gain understanding of nursing at secondary-level care hospitals, I added a second hospital site. Access to the secondary-care level hospital was facilitated through a university nursing faculty member. At the secondary-level hospital I first met with the nursing director and gave her copies of the executive summary and information and consent forms to review. The nursing director then obtained permission from the hospital director for me to conduct the study. This was confirmed verbally with me at a joint meeting with the hospital director and nursing director prior to my gaining access to the wards. On both sites, the nursing director accompanied me to the wards where I was introduced as a nurse researcher.

Participants

The nursing directors recommended and approved the wards on which I conducted my research. Once the ward was selected, the head nurse for the ward arranged a meeting with the nurses during which I explained the purpose

and methods for my research, distributed the information sheet, and invited nurses to complete the consent form and demographic questionnaire (Appendix 2). Nurses who did not want to participate in the research were told to notify me and to complete the form requesting that they not be included. No one requested the opt-out form. Consent was obtained prior to shadowing an individual nurse. In addition to shadowed nurses, other ward nurses also completed the questionnaire and consent form. No nurses requested that I exclude them from the study, although there were some conversations that they requested not be shared with others. These were omitted from my fieldnotes.

Participants for individual, semi-structured interviews were recruited from the hospital where I was a participant observer. In addition to nurses, three ward physicians were recruited. Physicians were included because their decisions and presence were observed to have an impact on nursing work and attitudes. All physicians interviewed worked on wards where field observations took place. Nurse interviewees were recruited either through personal invitation from me as a researcher or through the Head Nurses.

Prior to starting the interviews, I explained the purpose of the interview and asked the interviewee to read through the information sheet. If they agreed to continue with the interview, they were asked to complete the consent form and demographic questionnaire. In recognition that some nurses volunteered because the Head Nurse had asked them to give an interview, I told them I would not report whether they granted or declined an interview. I informed them that as the interview room was distant to the ward, they were free to leave and their decision would not be known to the Head Nurse. As per the ethics protocol described in the information sheet, I told interviewees they could also contact me later and request that their interview not be included. All translators present during interviews signed a confidentiality agreement (Appendix 3).

Patients were not the focus of the research and thus patient consent forms were not required. However, to explain my presence, nurses I shadowed explained to patients that I was there to learn about nursing. On occasions when I was asked by a nurse to

remove an IV from a patient, I first asked permission from the patient before removing the IV. Removing IVs was not a task specific to nurses as family members and patients themselves often removed IVs. The only other direct patient care I provided was at a patient's request, e.g., patients would ask me to plug in their cell phones, retrieve something from their bedside tables, help them to take their blood pressure using the automatic cuffs, talk with them, or relay messages to nurses.

Key informants who helped by providing feedback to verify observations and discuss ideas for describing nursing work and factors that impact it were also considered to have participated in the research (Appendix 12). According to the Staffordshire Ethics committee, key informants were not required to complete consent forms (Appendix 9). No identifying information on persons or location of wards was communicated with them. Activities and issues they discussed with me that I had not personally observed were not included in this thesis, with the exception of one reference to student nurses.

Data Management

Research data including all documents, audio recordings, and drawings were stored on the researcher's computer, an encrypted hard drive, an encrypted flash drive, and on Staffordshire University's One Drive. Original interview recordings as created by digital recorder were deleted after interviews had been completed and saved. Backup digital recordings made on a second recording device were deleted immediately after interviews had been uploaded. These were saved onto the computer and an encrypted flash drive. Oral and written translators for formal interviews were required to maintain confidentiality, including deletion of all research files, as agreed to in the confidentiality agreement form. Original fieldnote booklets and drawings were stored in a lockable cabinet in the researcher's home office. As per university protocol, all

electronic and hard copies will be destroyed after a period of 10 years following completion of the research.

Signed consent forms and demographic questionnaires from ward staff and interviewees were given codes and stored in the lockable cabinet in the researcher's home office. Everyone who completed a consent form also completed a questionnaire. There were no names on the questionnaires and only a signature was on the consent forms. Photocopies of hospital shift schedules for the months during which field work occurred were stored along with the consent forms. The shift schedules indicate which days I observed, the nurses scheduled to work those days, and the nurses whom I shadowed. Participant names were not identified in fieldnotes nor interview transcripts. All names used in the research were fictional. A key to code names and real names was maintained in an Excel Sheet and stored as per research data protocols for this research.

Ethics of Reporting

According to the plan approved by the ethical review panel of Staffordshire University, if any life-threatening action by nurses was observed that was not acknowledge by them, e.g., a medication error, then I was obligated to report such an error. Incidents of lesser risk, such as poor handwashing techniques could be noted in my research but not reported. During field observations I informed a head nurse of one incident I felt was unsafe. Following a validity check of my findings by a Mongolian nurse, I learned that a poor technique I documented in my field observations but did not report, was a practice the Ministry of Health was aware of and had responded to by enacting a law to prevent it from happening. As I recorded it anonymously, I elected to keep it in my data as an historical observation that contributes to understanding some of the contexts that shaped nurses' work and decisions.

Data Collection

Research was carried out on medical-surgical inpatient units in two acute-care centres in Ulaanbaatar, Mongolia. Medical-surgical nurses were selected as most hospital wards are classified as medical and/or surgical and therefore employ a larger proportion of nurses than other specialties. Three main types of data were collected for the ethnography: fieldnotes through participant observation, personal perceptions collected in interviews, and text as found in nursing job descriptions and in documents used by nurses on the ward.

The total number of hours of field observation and the number of interviews were not predetermined as these should be based on data needed to answer the research question along with consideration of available time and funding. In the literature, there is a range of hours reported by ethnographers. In an ethnographic study on casual nurses and workplace communication, researchers spent 2 hours per observation of day, evening, and night shifts on 4 different units for a total of 60 hours of observation and 26 interviews (Batch and Windsor 2015). Fry (2012) recorded 200 hours of observation and interviews with 10 nurses in her ethnographic study of the impact of cultural beliefs on triage decisions. Griffiths (2011) who used ethnography to study the role of nurses on medical assessment units, recorded 200 hours of observation and 24 interviews. In Grinspun's (2010) doctoral dissertation describing social construction of nursing care, she reported working one 12-hour shift per week over a period of 8 months (384 hours) and conducting interviews with 24 nurses. These reports suggest ranges of 60-384 hours in observations and 10-26 interviews.

In my research, data was collected over two years. I conducted field observations from October 2017-May 2018, logging 208 hours in nursing shifts (Appendix 14). In addition to observing shifts, I spent 25 hours in meetings, conferences, and social events connected to my presence on the hospital wards.

Nine formal interviews were conducted during the period from February 2018-June 2019, and discussions with key informants took place throughout the research period. Data was collected and analysed in a cyclical process until research questions were answered and data saturation considered sufficient (Richards and Morse 2007).

In this research, most data came from field observations. The goal for formal interviews was to provide insight into questions that emerged from data analysis of field observations and previous interviews. The number of field observations in this research was determined based on (i) the decision to observe a variety of shifts, meetings, and social events on each of the three wards and (ii) the point at which fewer new insights were emerging from field observations. The number of interviews was similarly determined by (i) purposeful recruitment of a variety of participants from each ward and (ii) questions that had emerged from data analysis of field observations and previous interviews being answered. Textual data included (i) documents used by nurses during their shifts and (ii) job description templates for ward nurses as developed by the Mongolian MOH.

A questionnaire was developed to obtain basic demographic details for the purpose of describing the participants (Appendix 2). Although nursing colleagues reviewed the questionnaire prior to it being distributed, as the distributed questionnaires were returned and analysed, I realized that some of the questions were not answered consistently among participants. Basic information such as gender, age, profession, years worked, and religion were useable. Information on family size, family income earners, and education and specialty programmes were not sufficiently consistent to be used in this research. Income bracket was useable for comparison with the average Mongolian income but was too general to note the minor income differences between most ward nurses.

Field Observations

The traditional method for collecting ethnographic field data is through participant-observation. The degree to which the researcher is the participant or the observer depends on numerous factors. It was not possible for me to work as a nurse because I did not have a Mongolian nursing license. However, as the nurses became more comfortable with me, and I with the activities on the wards, on their request I helped with activities that were done by nursing assistants such as removing intravenous lines and fetching charts or supplies. I also participated in social activities, including conversations, meals, and celebrations.

The blend of participation and observation means that the researcher can experience what it is like to be an insider (emic perspective) while at the same time maintaining a distance that permits them to observe and analyse as an outsider (etic perspective). Being primarily a participant usually creates difficulties in distancing oneself for the purpose of bringing an etic perspective to the research. Observation-only has the opposite challenge whereby the researcher is less likely to develop an understanding of the emic view. Due to limitations on full participation as a result of nursing licensure and language requirements, I functioned more as an observer-as-participant (Roper and Shapira 2000). While limiting the degree to which I experienced life as a Mongolian nurse, this position held the advantage of being able to take real-time, detailed fieldnotes. As it was not a purely observational role, my observer-as-participant role still gave me some degree of an insider experience. Living in Mongolia for over 10 years and having a close network of nursing friends also helped to balance limitations of my observer-as-participant role.

The nursing director at the tertiary-care hospital selected a surgical ward as the first research site. As my research aim was to describe the roles and responsibilities of nurses, I chose to be present for complete shifts so I could

observe activities that a nurse did throughout her working hours. The nursing director selected two nurses on the surgical ward for me to shadow. They were viewed as good nurses and the nursing director hoped that by being paired with me, they could improve their English. I tried to select a variety of weekday, weeknight, and weekend shifts to increase exposure to different routines (Appendix 14).

The second placement was on a medical ward. However, rather than follow one or two nurses for the duration of my time on the second ward, I selected shifts that I wanted to observe and the Head Nurse chose nurses for me to follow who were working those same shifts. As with the first placement, I observed weekday, weeknights, and weekends with time between shifts so that I could write and reflect on my observations prior to going on the next shift. For my third placement, I was again invited to select the shifts I wanted to observe. However, apart from the first shift when I was assigned a specific nurse to follow, the nurses on each of the shifts I worked decided among themselves who I would shadow.

Advantages of following the same nurse throughout a ward placement, as occurred in the first field observation site, includes observing the same nurse in different situations such as when a ward is busy or less busy and developing a social relationship where one can gain greater understanding of the everyday life of nurses. The fact that exemplary nurses were chosen may be a disadvantage as some of the characteristics and experiences of other nurses may not be observed and the nurses I shadowed may have felt obligated to give a positive impression. Subsequent field observation pairings changed with each shift; some having been chosen by the head nurse while others were self-selected from among the nurses. This mixed approach may have resulted in a more comprehensive experience for participating in and observing ward nursing, balancing the advantages and disadvantages of each approach.

Data collected during field observations was recorded in fieldnotes. Fieldnotes were initially recorded by hand in small notebooks that I took with me on the wards. Due

to my observer-as-participant status, I had sufficient time on most shifts to write detailed notes which were later transcribed almost verbatim (Appendix 15). Transcribed fieldnotes were uploaded to NVivo where they were subsequently analysed. In addition, I wrote reflective summaries following each of my field observations. These field reflections were written within 24-hours of completing each field observation (Appendix 16). These were also uploaded to NVivo. The purpose of the reflections was to capture my thoughts, impressions, questions, and experiences, including reflections on my influence on others and potential biases due to characteristics from my own culture and previous knowledge and experience.

Interviews

There were two types of interviews that took place: formal and informal. Informal interviews took place during field observations when I would converse with nurses about their life and work. I also met with key informants throughout the research process to assess whether my observations and interpretations were similar to their experiences and views.

The purpose of formal interviews was to gain insight as to the perceptions of the interviewees on nursing work and relationships in their work setting, and to explore questions that had emerged from data analysis. A standard semi-structured interview was developed although I remained flexible to allow the interviewees to talk about subjects they felt were important (Appendix 17). The flexible structure was also important for asking questions arising from data analysis (Morse and Field 1995).

Nine formal interviews took place between February 2018 and June 2019 and ranged from 20 to 75 minutes per interview. Purposive sampling was the strategy used for selecting participants and is appropriate when the aim is clarification of observations and increasing the depth of understanding on a

research topic (Boadu and Higginbottom 2015). Interviewees were recruited from hospital wards where I conducted research either during my field observation time or as recommended by head nurses from wards involved in my research. Interviewees determined the timing for the interview. Of the nine interviews, one was conducted before work, three after work, and five were conducted during interviewees' work time. The two ward nurses who gave interviews during work time had permission granted by their head nurses. The shortest interviews took place during the middle of day shifts thus decreasing the amount of available time for conversation. Although conducting interviews in the middle of a working shift was not ideal from my perspective, it was the time the interviewees chose. Time given per interview was not reflective of the degree of contribution to the research as the shortest interview yielded some of the most valuable data on one of my questions.

At the tertiary care hospital, interviews took place in one of the hospital board rooms that had been arranged for me by the hospital's research director. As it was in a different section of the hospital, it provided both distance from the wards and privacy. There were, however, a couple of times when interruptions occurred by people who did not realize that the room had been booked. While we did not have to leave, for some interviews the interruptions contributed to a sense of urgency to finish quickly so that the room could be accessed by others. One interview took place in my home office at the request of the interviewee. Interviews at the secondary-care hospital took place either in one of the nursing administrative offices or at a coffee shop approximately 500 meters distant from the hospital, where a corner table afforded privacy.

Formal interviews were always conducted with the presence of a translator. The decision to have a translator was because of my own assessment of my language fluency. To prevent potential misunderstanding due to pronunciation and choice of words and grammar, I chose to always ask my questions in English and have the translator translate them into Mongolian. Responses from interviewees were not always translated

at the time of utterance. The decision to translate discussion during an interview was based on (1) my understanding of the conversation and (2) available time. When interviews occurred in the middle of someone's shift and time was short, I chose not to translate their responses except for when I felt I did not have sufficient understanding to formulate a follow-up question.

Within 24-hours of an interview, fieldnotes were completed. These fieldnotes contained both details about the interview and the debrief with my translator, as well as ideas that were generated from the interview and reflexive observations (Appendix 16, Post-Interview Reflections). Digitally recorded interviews were initially transcribed and translated by a translator, usually within a month of the interview. Once completed, I listened to each recording, checking both the Mongolian transcript and English translation. However, when I compared some of the English and Mongolian transcripts, I realized that my lay translator had changed some of his phrasing from the oral interviews to match what the interviewee said rather than his actual translation. To address this issue and to ensure confidence in translated transcripts, a professional translator who had not participated in the interviews was hired (Appendix 4). This translator re-transcribed and translated the interviews originally done by the lay translator (Appendix 6). While there were no significant differences that impacted the analysis, the hiring of a professional translator increased confidence that the final translations were accurate. (See also pp. 37-40). When questions arose regarding the meaning of translated transcripts of the interviews, I discussed it with the professional translator. Reference to fieldnotes written following interviews that included debriefing notes also helped with clarification when needed.

Documents

The main documents included in this research were the ward nursing job description templates from the Mongolian Ministry of Health (Appendix 18). These documents were translated by a professional translator. Verification of the translation was done by my reviewing the English and Mongolian versions. Adding to confidence in the translation was a point-form English translation previously done by a Mongolian nurse that was consistent with the professional translation (Appendix 18).

During field observations, I made note of different types of documents used by nurses. These included patient charts, forms, checklists, announcements on bulletin boards, and various handwritten logs and notebooks. I made drawings of some documents and architectural layouts which were included as part of the data collection. Data from nursing reports on the numbers of inpatients and the types and quantities of injections were recorded in fieldnotes.

Data Analysis

Method

In ethnographies that seek to identify and categorize actions, behaviours, values, or other elements within a culture, analysis is usually conducted with content analysis methods (Morse and Field 1995, Miles and Huberman 1994). In keeping with this, I chose content analysis methods as described by Morse and Field (1995) and Richards (2009), whereby data was initially analysed through a process of constant comparison as to common characteristics. This first step resulted in topical codes (i.e., what nurses did). In the second step, analytical topics related to the meaning of activities (i.e., the purpose for undertaking the activity) were also analysed using constant comparison. This is consistent with an inductive approach to content analysis that moves data from specific details to general concepts, condensing the data into broad, descriptive categories (Elo and Kyngäs 2008).

Coding and Abstraction

Coding of data is the key method used in content analysis for moving data from unstructured to structured; descriptive to theoretical. Three types of codes are used in data analysis: descriptive, topical, and analytical. Descriptive codes are details considered as facts that do not normally require interpretation (Richards and Morse 2007). In this research, descriptive codes for shift observations, interviews, and meetings included details such as dates, ages, gender, professional qualifications, locations, ward speciality, shift length, distances walked, and numbers of patients. Each transcript was tagged with its relevant descriptors. Descriptive coding facilitates subsequent analysis based on descriptive characteristics, such as day versus night shifts. Topical and analytical codes require interpretation as to the content and meaning of textual data within the transcripts. Topical codes describe what exists or is happening and can include attitudes, experiences, and details about the setting (Richards and Morse 2007). Analytical codes are a higher level of abstraction than topical codes. They link data and describe themes or concepts (Richards and Morse 2007).

Initial analysis of transcripts (i.e., raw, unstructured data) was approached in two ways: (1) by reading the whole transcript to get an overall impression of the contents and (2) by reading the transcript line by line (Richards 2009, Emerson, Fretz and Shaw 2011). In this research, analysis of data was facilitated through the use of NVivo software for field observations and interviews, and Excel worksheets for job descriptions. Topics that described work activities of nurses were not pre-selected, instead they were identified through the reading of fieldnote and interview transcripts.

Open-coding is a method first described by grounded theorists as the starting point for making sense of unstructured qualitative data (Richards and Morse 2007). Open-coding was the process used in this research to create topical codes based on what I understood was being described in the text. Topics frequently had sub-categories

which were also coded. These sub-categories were helpful for understanding different aspects of nursing work within each category.

The first codes were developed from field observations in response to the question “What is being described?”. By asking this question, I began to identify work activities, descriptions of the setting, and types of interactions and expectations. The process was iterative as analysis continued with the addition of new fieldnote and interview transcripts. Each major topic, category, and sub-category were periodically reviewed as to the appropriateness of the categories and their definitions. Coding decisions, such as their creation, renaming, deletion, and organization were logged in a research log (Appendix 8). Linked memos were used to summarize contents of categories. Ideas or questions that emerged during the analysis were stored as general memos and not linked to specific categories. General memos were reviewed frequently to assist with discerning which data still needed to be collected and to help in the process of thinking about the meaning of data and how it could be best communicated.

After analysing data according to the question ‘What is being described?’ I conducted a more abstract analysis, asking the question ‘What is the nursing role?’. Each transcript was re-read and the open-coding process used for sorting excerpts into categories related to nursing roles. Categories were summarized in memos. These summaries were used in the process of writing definitions and examples for the nursing roles. Samples of coding are found in Appendix 19 and memos in Appendix 20.

Analysis of interviews was conducted in a similar process to analysis of field observations. As the purpose of interviews was to elicit participant perspectives on the nursing role as well as to answer questions about field observations, some of the topics raised were different than those identified from the fieldnotes. Thus, rather than using the same topical codes as for field observations, I used open-coding, as described earlier in this section, to develop a new set of codes for categories and sub-categories. (For an example, see Appendix 19: Screen Shot – Interviews).

When the analysis of all transcripts for field observation and interviews were completed, I compared the nursing role categories developed for interviews and field observations (Appendix 20: Combined Fieldnote & Interview Memo Sample). This helped with discerning the fit between field observation and interview categories. As a result of the comparison and merger of categories, 16 nursing roles were identified and described. Additional refinement of these role descriptions for the purpose of validity and understandability occurred following the integrative literature review and expert review. The roles are detailed in Chapter 5.

Job description templates for medical and surgical ward nurses as written and approved by the MOH were the last data to be analysed through coding. Coding of the job descriptions was done twice. Codes were pre-determined according to (1) the categories of work activities elicited from the integrative review and (2) the 16 Mongolian nursing roles described at the end of Chapter 5. This method of coding facilitated comparisons for the purpose of identifying similarities and differences between the job description and (1) nursing activities identified in the international literature and (2) nursing roles as elicited from this research.

Comparisons

Comparison of cultures is one of the methods used in ethnographies to help identify values and perspectives that might otherwise be hidden (Richards and Morse 2007). In this research, comparisons focused on the roles and work activities of nurses. To identify similarities and differences, descriptions of Mongolian nurses' roles, including associated work activities, were compared with the work activities identified in the international research literature. The analysis process for the international integrative literature review is described in Chapter 6.

The findings from the integrative review identified work activities of ward nurses. I summarized these findings into what I termed as three core nursing functions: patient care, ward functioning, and professionalism. These findings were key for answering the

second research question seeking to identify differences and similarities in the roles and work activities between Mongolia and other countries. To answer this question, the first step was to assess each of the Mongolian nursing roles as to their fit into the three core functions by asking the question: “What is the main purpose and function of this role?”. In answering this question, I used a card-sort (Streubert and Carpenter 2011) whereby nursing roles were sorted according to the three core functions.

Identifying similarities and differences among ethnographic findings, job descriptions, and findings from the review was the second phase of the comparative analysis. Categories of work activities identified in the integrative review were assessed as to the relative similarities or differences to Mongolian nursing roles and their associated activities. This process of analysis has been called ‘constant comparison’ (Streubert and Carpenter 2011). Constant comparison was key to determining the fit of work activities into nursing roles. In turn, the process helped with further refinement of nursing role descriptions.

Explanations for differences was the next step of the analysis process. Explanations were proposed based on synthesis of findings from this research, memos describing ideas and themes that emerged during data analysis, background literature reported in Chapter 2, and feedback from key informants. Findings from published research on factors affecting nursing workload provided a framework for organizing explanations on similarities and differences between acute-care ward nursing in Mongolia and other countries.

In summary, by using the constant comparison method to code raw data excerpts from transcripts, job descriptions, and research articles, major topical categories on nursing activities and functions were identified. Analysing the combination of fieldnote and interview findings resulted in descriptions of Mongolian nursing roles and the activities they encompassed. The Mongolian nursing roles were assessed as to their fit with the three core nursing functions of patient care, ward functioning, and

professionalism that had been created to summarize the integrative review findings. Work activities identified from the job descriptions and the integrative review were compared to Mongolian nursing roles to identify differences and similarities. Finally, the synthesis of the findings with knowledge about the history and context of Mongolian nursing, as well as research literature on nursing work, resulted in a conceptual model for describing the work of acute-care ward nurses. A flow diagram illustrating the analysis process is shown in Figure 4.

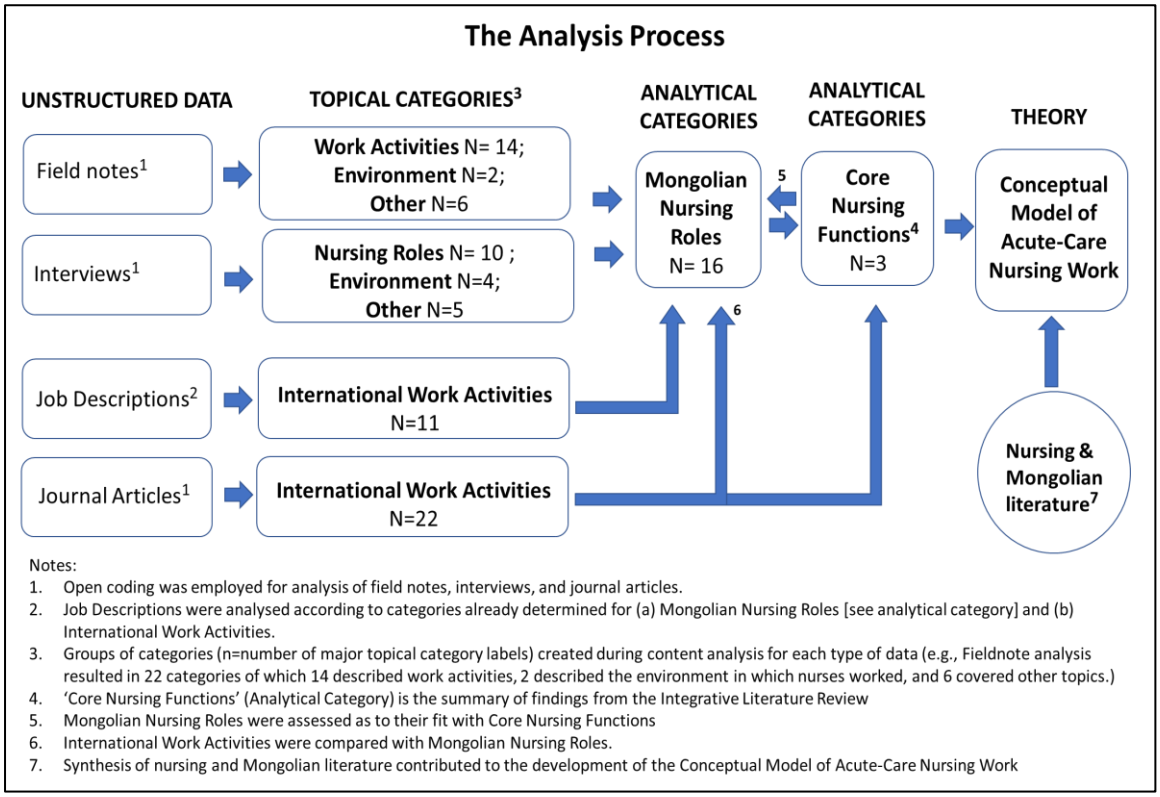

Figure 4. Flow Diagram of the Research Analysis Process

Rigor

It is important to conduct research in ways that contribute to confidence in the truth of the findings, applicability, consistency, and neutrality (Morse, Field 1995). Rigor refers to the thoroughness in efforts to ensure truthfulness, neutrality, consistency, and applicability. To enhance rigor, different strategies were employed.

Trustworthiness (credibility) addresses the truthfulness of the findings. Triangulation by multiple approaches for examining a phenomenon is one strategy that

helps ensure adequacy and trustworthiness of data (Hammersley, Atkinson 2007, Boadu, Higginbottom 2015, Morse, Field 1995). Streubert & Carpenter (2011) outlined different types of triangulation that can be used in qualitative research to help compensate for inherent weaknesses present in any one approach. In this research, methodological triangulation occurred through the collection of different types of data (observations, interviews, and documents). Data triangulation occurred by collecting data from a variety of settings (2 hospitals, 3 wards, venues for meetings, social events, and conferences), times (days, nights, weekends), and personal characteristics (job, age, length of working experience).

To address the issue of researcher bias when there is only one investigator, key informants provided feedback on ideas generated throughout the research process. Three Mongolian nurses reviewed the ethnographic findings to check for validity and one Mongolian nurse reviewed and consulted on the conceptual Model of Acute Care Nursing Work as presented in Chapter 7. Debriefing with the translator following each interview also helped to decrease researcher bias and misunderstanding. Researcher bias was further mitigated through reflexive journaling and consultation with research supervisors.

Dependability refers to the consistency and accuracy in handling data collection and analysis. To demonstrate this, recording of reflections, steps, and decisions for the purpose of confirmability of findings is considered good practice (Richards 2009). In this research, details of decisions, insights, queries, and steps taken were recorded in a journal in NVivo and copied to a hard drive (Appendix 8). Handwritten notes were kept in notebooks. A summary log of documentation and coding was also maintained (Appendix 21).

Consistency in coding was checked by the researcher. Early consistency checks were done by printing a transcript, coding it by hand, and then comparing it to coding as stored in NVivo. Each transcript was analysed at least twice. In the process of re-reading

transcripts for analytical coding, I checked previous topical coding to assess whether the original coding was consistent with how I viewed re-reading the data according to the questions originally used for coding (e.g., “What is being described?’). Coding was assessed as generally consistent, and the results of the coding checks contributed to confidence in the reliability of the analysis. The relatively large volume of data (fieldnotes=124,313 words; interview transcripts=65,609 words), further added confidence as multiple excerpts describing similar topics were noted as consistent within categories.

Transferability refers to the applicability of research findings for other settings (Nowell et al., 2017). Applicability of qualitative research to other settings is not assumed as data collected comes from a limited number of settings and participants, and interpretive methods of analysis were used. Thick descriptions including detailed observations and verbatim quotes are presented in this research so that readers can determine the applicability of the research for their setting. Conducting this research on 3 different wards in two different levels of hospital facilities may contribute to transferability, especially within the urban setting in Mongolia. The theoretical findings as conceived in the Model of Acute Care Nursing Work may be more transferable to other settings than Mongolian roles, as synthesis of qualitative results with other research examining the same phenomenon is considered to facilitate transferability (Morse, Field 1995).

The process of identifying and describing nursing roles and work activities took place from 2017-2020 and included multiple data inputs from field observations, participation, interviews, key informants, reviewers, and literature reviews. The following two chapters present both detailed descriptions of medical-surgical ward nursing resulting from analysis of data and a summary of nursing roles and their associated activities.

Chapter 4: Findings (Part 1) - Nursing on Inpatient Wards

Introduction

Developing a description of what Mongolian nurses do is important as there is no published research that clearly describes the work of nurses[5] in Mongolia. Without an understanding of the work that Mongolian nurses do, there is the risk of significant disconnect between Mongolian nursing education and nursing practice, and between nursing policy and nursing practice. To develop a description of Mongolian ward nursing, this chapter, together with the following chapter, summarizes details from field observations and interviews about nurses' work on three wards in two Mongolian public hospitals located in the capital city of Ulaanbaatar.

Familiarity with the context in which the nurse functions is important for understanding nursing roles and work activities. This chapter provides a window into the context of medical-surgical ward nursing in Mongolia's urban public hospitals by describing the nurses who participated in this research and the way their work is organized, the physical structure of the hospitals, and the socio-emotional environment.

Participants and Setting

Participants

Field observations were conducted at two public hospitals in the capital city of Ulaanbaatar. One was a district hospital; a secondary-level facility with an official capacity of 90 inpatient beds. The other hospital was a national, tertiary-level facility with an official capacity of 520 inpatient beds. Three wards agreed to field observations: a specialty surgical ward with 45 beds (Ward A), a specialty medical ward with 34 beds (Ward B), and a general medical ward with 90 beds (Ward C). Thirteen female nurses

[5] In this chapter, the term 'nurses' is understood to refer to Mongolian nurses working in Mongolian hospitals unless otherwise stated.

were shadowed over 19 shifts that resulted in 208 hours of field observations, with 88 hours of these spent on a surgical ward and 120 hours on two medical wards. (See Appendices 13 and 14 for participant demographics and field site data.) Approximately 25 additional hours were spent in nursing meetings and events, and in meetings with key informants.

A total of thirty female nurses, including those who did a recorded interview, completed demographic questionnaires. Some were new to nursing, while others had many years of experience (Figure 5). The average age of nurses participating in this research was 35.5 years. Among these 30 nurses, 14 nurses were in their 20s, four in their 30s, seven in their 40s, and five in their 50s. The official age of mandatory retirement for government institutions is 55 years of age for women. If women have 4 or more children, they can retire at age 50. None of the nurses returning questionnaires indicated they had more than 2 children. The average time it took nurses to commute to work one-way was one hour, the closest taking 30 minutes and the longest taking 2 hours.

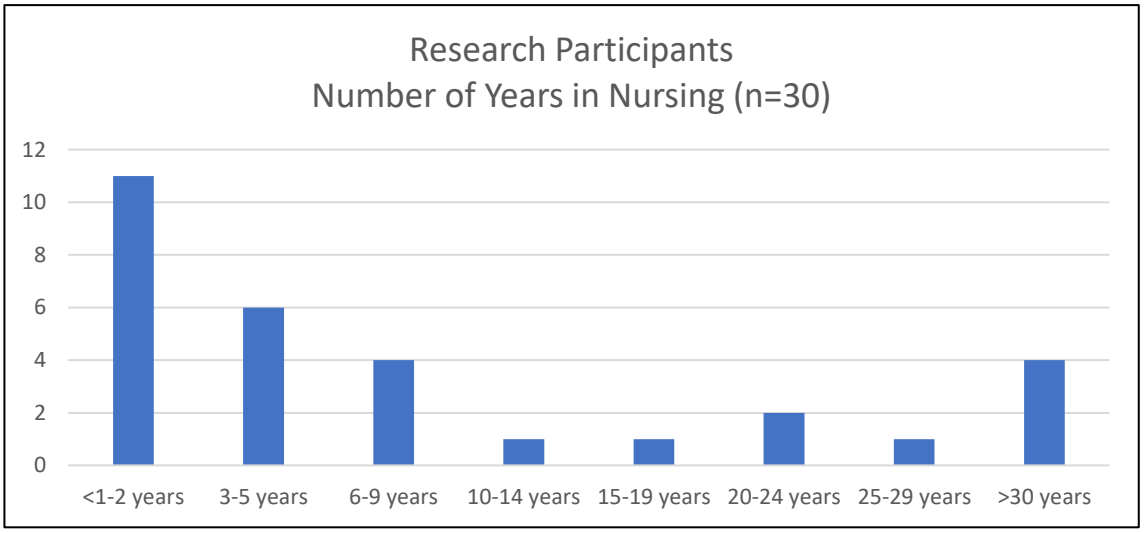

Figure 5. Research Participants: Number of Years Worked in Nursing

Twenty nurses identified themselves as Buddhist, two as Shamanists, one as an atheist, two as having no religion, two listed ‘other’, and two indicated they held to more than one religion. Of the two who practiced more than one religion, they both practiced

Shamanism, with one identifying the second religion as Buddhism and the other nurse simply listing ‘other’.

The average number of years worked in nursing was 10 years. Most ward nurses earned less than Tg500,000 per month at the time of the study (£145/month or USD$200/month). According to the questionnaires, nurses who had worked more than 10 years received a higher salary (between Tg500,000-750,000). Only one ward nurse with more than 30 years of employment and some managerial responsibilities recorded a salary level of Tg750,000-Tg1,000,000.

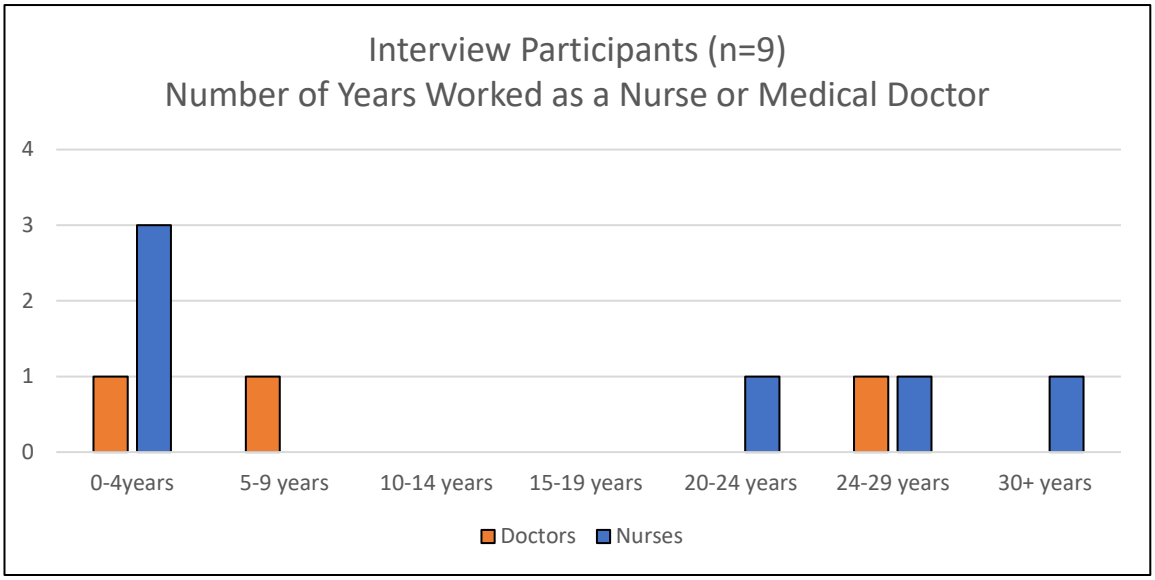

Figure 6. Interview Participants: Years Worked in Profession

Among those who completed formal interviews were 6 nurses and 3 doctors (Figure 6). Of these, 7 were female. The average age of interviewees was 36, ranging from 24-52 years of age. Of the 6 nurses interviewed, 4 were from the tertiary hospital and 2 from the district hospital, with representation from each of the wards on which field observations took place. The average length of employment in nursing was 14 years, with a range of 1-32 years. One of the nurses was a nursing director, one a senior ward nurse, and the remainder were general ward nurses. Among the doctors, the most experienced had worked 23 years and the youngest was in her first year of residency.

Staffing and Nursing Shifts

An inpatient ward's nursing staff included a Head Nurse, one or more senior ward nurses, general ward nurses, and sometimes Assistant Nurses (AN) (Appendix 22). Shift schedules were made by the Head Nurse and approved by the Nursing Director. Apart from 24-hours shifts sometimes scheduled at the secondary hospital, there were usually two shifts per day. Dayshifts were 8 hours in length and depending on the hospital, scheduled to start in the mornings at 08:30 or 09:00 and finish in the late afternoons at 16:30 or 17:00. Night shifts were 16 hours. However, many nurses were observed to start early and work late without extra compensation. One of the reasons given for the 16-hour shifts was inadequate public transportation during the night and the safety of nurses who often had to walk some distance from bus stops to their homes.

There were no part-time or casual staff, although at times nurses working in the ambulatory department were reassigned to help on the wards for a few hours as needed and available. Clinical Nurse Specialists also helped if needed. There were no formulas to determine staffing levels based on patient acuity, thus whether there were high or low levels of patient care needs, the same number of nurses were usually scheduled.

Fulltime work and pay were calculated monthly and based on a 40-hour work week. The actual number of hours therefore varied each month depending on the number of weekdays, minus official holidays. Most ward nurses who did night and weekend shifts worked extra shifts. Although there is no pay differential according to whether one works nights, days, weekends, holidays, or even overtime, many nurses liked to work extra shifts as even the base-salary pay per extra 8-hour shift meant they could earn extra money. In 2017-2018, at the time field observations were conducted, the total average wage for 8 hours of work was 24,000 Tugriks (approximately £7 or USD $10 per 8-hour shift). An example of a shift schedule is shown in Table 3.

Table 3. Nursing Shift Schedule

Sample 30-day Month: Nursing Schedule (partial) (Composite of examples from Wards A, B & C)														
RN	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon	Tues	Wed	Thur	Fri	Sat	Sun
1												8		
2												8	8	
3													8	16
4														24
RN	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	8	8	8	8	8			8	8	8	8	8		
2	8	8	8	8	8			8	8	8	8	8	8	
3			8	16			8	16			8	16		
4			16			24			16					
RN	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	8	8	8	8	8			8	8	8	8	8		
2	8	8	8	8	8			8	8	8	8	8		
3	8	16			8	16			8	16			8	
4	16		16				24	16		16			24	
RN-1 = Senior Nurse: (regular day shifts)……..Full Time = 168 hours (month with 21 week days) RN-2 = Junior Ward Nurse: (day-only shifts)…….Full Time + 2 extra 8-hour shifts = 184 hours RN-3 = Ward Nurse: (mixed rotation)…….Full Time + 1 extra 8-hour shift = 176 hours RN-4 = Ward Nurse: (nights & 24-hour shifts)……. Full Time + 40 extra hours = 208 hours														

The Nursing Director for Ward C explained that she tried to give nurses their preferences for who they worked with and the type of shift worked. For example, one of the older nurses had recently switched to full-time days because she wasn't able to handle the night shifts any more. Others worked exclusively nights and weekends, and often had the option of choosing to work with the same nurse. On Wards A & B, except for full-time day staff who included the Head Nurse, senior nurse manager, and new nurses, all ward nurses were expected to work a rotation of days and nights. On Ward B, night staff consisted of an RN and AN. On Wards A & C, night staff consisted of two RNs. On the surgical ward, surgeries usually occurred during weekdays and on evenings during the early part of night shift, with emergency surgeries occurring at any time. The regular occurrence of evening surgeries was said to be a result of inadequate numbers of operating rooms.

Nurses are known to do a lot of walking during a shift. In this research, estimates of the distances walked by nurses were made using an iPhone app (Figure 7). They were not precise, but they give an indication of the amount of walking done by nurses. Among those who were shadowed, nurses on day shifts walked between 2-6 km/shift, nurses on nights walked between 2-9 km/shift, and the one nurse I shadowed on a 24-hour shift walked between 5-6 km. Nurses on the surgical ward were recorded as walking 2-6 km, nurses on the medical ward at the tertiary hospital walked 3-6 km, and nurses at the secondary hospital walked 3-9 km. The ANs at the tertiary hospital walked 4-6 km during day shifts.

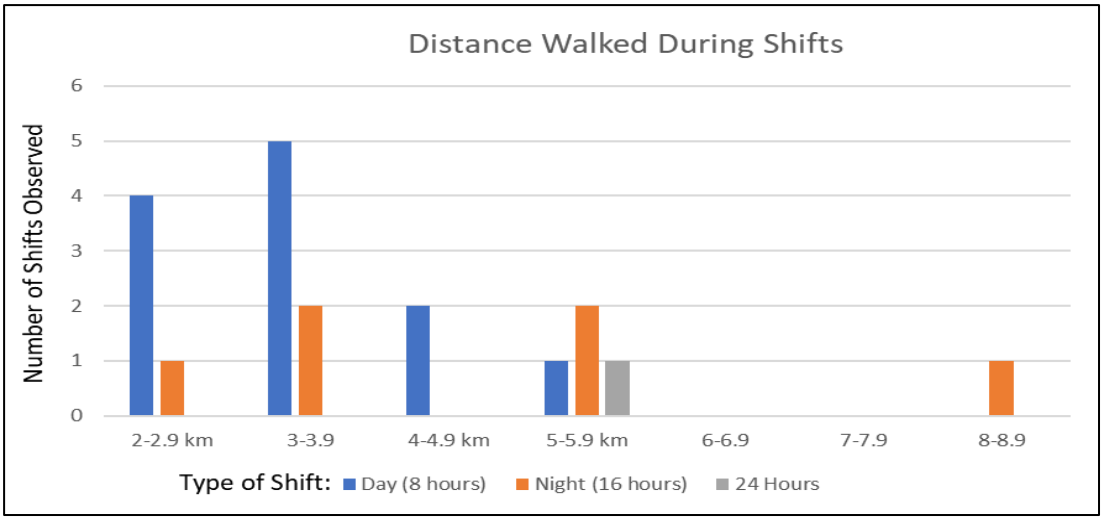

Figure 7. Distances Walked During Shifts

Medical doctors were always present in the hospitals. During weekday shifts, doctors were usually either in the ward, ambulatory department, or operating room. At the secondary-level hospital with 90 beds on one double ward, one doctor remained on staff during nights and weekends and was usually found in the doctors' room at one end of the ward. At the tertiary hospital's medical ward that had 34 beds and surgical ward with 45 beds, junior doctors or residents were always available onsite.

Patient Wards

Construction and Layout

Many of Mongolia's public hospitals are in older buildings dating from the 1940s-70s. While there have been some renovations, such as new paint on the walls and linoleum on the floors, the wards on which I conducted field observations appeared to have only been slightly modified. The wards were structured lengthwise with patient rooms on either side of a long corridor (Figures 8 & 9). In one ward, there was a door sill at the entrance of each room over which nurses had to lift their medication carts on entering. The buildings were constructed from concrete, and the original flooring was often covered with linoleum. As noted in the following fieldnote excerpt, the acoustics were usually loud:

> She asked me to take the med cart back down to the post. I was surprised at the unevenness of the corridor, and the cart made a lot more noise than I expected because the metal trays and containers on the cart banged into each other as I went over the uneven surface. (Shift-3)

On each ward there was one room that was designated as an ICU (Intensive Care Unit). It provided a lower level of care than a regular ICU ward, but it served the needs of the medical and surgical wards by placing more acutely ill patients in a room where they received closer monitoring than they would receive in a general patient room. The ICUs had been more recently renovated and had 2-4 beds/room. On the surgical ward, the ICU was used primarily for post-operative recovery, following which the patients would be moved to general rooms or transferred to another ward. In addition to inpatient rooms there was at least one treatment room per ward where nurses would do wound care, give injections, take blood samples, and provide catheter care, and where doctors would sometimes perform minor procedures.

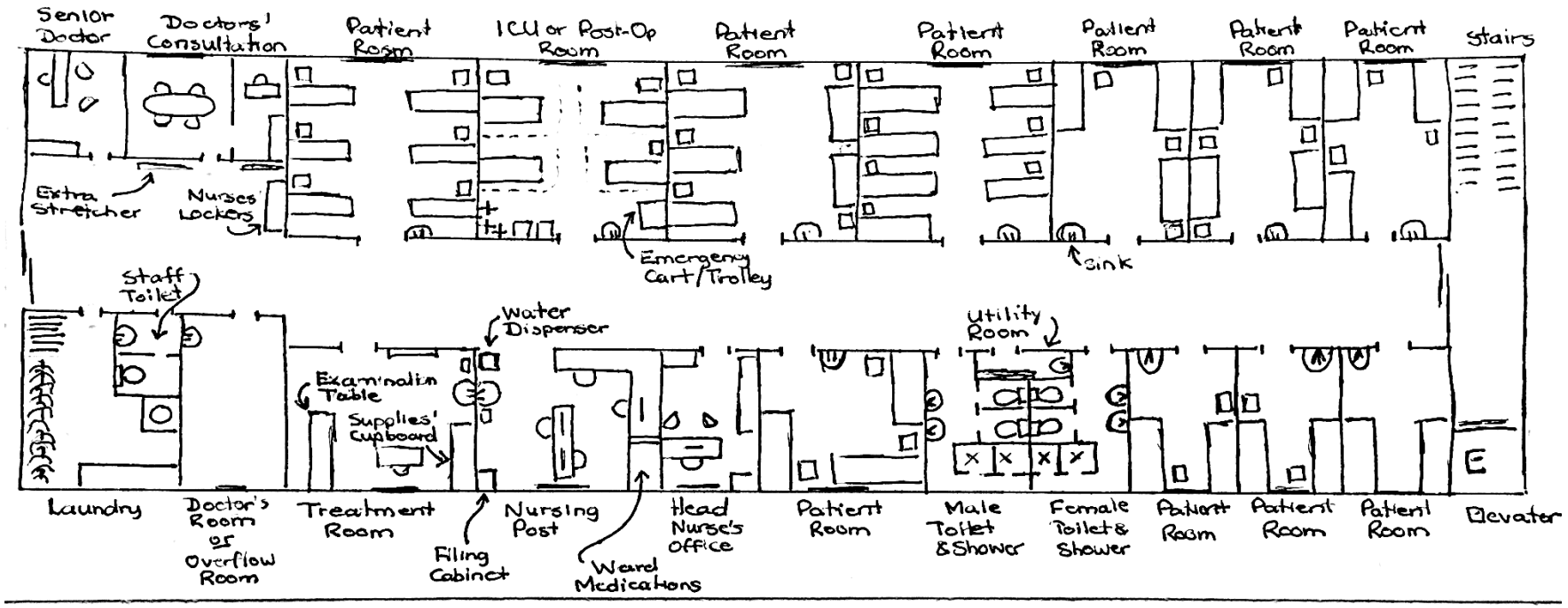

Figure 8. Tertiary Hospital Ward Layout

Note: The layout is not drawn to scale. Some modifications to the drawing were made for the purpose of maintaining confidentiality.

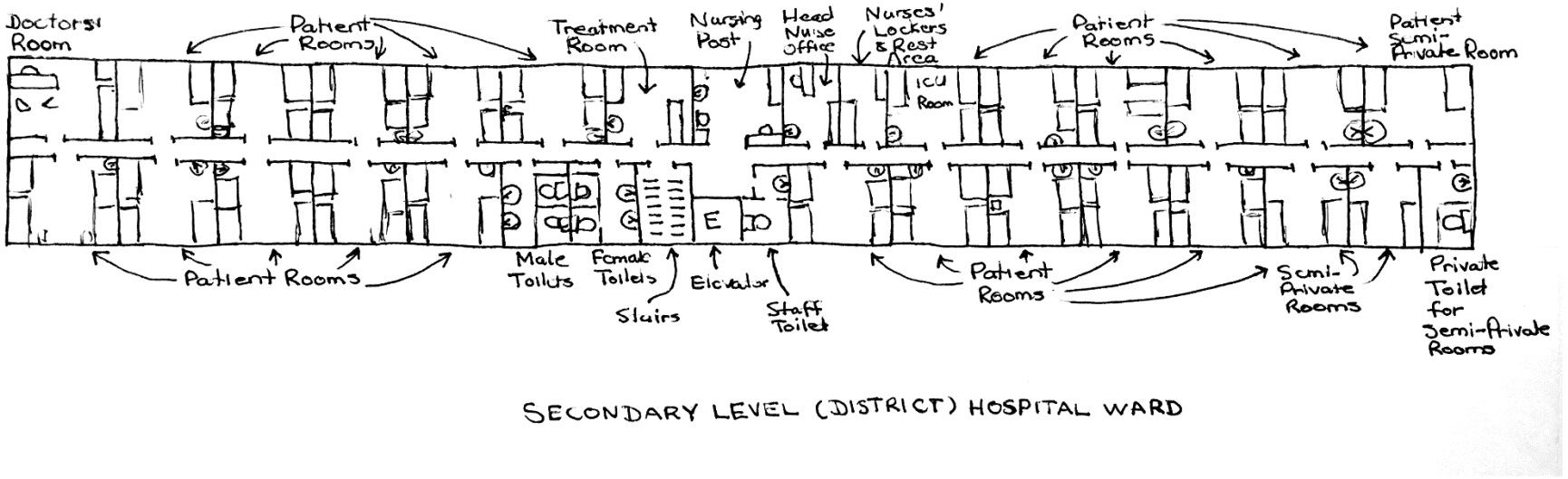

Figure 9. Secondary Hospital Ward Layout

Note: The layout is not drawn to scale. Some modifications to the drawing were made for the purpose of maintaining confidentiality.

The office of the Head Nurse was in a small room next to the nursing post. In two of the wards, the office had enough space for a desk and computer, telephone, a bookshelf, and a small sofa. At the district hospital, the Head Nurse's office had only enough space for one desk with a computer and telephone, a metal storage cabinet, and an extra chair. The nursing post was usually located near the centre of the ward's corridor. On the wards with lots of staff, there would be a few desks and chairs, while on the ward with only a couple of nurses, there was just one desk and two chairs. Automatic blood pressure cuffs were available at the nursing posts on Wards A & B for patients to monitor their own blood pressures. Each ward had a hot and cold-water dispenser that was available for patients and staff.

Each ward had posters and at least one bulletin board. The nursing shift schedule was posted on a bulletin board along with various announcements and information. In both hospitals, posters were located near the area of the nursing post. Posters usually had information about protocols such as steps for CPR or handwashing, or they focused on health promotion, such as healthy eating. At the district hospital, nursing information such as announcements of the month's continuing education requirements were posted in the treatment room. At the national hospital, there was also a whiteboard at the nursing post on which was posted patient dietary codes.

Patient Rooms & Facilities

The number of beds per room ranged from 2-8, with bedside tables but no curtains serving as dividers between beds. Most beds were older and manually adjustable, and nurses often had to bend over or find a chair to sit on when working with patients. Electrical beds were not plugged in unless the bed was in the room designated for more critically ill patients. Some beds had no means for being raised or lowered, either manual or electric, and only a few had side rails that were in useable condition. Stretchers were similar: some were old and had no side rails and brakes, and others

were newer, although not all were able to raise or lower to the level of the patient beds as noted in the following experience:

> The ambulance stretcher is only about 40 cm above the ground, and it does not have any system to raise it to the height of the stretcher that the patient is on. So, we all take a piece of the duvet that the patient is wrapped in, and with the mother holding her daughter's head, we lift the patient down to the ambulance stretcher. It is a 4-person transfer. (Shift-4)

Rooms were often crowded with beds up against a wall and sometimes with two beds' headboards touching. When there were more patients than beds, a variety of surfaces were created as temporary beds as described below:

> Today there does not seem to be enough beds for all the patients. I noticed that there are four beds set up in the corridor. One is a bed made up of two backless benches pushed together. Later the number of beds in the hallway was increased to six. There were three cots, two metal examination tables, and the one double bench, all of which were used for patients. (Shift-16)

Each room had a call bell that either rang at the nursing post and displayed the room number code, or that rang through to wrist bands that the nurses wore. In most rooms, there were only 1-2 electrical outlets. Patients would use these primarily to recharge their mobile phones. The only oxygen outlets observed were in one ward's renovated ICU room. Those requiring oxygen in other rooms either used an oxygen cylinder or a portable oxygen concentrator machine, depending on what was available. There were no wall or portable suction units. Except for the ICU rooms, when a piece of electrical equipment was used, they usually had to run an extension cord across the floor to access the electrical outlet. There was overhead lighting in the centre of the rooms, but none on the walls above the beds. This meant that nurses usually worked in their shadow when doing tasks such as venepuncture. Examples of inpatient rooms are shown in Figures 10 & 11. Room size is approximate and not drawn to scale.

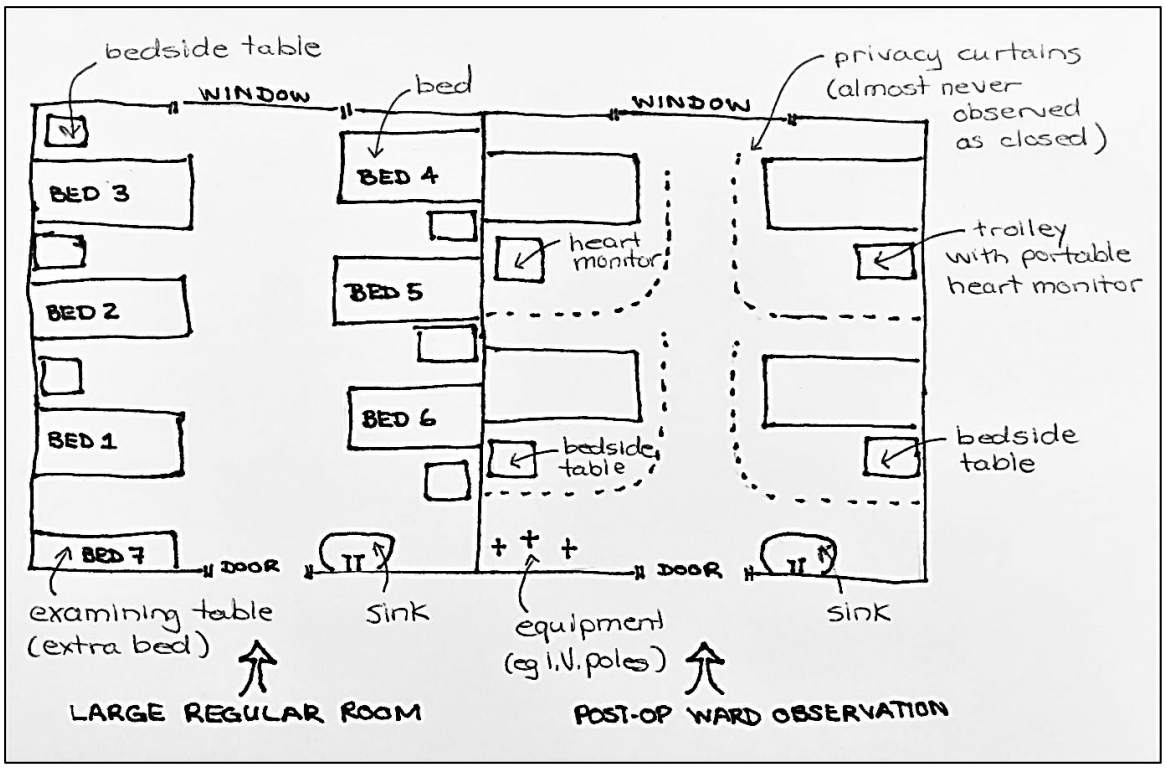

Figure 10. Large Ward Rooms

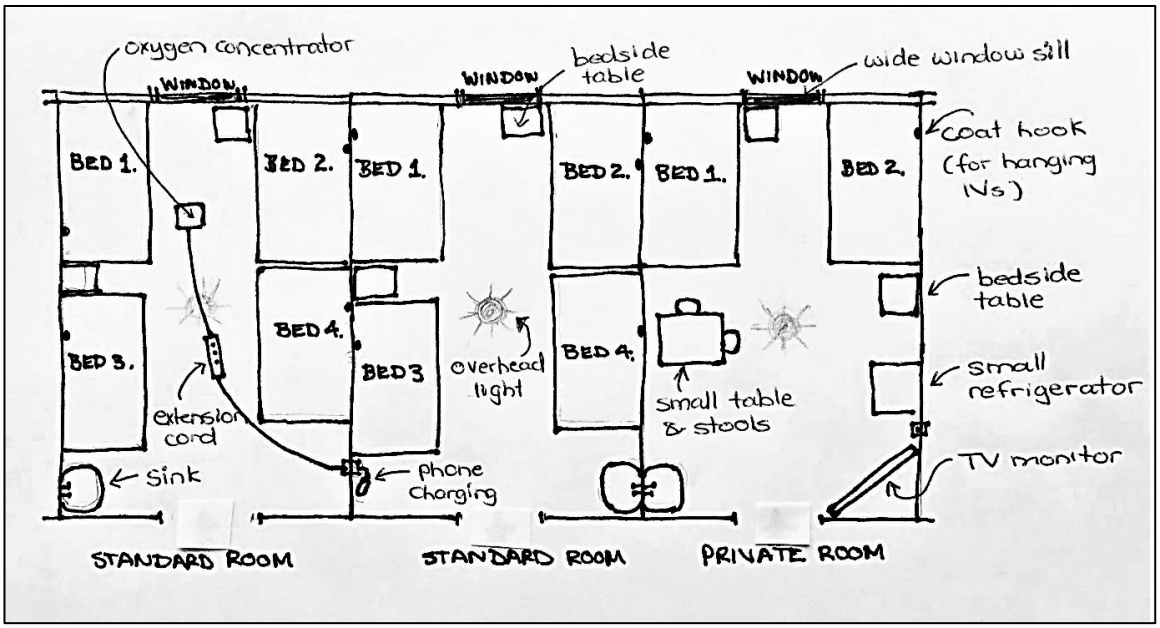

Figure 11. Standard Ward Rooms: Public & Private

Each room had one sink with running water, but nothing on which to dry one's hands. On a single ward, there were two patient toilet facilities, one designated for females and one for males. The two exceptions to this were noted on a surgical ward that had one double occupancy room with an attached toilet and shower facility and on a medical ward where there was one shared toilet for three semi-private double-occupancy rooms. These rooms were reserved for those who would pay a surcharge for having a maximum of one or two roommates, a TV, and a small refrigerator.

The general ward's male and female toilets were usually set up with two stalls and 1-2 sinks each. There was no hand soap, but there was usually a dilute disinfectant such as chlorhexidine that people could splash over their hands. At the tertiary level hospital, there were 1-2 shower stalls per ward. On one ward, there were no doors to some of the toilets and shower stalls. There were no showers at the secondary level hospital and some patients would leave the hospital to go home and shower and then return to the hospital. Patients had to bring their own toilet paper and towels. They also had to provide their own bedding, pyjamas, slippers, and their own dishes, usually a mug, bowl, and cutlery.

The wards were often drafty in the Mongolian winter months which regularly had outdoor temperatures below -20ºC, sometimes reaching into the -40ºCs. When there were high levels of outdoor pollution, the air inside the ward would smell of coal. The wooden window frames and doors were old and did not always close tightly as described in these fieldnotes from a nightshift:

> In one of the patient rooms, the temperature is quite cold. While standing nearest the door (as far from the windows as possible in the room) I can feel my nose and fingertips getting cold. I move towards the windows. There is a large gap between the balcony door and the door frame that I could stick a pen tip into, and the cold air is flowing in. I check the window next to the balcony door. It is like the windows at the nursing post and can't close. Later I realize that the window next to that has the same problem. The two CAs in the room and one patient comment on how cold it is in the room. Alyssum includes this in her shift report and asks the head nurse if something can be done about the cold in the patient rooms. (Shift-2)

To fix these types of problems, maintenance workers, and sometimes nurses, would seal windows and doors as needed. In the spring and summer, long hours of sunlight and warm temperatures could be a challenge, and occasionally during dust storms, sand and dust would come in through cracks in the windows and doors. While some room windows had curtains, these were often thin or partial. Other windows had no curtains. In rooms with no window curtains, patients or staff would sometimes tape newspapers to the windows to reduce the glare from the sun. Housekeeping staff were responsible for keeping the floors and windowsills clean, while ANs at the national hospital were also observed wiping windowsills.

Visitors and Care Attendants (CAs)

When family members or other visitors came to the ward, they were usually required to wait outside the doors of the ward and the patient would leave the ward to meet with them. If they came onto the ward, they had to first leave their coat in the main cloak room or with another visitor waiting outside, and they either wore indoor slippers or they covered their shoes with plastic covers that were available for purchase on the main floor of the hospital. This was especially important during the winter season as snow would melt from shoes and leave black, watery puddles. The black colour came from coal soot that covered the ground as a result of it being the primary fuel for heating throughout the city.

Family members frequently brought food and traditional Mongolian salty-milk tea. When patients were on restricted diets, this created challenges for the nursing and medical staff. When a family member stayed with a patient to provide personal care as a '*сахуур*', translated as 'care attendant' and referred to in this research as a 'CA', the CA was required to bring his or her own indoor slippers. Usually, only patients who were not fully independent were observed as having CAs. When present, CAs usually sat on a chair adjacent to the patient. On Ward A, CAs who stayed overnight could request a pallet, which was a narrow board that was put on the floor for them to lie on. A nurse

would unlock the storage room where the pallets were stacked, and together with a CA, would take them to the patient room.

Resources and Supplies

Nurses had to be creative when there were inadequate supplies and equipment. On Ward C, nurses made their own hand sanitizer dispensers from energy drink bottles that had been washed and fitted with cut-down pump handles from other containers. Nurses used gauze to tie urinary drainage bags to beds to keep the bags off the floor. They sometimes used disposable gloves as tourniquets. As there were no safety needles, nurses were observed to momentarily stick a used needle into a bed mattress until they could dispose of it safely. Some beds had IV poles attached, but most didn't. Nurses would fetch portable IV poles either from another patient who wasn't using it, or from a room where a few were kept available. At the district hospital, metal coat hooks attached to the wall above each bed replaced the IV poles and nurses either had to kneel on the beds to hang the IV fluid bags or they got the patients to hang it up themselves. Nurses were resourceful in getting things to work, although sometimes compromises were made, perhaps unknowingly as reflected in the following observation:

> Sometimes the intravenous fluid to be given is contained in a glass bottle. However, many of the bottles don't seem to have any holders, therefore the nurses have to be creative in finding ways to hang the bottles. Pixie takes a plastic bag that had earlier contained a medication administration set. She puts the bottle in the torn bag and takes the IV line and pierces through the bag and into the bottle. She then [uses] the corner of the torn bag [to hang the IV]. While I think this is creative, there is also a complete break in sterility, because she pierced the bottle through an unsterile bag. (Shift-19)

The ward stocks of supplies and extra medications were usually kept close to the nursing post or in the treatment room. There was one emergency cart for each ward containing various emergency medications and supplies such as syringes and a bag-valve mask. There were no defibrillators stocked on the carts at the time of field observations. There was a sink with running water close to the nursing post – either at the post itself or in an adjacent treatment room. As there was almost never anything on

which to dry one's hands after washing; most nurses simply air-dried their hands, while a couple of nurses would bring their own towels. They would place the towels to dry on the hot water radiators which were used for heating the hospitals during the winter season. Nurses not only brought their own towels for drying their hands, but they would sometimes bring or store other supplies they anticipated would be needed. One nurse brought her own roll of wide cellophane tape for taping shut the sharps' boxes because she felt this was safer.

The availability of Personal Protective Equipment (PPE) was inconsistent and limited. Occasionally there would be a notice posted on a patient room of precautions to be taken, but there were never any supplies such as gloves, masks, gowns, or eye shields placed outside the rooms. Gloves and masks were sometimes available inside a room, but usually in small quantities and most nurses and other personnel who entered the room seldom used them. Nurses were conscious of the fiscal need to ration the use of gloves and often used hand sanitizer to clean gloves between patients. At the district hospital, nurses were given a limited number of gloves for use during one-month periods. Nurses always had a hand sanitizer dispenser on each of their medication carts for medication rounds. Hand sanitizers were available in most rooms and the hallway of the tertiary care hospital, but there weren't any hand sanitizers readily available on the ward at the district hospital.

Nursing Workspaces, Uniforms and Services

The tertiary hospital's wards had on average three computers at each nursing post, while the district hospital had one. Most of the time there were no problems with the computers, however there were periods when the computers would load very slowly or when multiple users wanted to use the computers at the same time. Both of these situations resulted in nurses having to wait until they could get access. There was one landline phone at the nursing post that was used primarily for in-hospital communication. However, most nurses and doctors used their personal mobile phones for connecting

with each other if they were not in the same place. Nurses usually completed their charting at the nursing post as both the computers and the various notebooks and logs were kept at the nursing desk. Nurses on Wards A & B used a combination of electronic charting and handwritten documentation, while nurses on Ward C still documented patient care in paper charts, notebooks, and logs.

Nurses had tiny lockers for valuables when working. These were located on the ward and had sufficient space for a handbag, a mug and bowl, a lunch bag, and a few papers. Nurses would store their outdoor clothing and shoes in the larger, general hospital staff locker room, usually sharing a single locker with another worker. All nurses, including ANs, had to wear white uniforms and footwear. Some nurses at the district hospital wore nursing caps, but at the tertiary hospital, no caps were worn. Hair had to be kept tied or short. Nurses with long hair tended to use small hair nets to bundle their hair into.

Most hospitals had a laundry service that would clean nurses' uniforms for a small fee each month. This service started many years ago when people had no washing machines in their homes. On each ward there was a tiny room with a single toilet and sink that was designated for the nursing and medical staff and which could only be used if one had the key which was kept at the nursing post. Nurses had to supply their own toilet paper and often there was no soap or hand disinfectant for the staff toilet.

There were no ward kitchens or galleys except on Ward B where there was a small kitchen. However, as it was out of sight of the nursing post and had nothing in it except a sink, empty cupboards, and a small sofa, it was seldom used by the nurses. Ward C was the only ward in this research that had a small 'nursing staff room' which was furnished with nurses' small lockers and a single bed that was sometimes used by nurses during 16-hour nights and 24-hour shifts. Eating and drinking was not permitted at the nursing post, although nurses working nights and weekends would often bend this rule. On weekday shifts, nurses would often take their breaks in the Head Nurse's office.

Nurses frequently left the ward to go to the hospital's lab, pharmacy, sterilization unit, waste disposal room, or emergency department. During the daytime, the hallways they navigated through were usually full of people and the elevators slow because of heavy use. At night, nurses had to navigate poorly lit areas, stairs, and at one hospital, they had to get security to unlock the elevator in order to use it. When lighting was poor, nurses would sometimes use the flashlight on their mobile phones. On rare occasions when there were power outages, nurses used their own mobile phones for light as there were no emergency lights in halls or stairwells, and emergency flashlights were not available.

Workload

In Mongolia, there seems to be a combination of factors contributing to the heavy workload that nurses in this study commented on and were observed as having. Depending on the type of ward, the patient-nurse ratio is high with a range of 15->65 patients per ward. The time of year also makes a difference, with springtime usually having the heaviest patient load on adult wards. Staffing levels were static and additional staff were usually not brought in even when there were 10-40% increases in the number of patients. Nurses cope, but it was challenging as explained by a medical ward nurse:

> *It is relatively okay in the daytime – there are 20 patients for 1 nurse and there are 5 or 6 nurses during the day – so I think workload during the daytime is okay. But the night shift requires a high level of responsibility, so very experienced and skilled nurses work on night shifts. We don't assign newly graduated nurses on night shifts. The night nurses have a high level of responsibility: they nurse and care; take notes; conduct assessments; and they do everything. 1 doctor and 2 nurses work on the night shift looking after 120 to 130 patients. (Nurse Pixie)*

Part of the reason for the high patient: nurse ratios is a nursing shortage. The high patient ratio contributes to work overload, and as one nurse noted below, sometimes frustration with this situation results in expressions of anger:

> *One nurse works with about thirty, and two nurses work with sixty patients – Because of insufficient nurses, there is a high work overload which results in frustration and anger I think – But we have to try our best not to take our anger out on other people – but*

because of high workload, we do take our anger out on some people. (Nurse Diana)

A relatively high turnover rate of nurses is, according to some, a challenge as time is invested in training new nurses only to see them leave and the cycle repeated. When an additional nurse was added on one of the wards during night shifts, the nurses said it made a significant improvement to their work. When ANs were part of the staff mix, it helped with managing tasks that would otherwise have been assigned to nurses, e.g., taking a patient to diagnostics or couriering items to and from the lab or pharmacy.

An additional factor impacting the workload of nurses is the high number of injectable medications prescribed by doctors. As noted by Clematis, tasks related to medication administration are a priority and comprise the major portion of nurses' work, including the preparation, administration, troubleshooting, removal, and documentation of medications:

In getting ready for a shift, our ward is busy with many activities. …the most important tasks are, in the case of our ward, we do more injections than nursing care – a lot of injections. We are supposed to work closer with [patients] more on nursing care – but because we have many injections, we do less in nursing care. I think if we resolve these injections, we would do more in nursing care. (Nurse Clematis)

In the process of medication administration, nurses were interrupted numerous times. Removal of the single-use IVs that had finished infusing was a constant interruption. Other interruptions were requests by patients, doctors, and other nurses. Although managing interruptions is recognized as part of the work of the nurse, it is a factor that contributes to higher workload.

Nurses help to keep the ward functioning in addition to providing patient care. However, the 'caring' part of nursing work that many nurses value was the area most neglected simply because of time pressures for urgent and non-negotiable tasks, of which giving injections was the major task. Clematis, a nurse with many years of experience explained:

Well, although it seems not relevant, they [tasks that aren't directly nursing tasks] are necessary. For example, in addition to our nursing tasks, we do everything! In our ward nothing happens without nurses' involvement. Nurses are needed if a patient goes for [diagnostics] …Nurses are overloaded with work with too many responsibilities. When nurses try to pay attention to nursing patients, they get caught up with injections which they have to do…Since we have to do the injections, we just have to cope with it since we can't reduce injections.

Impact of New Technology

New technology has impacted nursing work. Blood pressure, especially in the tertiary hospitals, is measured primarily by electronic blood pressure machines. As observed by one of the surgeons, cardiac monitors and electronic BP cuffs allow for continuous monitoring which frees nurses and doctors from having to manually check a more critically ill patient at frequent intervals:

When checking a patient's blood pressure, the doctor used to sit next to the nurse. But today, a nurse checks blood pressure using an apparatus without a doctor. In the past, the doctor used to sit right next to the nurse and double check the result manually. Today, technology does all these things for nurses and doctors. (Dr. Ulmus)

For hospitals transitioning to electronic charting, nurses need to become skilled at keyboarding. The use of computers makes it easier for nurses to document using a keyboard instead of writing things out manually. However electronic charting was also cited as the cause of problems. Although it seemed that patients thought nurses weren't working if they were sitting at a computer, both doctors and nurses felt that computers increased the workload of nurses as nurses still had many forms and notebooks where they did manual entries in addition to the e-charting. This was recognized by a senior ward doctor:

Today, we have IT/digital systems for registration and recording. This added to the workload of the nurses – nurses have a lot of forms to fill in. Someone might observe that nurses sit in front of a computer as if not caring for patients – but most of the nurse's work is inside that computer. (Dr. Ulmus)

There have been incidents of misunderstanding between doctors and nurses because of electronic charting. Nurses report that doctors will give verbal orders but not follow-through with entry of their orders into the e-chart. Doctors will also update the e-charts with new treatment orders, but if they don't verbally notify the nurse and make the changes on the medication sheet hard-copy, then treatment changes might not be immediately implemented. Although nurses are expected to do multiple checks to ensure that paper and electronic documents are consistent, sometimes the realities of time constraints make this challenging as recounted in the following:

> *After we finish doing the medications, if we find some medications unused in the basket, we double-check the [paper medication administration] form if there is any update & change. If there is no update & change, then we stick to instructions written on the form. Sometimes, we go to the doctor to double-check with them about the unused medicines against the prescriptions on the form. One time…I found there were unused extra [medications] in the [patient's pharmacy basket]. I didn't use those because there was no prescription on the form. Then, just after I finished doing [other patients'] injections, the doctor scolded me saying that I was supposed to use those two. So why? … I will not do [them] if they are not prescribed. Also, because other patients needed injections and I needed to finish injecting them - I was thinking I would ask from the doctor when I became free. (Nurse Margi)*

Socio-Emotional Environment

The socio-emotional environment described in this section encompasses attitudes, feelings, and relationships both on the hospital wards and within Mongolian society. Although some feel that generational attitudes towards nurses are improving, many Mongolians still believe that doctors are smarter and better than nurses. Based on my field observations, Mongolian nurses have tried to counter this by instilling a sense of pride in the profession through activities such as celebration of Nurses' Day, engaging in research and further education, and fostering social support within nursing teams. Some doctors also think it is important to change this attitude, in part by recognizing the value of nurses and furthering their capabilities as commented on by Dr. Juni:

> *In Mongolia, there is an attitude that doctors are better than the nurses – they think those who are smart become doctors, and those who are not so smart become nurses. If we change this attitude, and if we focus on the nurses by improving their competency, it would be good.*

While many nurses felt that nursing was a rewarding job because of the role in helping people become well again, the impression that nurses were not well-respected was common. Nurses frequently mentioned they had wanted to become a doctor, but because academic grades were not high enough, they became nurses. This contributes to the perception that nurses are not as smart as doctors. It is also reinforced by the perceived role of the nurse as a person who carries out doctors' orders as reflected in the following statement:

> *Generally, doctors are more accepted. [laughs]…People think doctors can fully heal them and nurses are just people who do injections and who can't do anything else. [laughs] (Nurse Diana)*

The work of the nurse in Mongolian public hospitals can be quite stressful. Heavy workloads and unrealistic expectations contribute to stress. Mongolian patients sometimes express anger towards nurses and this was described by one nurse as one of the most difficult aspects of nursing. In Mongolia, the working conditions for doctors are thought to be better than for nurses. Some nurses in this research indicated interest in becoming doctors or changing to other jobs because they offer better salary, a more reasonable workload, and greater respect. It is interesting that these nurses didn't say that they didn't like working as a nurse, but rather they felt disrespected and the low salaries they received made it financially difficult for them. This was reflected in the response of one nurse when asked why she wanted to leave nursing:

> *…in Mongolia, nurses have a low reputation and they get a very small salary. Besides, they have work overload and they work overtime when there is not enough nurses. (Nurse Margi)*

Attitudes

Attitudes are part of what makes up the nurses' socio-emotional environment. Attitudes are complex and can be described as a mood, sentiment, and approach or mindset. The theme or topic of attitudes was discussed in all but one interview and was noted in some of my post-field observation reflections. There were a variety of examples of attitudes discussed and observed. These will be summarized in the next few pages according to the attitudes of nurses, doctors, and patients as they relate to the nursing role in Mongolia.

Attitudes of Nurses Toward Doctors.

Nurses are taught that they work together with doctors as one team. The understanding of what it means to be a team member likely varies between the nursing and medical professions as well as among individuals. Some nurses seem to be content with their roles on the team while others find it difficult or are disillusioned. Although there have been some efforts to strengthen nursing as an independent profession, hierarchical and authority differences between doctors and nurses are still present as explained by one nurse:

> *What we were taught in college is that the doctor and the nurse are one team. So I expected I would work as a team with a doctor - but it was the opposite – we don't work as a team. The doctor orders the nurse what to do. (Nurse Margi)*

Nurses said that doctors were often quick to assume that if there was an error or something hadn't gone according to expectations, it was the nurses' fault. The most common area of complaint was related to medication administration. One nurse described a situation in which a doctor blamed the nurses when a patient didn't receive a medication, making the assumption it was the nurse's fault. She recounted:

> *Later we showed [the document with the patient's signature] to the doctor that the patient himself refused the treatment. But if we don't have [the patient] write down the refusal, later we, the nurses, get the blame that we didn't do the treatment as per the prescription on the form. (Nurse Margi)*

While some nurses said they had no problems with doctors, others were fearful of doctors. Margi, who had experienced conflict with doctors made the following observation:

> *If the doctor simply scolds the nurse for the things she did wrong, then the relationship becomes tense and the nurse becomes hesitant to ask questions and is not confident in doing her work. By avoiding asking questions for clarification, the nurse might make another mistake and get scolded. This way, the relationship between the doctor and the nurse gets further and further apart…There is fear and hesitance on nurse's side to ask questions from the doctor. (Nurse Margi)*

Nurses feel that most doctors wouldn't accept a nurse telling them she wasn't able to do what they asked at the moment they asked. This was reflected in the following account:

> *…when the nurse is doing her job - let's say in the middle of doing treatments - suddenly the doctor would come and call the nurse and instruct (command) her to take a patient for an ultrasound immediately. It is hard for the nurse, in the current Mongolian context, to tell the doctor that she first has to finish doing her current task; the doctors would not accept and respect it. (Nurse Halenia)*

The tendency to publicly acquiesce was also observed in a staff meeting I attended where I recorded the following:

> Dr. Silvestis clearly had some issues with the quality of nursing care provided as there were a couple of times when he talked about things being major errors (such as delayed timing for drug administration) and when he relayed patient complaints (such as billing of drugs, not picking up rubbish, and poor attitudes of nurses to patients). From the volume and tone of voice, it was clear that he was 'scolding' the nurses. The nurses, for the most part, passively looked at him with expressions that didn't reveal if they agreed or were angry or were shamed. The only ones who spoke in response (defended themselves) were the male nurse, the male pharmacist, and the head nurse. (Shift-17)

Attitudes of Doctors Towards Nurses.

Doctors interviewed about the roles and responsibilities of nurses had more examples of complaints than they had examples of work that they thought nurses did

well. Doctors have considered nurses at times to be irresponsible (e.g., when a nurse didn't check to see if an IV infusion was in-situ, with the result that there was significant interstitial leaking), not trustworthy (e.g., they don't always do something even if they chart it has been done, they take leftover medication for themselves, or they substitute their own lab samples in place of patients'), and disregarding of best practices (e.g., one nurse doing 4-5 IV insertion attempts on a patient instead of calling for another nurse to take over after 2-3 unsuccessful attempts as per protocol). In addition, some doctors felt that nurses have poor verbal and non-verbal attitudes towards patients.

While conversation between doctors and nurses was usually observed as cordial, friendship or collegial relationships between doctors and nurses doesn't seem to be the norm, nor is it encouraged. One doctor said that when she first started to work at the hospital, her senior doctor's advice was to avoid socializing with nurses as equals because changing that hierarchy might result in nurses being unwilling to follow doctors' orders. During a social gathering of ward doctors and nurses, it was observed that only doctors and senior nurses sat on chairs around the small table; the general ward nurses either stood or were seated behind the doctors.

Attitudes of Nurses Towards Other Nurses.

Nurses' attitudes towards other nurses was an important part of how the nursing team functions. Kindness, respect, and a willingness to help other nurses with their workload, including staying overtime as needed were all characteristics expressed as important. One nursing manager commented on the need for new nurses to work better in teams as noted in the following quote:

> *…new nurses who recently graduated are a bit weak at working as a team – there is this attitude in them – they don't listen to the [older nurses'] advice and they talk back – they have this attitude that they have a bachelor's degree and they don't want to listen to an older nurse who has a diploma – this attitude seems to become a hindrance when working as a team. (Nurse Halenia)*

Good communication skills, for the sake of team functioning was important. Although a few nurses individually expressed fear of senior nursing management, head

nurses appeared to work at cultivating positive team attitudes among the nurses by opening their office as a break room, providing tea and coffee, and helping with the workload as needed.

Major social events such as an end-of-the-year party and International Nursing Day were events where hospitals hosted fancy celebrations that most nurses eagerly anticipated. There were competitions with prizes given out to nursing ward teams. In addition, some nursing wards organized informal social events both within the hospital (e.g., sharing a meal together) or outside of the workplace (e.g., going on a trip together). One key informant expressed that her greatest challenge as a new nurse was feeling socially isolated within her team. She reflected that this was likely due to her not going to social events, especially ones with alcohol, and by her not participating in gossip.

Attitudes of Nurses Towards Patients.

Both nurses and doctors had opinions about the type of attitude nurses should have towards patients. A caring attitude is a priority. Eye contact when communicating with patients was considered important along with a kind facial expression as explained by Halenia:

> *I think the appearance of the nurse… is very important because a sick person always looks to a person's face for help. If the nurse has a sharp, unwelcoming appearance, that is not helpful. (Nurse Halenia)*

Concern was expressed that nurses sometimes spoke to patients in unpleasant or argumentative ways and at other times nurses gave preferential treatment to patients who gave gifts or who were paying for private rooms. Dr. Ulmus acknowledged that nurses often come to work with stresses related to inadequate income and other personal issues. However, nurses should be able to set aside these personal issues or concerns in order to focus on their job as noted by Dr. Juni:

> *They could talk with patients when doing injections instead of being angry. Or they could come into the patient room smiling and*

conversing nicely with the patient as if they are talking with their loved ones. (Dr. Juni)

Attitude of Patients and Families to Nurses.

As this research did not specifically look at the attitude of patients towards nurses, comments regarding how patients felt towards nurses or how they treated nurses are from the perspective of research participants. However, the comments provide some insight about what nurses and doctors have heard or observed regarding patient and families' attitudes toward nurses.

In general, the public is perceived as having a relatively low opinion of nurses. According to nursing and medical interviewees, nurses were considered by the public as not as smart as doctors. The nurse's main task was seen as carrying out doctors' orders and if this was done according to expectation, patients were grateful as noted by a nurse:

When I serve people, giving them injections or being there during their time of illness, people get very grateful and happy, and that makes me feel happy. (Nurse Latifa)

However, if nurses were sitting at the nursing post, or if they walked and didn't run to respond to a patient's call bell, people thought of nurses as lazy as reflected in the following:

In some cases, people get angry and verbally abuse us. They say, 'You should work harder as you are paid by the government' etc. Such cases are very common. (Nurse Latifa)

Although most patients were pleasant towards nurses, frequently giving them gifts of food such as fruit or candies, nurses reported occasional physical expressions of anger as recounted in the following incident when a family blamed the death of a patient on the nurse:

In my 20 years of experience working as a nurse, I had a case of being attacked by a patient's family members – They almost beat me although I did everything as instructed by the doctor… The family members had a totally wrong understanding of the situation when an elderly man died, and they immediately attacked me. It was

frightening. Things do get difficult in such hard times especially when someone is at the brink of death. (Nurse Latifa)

Patients and families didn't always express negative feelings about nurses openly – perhaps in part because of fear as noted in the next sub-section (fear/blame/anger/violence). However, one of the doctors interviewed commented that patients would sometimes complain to him about nurses:

The nurses don't communicate with anyone badly in my presence. But people who received [nursing] services tell me that a certain nurse was bad to them; had very poor communication skills. (Dr. Ulmus)

Fear/Blame/Anger/Violence

Nurses experience incidents of blaming, anger, and fear in the workplace. These can be directed at a nurse through patients, families of patients, doctors, nursing management, or the other nurses with whom they work. The role of the nurse in these situations is to carry on and work according to the policies of the ward and hospital. For nurses, it seems that much of the time they are expected to be passive, especially regarding anger, or in response to admonishment from senior nurses or physicians.

Blaming others rather than investigating the situation was mentioned as occurring frequently. This seemed to create a tremendous amount of pressure on the ones who either were blamed, or the new nurses who were trying to learn but recognized they would likely make mistakes. Thus, nurses had to learn how to prevent blame and to handle it when it was directed at them as explained by Nurse Margi:

There is a saying that once you have a bad name, you always have it. We have one nurse in our ward and when something goes wrong her name is mentioned – but we don't know if she really did it or not. These kinds of misunderstandings occur. But sometimes, I get offended; feel discouraged. Sometimes I regret that I chose this profession too. [becomes teary, voice wavers] It was hard for me in the beginning, to be honest, because I felt offended that they put me in this difficult ward. But I got used to it now and I feel ok – generally ok. When such misunderstandings arise, it's a bit hard. (Nurse Margi)

Patients sometimes expressed anger towards healthcare workers. Anger was described by one nurse as being a part of Mongolians' cultural response to fear. The following nurse stated that while anger could be aimed at the nurse or the doctor, nurses faced it more frequently because they provide most of the direct care:

> *Mongolian people have a very angry and sharp personality. They are very angry when they are ill. We face different kinds of people who are sick, angry and in pain – if the nurse gets angry as soon as she meets such patients, it will be a disaster. [slight laugh] Therefore, the nurse must control her temper very well in order to meet such patients. If the nurse gets angry when communicating with the patient, it will ignite an argument. Instead, the nurse should greet the patient, talk with him and smile at the patient even if he/she is angry… Generally, Mongolians of course don't come to the hospital smiling when they are in pain – and perhaps it is same in other countries – but Mongolians are known for anger and quick temper from the ancient times; there is such a mindset – they express their pain in anger. (Nurse Diana)*

There were a couple of incidences recalled by both nurses and one of the doctors where a patient's family became angry towards a nurse and the doctor had to step in and explain to the patient's family that the nurse was not at fault. Verbal abuse was most common, although the possibility for physical violence was acknowledged as described below:

> *There was another case later where both the doctor and nurse were attacked by patient's family members. I think such things occur maybe because family members have lack of understanding about the degree of illness a patient is suffering… Well, we work according to the doctor's instruction. The doctor is the one who meets family members and re-explains the situation, etc. and helps them get the correct understanding… We would tell the doctor that family members are blaming nurses, we did everything as instructed. Then the doctor would speak with family members and explain to them… In the earlier case which happened to me, the family members were furious and tried to hit me. I stepped back and at that very moment [the doctor] came out of the room and asked the person, 'Why are you attacking? What happened?' etc. (Nurse Latifa)*

Although physical violence from patients occurs, the fact that it was described as occasional might be related to the strict codes of conduct in place during the communist era under which the health system developed. It could also be based on the Mongolian

worldview that has a significant fear component as noted in my recollection of a conversation with a doctor and my translator:

> I asked [Dr. Juni] if patients ever talked to her [negatively] about nurses. She said that they never did because they were afraid of the nurses. I asked her why they would be afraid. She told me they would be afraid that a nurse they complained about would treat them badly. My translator commented that this showed their superstitions. I asked what he meant by superstitions. He said that fear is a dominant component of shamanism as well as in Mongolian Buddhism… people believe that what they do always has a consequence, and if they are negative about someone, then they might be on the receiving end of something negative…
>
> I commented that it seemed like the health care system in regard to the people in it, was based on fear: the patients are afraid of the nurses, the nurses are afraid of the doctors, the doctors are afraid of the director, and everyone is afraid of the shamans and lamas. [Dr. Juni] said 'Yes! That is what it is like.' I asked if people were motivated by fear and she said that they were. (2019-01-17 with Dr. Juni)

Some nurses felt that if one was kind to patients, then patients would be kind in return. This is consistent with a Mongolian Buddhist worldview of karma whereby good deeds are rewarded, sometimes in the next reincarnated life and sometimes within one's current life.

Nursing as a Career Choice

The most common response to the question 'Why did you decide to become a nurse?' was that it was their second choice; most nurses initially wanted to become a physician but were unable to because of low academic grades, lack of financing, or a family crisis. The interest in medicine was usually either an altruistic desire to help people in their time of need or it was a practical decision whereby different members of a family studied to work in a variety of professions. While the latter may seem strange to western ways of thinking, in Mongolia, having someone in each of the different key sectors (e.g., medicine, law, business, politics) is a practical way of ensuring the family can access resources in times of need as explained by a nurse:

> *We have many girls in my family and my mother used to tell us that it would be great if one of us would become a medical professional. I decided to pick medicine, but I didn't specifically think I would become a nurse. Because of my examination score, etc. I ended up in nursing (Nurse Latifa)*

A few nurses told me that nursing was their first choice, and often it was because they had been inspired by nurses who had cared for a family member. Whether nursing was their first or second choice, one of the attractive aspects of nursing was the perception that nurses spent significant time with patients in direct care, including emotional-social care as described below:

> *I chose this profession because I thought this profession shows kindness to people, helps people, and saves people. I wanted to help people and society – Well, nursing is a well-respected job internationally, although it is not that so much in Mongolia, – so I wanted to study as a nurse. Anyways, I was thinking to study as a doctor if not as a nurse. However, when I enrolled in the nursing college, I started to think that nursing is a very nice field of study. (Nurse Diana)*

Despite the challenges experienced in nursing, many felt that nursing was a good career. Nurses were happy when patients would smile at them or when patients were discharged home because their health had improved. They enjoyed caring for people in their times of need and took pride in their profession. This sense of pride was expressed by a nurse who said:

> *I am proud of myself for choosing this profession. I am proud of my profession…Sometimes I wonder who I would be if I didn't wear this white uniform. When I reflect on that, I feel so proud of my profession. We are heroes in white uniforms, godly heroes – in any difficult situation, when people provoke, I don't get angry, I stay patient. I am really proud of my profession. (Nurse Clematis)*

Summary

The characteristics of the workplace, including the people who are in it, influences the nature of the work and the interactions that occur within it. There are physical characteristics of inpatient wards in Mongolian public hospitals such as architecture, equipment, and furnishings. There are also socio-cultural characteristics that include worldviews and hospital policies, procedures, and practices. In addition, the professional mix of hospital employees, the ratio of patients to nurses, the role expectations among staff and patients, and the ages, diagnoses, and acuity levels of patients all have an impact on the work of nurses.

A minimal diversity in the staff-mix on medical-surgical inpatient wards means that nurses likely took on roles that are done by non-nurses in other countries where a greater diversity exists in ward staffing. Nurses, doctors, and sometimes nursing assistants the primary ward staff. Patients who were elderly or not fully independent sometimes had a '*caxuyp*' (Care Attendant). One cleaner was usually assigned to the ward.

Pharmacists in the secondary care facility were not observed to interact with inpatients. At the tertiary hospital, pharmacists were sometimes seen distributing oral medications to patients; all other medications were managed by nurses. Other professionals such as physiotherapists, lab workers, social workers, psychiatrists, and pastoral care providers were not present on the wards. There were no clerks, porters, or orderlies; neither were there employees designated for the delivery and distribution of supplies such as bandages, syringes, or bedsheets.

Nurses often worked long hours owing to frequent overtime, both scheduled and unscheduled. Scheduled overtime was common as most nursing teams were short-staffed. Unscheduled overtime was a regular occurrence with nurses frequently arriving early for their shift and leaving late. Due to the frequency in which nurses worked

overtime, it suggests that nursing workloads are heavier most days than can be completed within scheduled work hours. Also contributing to a heavy workload was the number of patients assigned to each ward nurse; observed to range from 15-65 patients/ward nurse. Nurses working at secondary-level hospitals tended to have higher numbers of patients/nurse than those working at tertiary-level facilities. Although there was no assessment of patient acuity in either hospital, observations during this research suggest patient acuity was usually higher at the tertiary-level hospital.

Despite a heavy workload and overtime, nurses' salary was considered low. During the time field observations were conducted, most nurses earned about half the Mongolian average monthly salary and were paid £7 (USD$10) for an 8-hour shift. There was no pay differential for overtime or for night and 24-hour shifts. As a result of low salaries many nurses lived in the outlying districts where housing was more affordable. Some nurses also had side businesses, and a few were considering leaving nursing for higher paying jobs.

As a mid-level career, nursing has traditionally been considered to have more technical than professional characteristics. The status of being mid-level may translate to nurses having a lower reputation and respect than others, especially in comparison with medical doctors. Reciprocal relationships between doctors and nurses were seldom observed. When a doctor asked a nurse to do something, the nurse usually abandoned what she was doing to attend to the doctor's request. Patients also expected nurses to be constantly on their feet, attending to patient needs.

Many people, including nurses themselves, see the role of nurses as following doctors' orders and giving medications rather than being independent, knowledgeable practitioners. With an urban ratio of doctors to nurses being almost equal, it is possible that Mongolian physicians undertake some of the responsibilities done primarily by nurses in other countries. Examples of nursing work in other countries includes initiating physical assessments of patients experiencing a change in health status, the ability to

make independent decisions (e.g., administering oxygen), and carrying out of physicians' standing and phone orders.

The physical structure of the working place, its furnishings, and its supplies also shapes the work and health of nurses. General ward rooms were sparsely furnished with beds and bedside tables and no privacy curtains. Due to the quality of beds on the wards, nurses did a lot of bending when providing nursing care, often working in their shadow due to the centralized overhead lighting. Apart from the ward's ICU or post-op observation rooms, there was no oxygen or suction in patient rooms. If needed, they were brought in from other parts of the hospital. The long corridors on the inpatient wards and the necessity for nurses to leave the ward to go to other departments such as the pharmacy and laboratory meant that nurses often walked long distances during a shift. When resources such as hangers for catheter drainage bags or glass IV bottles weren't available, nurses had to be resourceful and create their own.

There were many challenges identified for ward nurses working on Mongolian medical-surgical wards that related to workload, resources, salary, respect, and working relationships. However, most nurses took pride in their work and received satisfaction knowing that they contributed to their patients regaining health.

Chapter 5: Findings (Part 2) - Nursing Roles and Work Activities

Introduction

The findings contained in this section help to answer the research question as to the roles and work activities of Mongolian medical-surgical ward nurses. Knowing what nurses do, and sometimes also noting what they don't do, helps with developing an understanding of the scope of practice of medical and surgical ward nurses working in Mongolian public secondary and tertiary level urban facilities.

Work activities is a broad term encompassing all the activities that are connected to a ward nurse's work. These include specific tasks as well as other activities such as what nurses do on their breaks, work-related meetings, social interactions, and educational activities. In this research, the term 'tasks' is used to identify the specific details of responsibilities nurses have during a shift.

Tasks do not stand alone. Multiple tasks are done for certain purposes. For example, in administering an IM injection the nurse checks doctors' orders, procures and prepares the medication, injects the medication, disposes of waste, and documents what has been done. Tasks differ from roles in that the various roles nurses have encompass the purpose for the tasks they engage in but are broader so as to include more purposes than, for example, the technical details of giving an injection to a patient.

The first section of this chapter provides a detailed account of tasks observed during fieldwork and described by interviewees. This section comprises the largest portion of the thesis as it provides the detail required for understanding what Mongolian nurses do and for undertaking comparisons with nursing as described in other countries. The second part of this chapter is entitled 'Nursing Roles'. Nursing tasks and other work activities are grouped according to the role or function of the nurse. The resulting role descriptions offer a conceptual summary of the work of Mongolian medical-surgical nurses as found at the time of this research. The chapter concludes with a summary of

the findings on the roles and tasks of Mongolian medical-surgical nurses working in urban public hospitals.

As described in the chapter on methodology, transcripts from field observations were first analysed by asking the question “What is being described?”. Through this process work activities were identified, including equipment or resources needed to carry these out. Work activities were then grouped into tasks. Interview transcripts helped provide additional insight and details. Sixteen categories of tasks were created to describe the activities of ward nurses that were observed to occur as part of their work responsibilities (Table 4).

Table 4. Ward Nursing Tasks

Tasks of Medical-Surgical Ward Nurses	
1. Assessment	**9. Care of Wounds & Tubes**
2. Admission & Discharge	10. Patient Transfers
3. Documentation	11. Physical Care
4. Handover	12. Patient Teaching
5. Medication Administration	13. Patient Communication
6. Locating & Fetching	14. Cleaning
7. Infection Control	15. Laundry
8. Laboratory-related Tasks	16. Dietary Services

For some of the tasks that are broad in scope, sub-sections were created within the task category. For example, sub-sections under ‘Assessment Tasks’ describe different types of nursing assessments and the equipment needed to carry out these assessments. Among the 16 task groupings, there are some activities that intuitively fit well into one category of task (e.g., patient transfers), while other activities fall within more than one category (e.g., documentation occurs with assessment, medication administration, wound care, etc.). Therefore, when an activity is done for more than one task (e.g., charting), the activity will be more fully described in one of the 16 task categories and only alluded to in other related categories.

Nursing Tasks

Assessment Tasks

Patient assessment is both a medical and a nursing responsibility, with each profession conducting and documenting their assessments independently. While each nurse was responsible for monitoring the well-being of their assigned patients, the responsibility to make a formal nursing assessment and record it was sometimes delegated to one nurse who would conduct and chart all patient assessments. In the hospital with electronic charting, dropdown boxes were used to record nursing assessments according to specific domains. In the hospital without electronic charting, nurses handwrote any relevant nursing assessments, diagnoses, and plans in the patients' charts. Nurses were observed to do assessment of vital signs, oxygen saturation, head-to-toe physical assessment, fluid balances, assessment of infusions and reactions to medications, and assessment of wounds, skin, and medical devices such as catheters.

On each of the wards, there was often only one sphygmomanometer and stethoscope and one digital thermometer. These were kept at the nursing post, although sometimes the doctors would take them to their room. Two of the wards also had functioning electronic blood pressure units that were located at the nursing post and placed on a counter accessible to patients. One glucometer was available for each ward. Cardiac monitors were available in the room designated either as the ward ICU or post-op room.

This section on assessment tasks is divided into 7 smaller sub-sections as found in Table 5:

Table 5. Assessment Tasks

Nursing Assessment Tasks	
1. Physical Assessment 2. Vital Signs & Oxygenation 3. Blood Glucose 4. Fluid Balance	5. Skin Integrity & Wounds 6. Catheters & Other Drainage Tubes 7. Patient Complaints

Physical Assessment

The extent of and approach to physical assessment was observed as primarily generalized observations or specific assessments in response to known or suspected problems. For patients who had acute liver or kidney problems, nurses would assess for conditions such as oedema or ascites. For patients who had wounds or who were at high risk for developing wounds, nurses would inspect the skin and wounds. At times, nurses would conduct assessments at the request of a doctor or when the patients or their CAs[6] asked to have temperature or blood pressure measured. At no time during field observations were ward nurses observed to use a stethoscope to listen to lung or bowel sounds. The following excerpt from my fieldnotes describes a combination of observations and recollections of conversations about the standard way that nurses do assessments:

> [The nurse] checks patients for the presence of IVs, tubes, catheters, dressings (including dates on the dressings), and for the presence of ascites and oedema… rather than doing a general head-to-toe assessment, the assessment by [the nurse] is a 'targeted' assessment related to those aspects of nursing care most relevant to the diagnoses of these patients…
>
> Visual assessment also includes noticing if the patient is breathing normally or not. Sometimes the nurse will hold a patient's wrist to check the pulse briefly (although I haven't seen them hold it for 30 seconds or more for the purpose of recording a pulse rate). Body temperature is considered normal unless either a patient specifically requests that a temperature be taken or if the nurse looks at the patient and suspects an elevated temperature.
>
> Youngia tells me that they do head to toe assessments by quickly looking at the patient: eye contact, condition of their lips, their respiratory rate and effort, any swelling or colour of the skin etc. They also take note when a patient walks down the corridor. For example, they know if the patient is walking slowly, limping, or walking normally. Youngia tells me that they can assess a patient's orientation by conversing with them and seeing if the response is normal. (Shift-15)

[6] 'CA' refers to the Mongolian term for a care attendant 'сахиур'. In the hospitals, CAs were almost always family members.

Nurses often used the opportunity of direct patient interaction that occurred during medication rounds to do further assessment if they suspected there was a change in patient status such as pain or fever. If there was a concern that required more advanced assessment than that of taking vital signs or assessing for pain, nurses often referred patients to the doctor rather than doing their own physical assessment as observed on a medical ward:

> Avens comes over and re-positions the [automatic] blood pressure cuff. She hangs the IV bag. She also hears the [respiratory] wheeze. She asked the patient if there was a problem with his lungs. She then tells the patient to mention this to the doctor. She says she will also mention it to the doctor. (Shift-14)

Vital Signs and Oxygenation Assessments

Nurses were to assess and record vital signs (BP, temperature, pulse, respirations). Oxygen saturation levels were occasionally taken during an admission assessment or by physician request. There were cardiac monitors for post-op patients and for patients in a medical ward's ICU. In some of the rooms with cardiac monitors, there were more patients than monitors, so the monitors and the cart would need to be wheeled or, if there were no wheels on the cart, lifted and carried between patients as needed. This was done by the nurse and whoever else they could ask to assist them such as another nurse or the relative of the patient.

Vital signs were assessed either by nurses themselves or by asking patients who had taken their own blood pressure using the electronic cuff at the nursing post. Patients considered to be more critically ill, those receiving a blood transfusion, or patients in the post-operative observation room had their blood pressures, pulse rates, and oxygen saturation taken more often than other patients. Nurses, ANs, or CAs would take axilla temperatures, usually when the patient or CA wanted it checked or if the nurse suspected the patient had a fever. When nurses took a patient's vital signs, it was often limited to only taking blood pressure. I never observed a nurse doing a 30-second or

more pulse or respiratory rate count. If nurses felt the patients were doing ok, they wouldn't take actual measurements, but instead would record a variation of the previously recorded vital signs[7]. An example of this practice was observed in charts as approximated in Figure 12 and described in the following fieldnotes' excerpt:

> Youngia returned to the nursing post to enter the information in the e-chart. When entering assessment data for another patient, she tells me that because the patient is stable they only need to make a slight variation on the value of the vital signs entered in the charts. I noticed that if a previous blood pressure reading was 118/80 then the next nurse might put 120/82 as an example of how the nurses vary vital signs when they enter them into the document. (Shift-15)

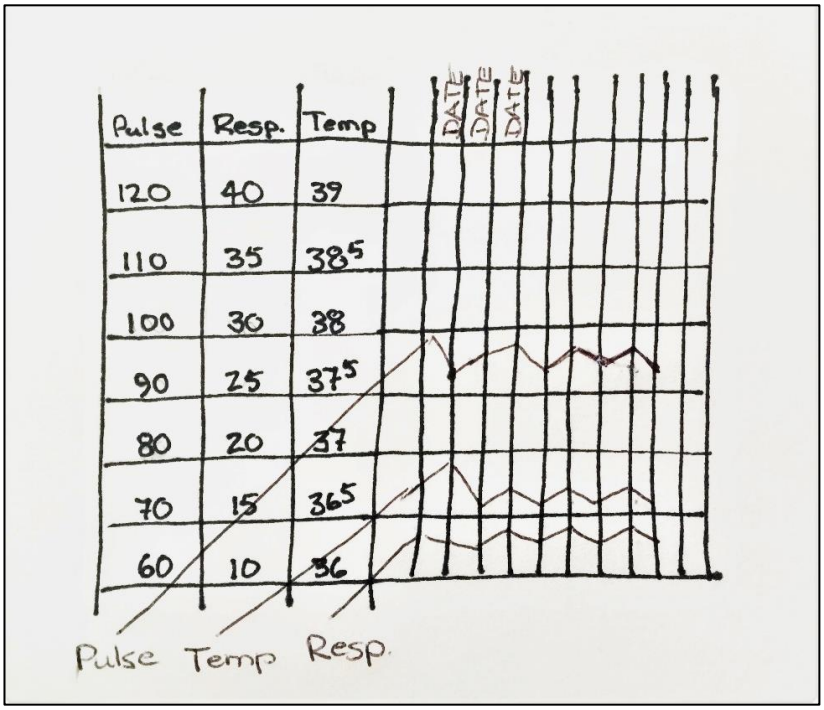

Figure 12. Recording Vital Signs: Sample of a Paper Chart

Blood Glucose Assessment

The testing of blood glucose using a glucometer was only observed a few times over the course of my field observations. Each ward had one glucometer. Of the three

[7] This is an example of a nursing practice that raises questions about ethics, professionalism, and best practices. Within this chapter, there are other similar observations. Rather than addressing them in this chapter, I have chosen to discuss them in the Discussion Chapter.

times that I directly observed and made notes about the testing of a patient's blood glucose, two were done by nurses: one at the request of the doctor and one at the request of the nursing director. A patient's family member conducted the testing for the third patient and reported the result to the nurse.

Fluid Balance Assessment

On the wards I observed, fluid balances were usually recorded for post-op patients in recovery and for patients who were more acutely ill. For patients who were post-op, there was a place in the post-op nursing assessment sheet to record fluid intake and output. Some wards had a fluid balance sheet that was printed and kept at the patient bedside. At other times, I observed fluid totals recorded on a scrap of paper at the patient bedside, and in one ward's ICU, records were made on small whiteboard.

Nurses who were monitoring post-op vital signs usually recorded fluid intake and output until the patient was transferred from post-op observation to a regular room. When ANs were present, they emptied catheter bags and recorded the fluid output of patients who had urinary catheters. If a patient had a CA staying with them in the hospital, the CA was often given responsibility to record fluid output and oral intake.

Skin Integrity and Wounds Assessment

Assessment of skin was observed only when there was a specific concern about a patient's skin integrity. Nurses conducted skin assessments when patients had wounds, oedema, or drainage tubes, or if they had known diarrhoea or haemorrhoids. Assessments frequently took place on patient rounds during the nursing shift handover, when a new patient was admitted, during a dressing change, or at the time of medication administration.

Catheters & Other Drainage Tubes Assessments

During handovers, when a nurse or doctor indicated a specific patient had a drain or catheter, the incoming nurse assigned to the patient did a quick inspection of the drainage tube and collection bag. Sometimes the head nurse or day manager nurse also

did a quick appraisal. One of the things the head nurse checked was whether the urinary drainage bag was positioned appropriately. Often drainage bags were placed on the floor. In those cases, the head nurse or ward doctor would tell the ward nurse to make sure that the bag was not touching the floor.

Nurses assessed urinary catheters and surgical drains for the volume of drainage and the quality of the drainage. Often patients or their family caregivers would initiate checks by the nurse as recorded in the following fieldnote excerpt:

> A patient comes to the nursing post and asks a nurse to look at her drainage tube. The urine is clear, but there is a long mucous string with one end spiralled that she points to and is concerned about. Serratula looks at it and assures her that it isn't anything serious. (Shift-6)

Some nurses assessed the skin around the area of urinary catheter insertion, surgical wound, or other drainage tube. When there was a designated wound care nurse, she would assess the site of insertion of surgical drains and contact the doctor when there was any concern, such as when a drainage tube had migrated out of position.

Patient Complaint Assessment

Nurses usually responded immediately to a request for assessment by patients or their CAs. Doctors also occasionally asked nurses to check a patient's vital signs. Reasons given for requesting an assessment included complaint of pain, concern that blood pressure was elevated, feeling feverish, difficulty with breathing, and for a couple of pregnant patients, cramping or rigidity of the uterus. At the time of my field observation, special attention was paid to pregnant patients because they were considered high risk. There were no midwives on staff and obstetrical services were normally available in public maternity hospitals rather than in medical-surgical hospitals.

At times, nurses initiated their own assessment of patients. Sometimes it was in response to hearing a patient moan or in response to the sound of someone vomiting. When doing medication rounds, if nurses observed patients as being in pain, they would

ask questions to determine the probable cause of the pain. Nurses would usually request the doctor to follow-up on a patient who was complaining of pain. When there was a pregnant patient experiencing adverse symptoms, nurses were usually quick to call in a doctor. At other times, the extent of the nurse's assessment prior to calling a doctor was simply identification of a complaint as described in the following observation:

> On the way down to the basement [on an errand], and before she exited the ward, Maple saw a patient walking down the hallway holding her upper chest... When she asked the patient 'what is wrong?', the patient pointed to her chest. Maple told the patient to sit and wait on a bench by the nursing post. She phoned the doctor and then proceeded to the basement. On return from the basement, she got to the nursing post around the same time as the doctor. The patient who had complained of chest pain was told to come into the treatment room and lie down on the examination table. The doctor took the patient's vital signs and asked questions. (Shift-18)

Admission and Discharge Tasks

Admission

The process for admissions seemed to differ slightly on each of the different wards on which I made field observations. The admission process also varied among nurses. During weekday shifts, one nurse was often tasked with doing all admissions. On one ward, there was an average of 5.6 new admissions per day with the number of new admissions per day over a two-month period ranging from 0-13 and total inpatient numbers ranging from 18-46 patients. The days with a census of less than 30 inpatients occurred during a national holiday. Unanticipated admissions added to the nurses' workload, especially when it was a busy shift. These admissions could come from emergency admissions, inter-ward transfers, and doctors admitting patients the day before proposed treatment. Nurses were usually notified of new admissions on the ward's phone or on their personal phones. Sometimes nurses only discovered there was a new admission when the patient appeared at the nursing post and said they were being admitted.

Patients were usually assigned rooms by the head nurse or the nurse tasked with weekday admissions. At times there were no available beds for new patients. In these circumstances, patients would have to wait until a bed became available. When a ward had more patients than beds, nurses would carry examining tables from treatment rooms to ward rooms, squeezing them in by moving the other beds. At the district hospital, nurses also created beds out of benches that were placed in the hallway.

Admissions were usually done either at the nursing post or in the head nurse's room rather than in the patient rooms. If the nurse assigned to an admission was unavailable at the time a new patient arrived, one of the other nurses would do the admission. When present, the AN often took the patient's weight and vital signs and escorted the patient to his or her room. An example of the admission process on Ward A is described in the following:

> There is a new patient at the nursing post. The [nurse doing intake assessments] takes her notebook to the front part of the desk so that the AN can record [the patient's] vital signs and weight. [The nurse] asks the patients a list of questions: Do you have any catheters or tubes? How is your [urination]? How is your eating? Any problems with your sugar? She then says to the AN that she can take the patient to Room #1. (Shift-9)

Assessments observed as being part of standard admissions included: BP, pulse rate, oxygen saturation, height, weight, blood glucose, the presence of any catheters, skin condition, presence of oedema, and questions about diet, diabetes, and voiding. Pain was usually assessed by asking patients if they had pain. Some nurses asked for further details by asking patients to rate their pain on a scale of 1-10.

When a new patient arrived, the nurse put together a paper chart. On the wards where there was electronic charting, the paper chart was still assembled as this chart had the checklist for medications and it was a record for other items such as handwritten medical consultation notes, printouts from lab testing, and labels from blood products.

Depending on what system was used, nurses' admission assessments and nursing care plans were entered in either the e-charts or the paper charts.

Nurses doing admissions often recorded admission information in two places: first in a handwritten notebook or log, and then in the patient chart. If the nurse was busy at the time of admission, the nurse would sometimes wait until the pace was slower before transferring information from the notebook to the patient chart and completing the nursing care plan. When there was no e-chart, nursing care plans were sometimes only written in the chart prior to a patient's discharge to ensure a completed chart. Nurses also collected and recorded information from the patient's National Health Insurance record, a small booklet that patients were required to bring with them on admission.

Discharge

When a patient was scheduled for discharge, one of the nurse's main responsibilities was to tally the medical expenses incurred by the patient as part of their treatment. Nurses calculated the costs of medications and the supplies required to administer the medications (e.g., IV administration sets, syringes, gloves, alcohol swabs). Patients who required wound care and used hospital dressing supplies had these supplies added to their expenses. Once the tally was completed, one of the nursing staff from the ward delivered the charts to the accounting department. After being discharged from the ward, patients went to the accounting department to pay the portion of their hospital expenses not covered by the national health insurance program.

Nurses often gave patients instructions prior to discharge. As explained to me by a nurse, the extent of discharge teaching a patient received was in part dependent on the busyness of the ward. The following observation was made on a day when the pace was slower:

> Serratula goes to the patients who will be discharged today. She explains what tubes/catheters will be removed from them before they leave. She gives them basic teaching about drinking lots of fluids, avoiding getting chilled, and the importance of following doctor's orders. Apparently, there are 5 patients being discharged

> today and it is the nurse's job to go to them and explain the discharge process and do some discharge teaching. (Shift-3)

On the surgical ward, discharge teaching was relatively standard and included instructions for outpatient visits. One of surgical procedures had a specific list of items to be covered during discharge teaching and patients had to initial that they had received the teaching as noted during field observations:

> Clausia is over at the desk and says to the patient "Come over here. You need to sign this now that your catheter has been removed." She then shows him a list of instructions post- [name of surgery] and the pre-discharge teaching saying 'Here are the instructions". The patient looks them over, signs, and then says "Ok. Thank you. (Shift-8)

When a patient died on the ward, nurses wrote the patient's name, date and time of death, diagnosis, address, and phone number on a piece of paper that was taped to the deceased. They helped prepare the body to go to the mortuary. Depending on the hospital and available personnel, nurses would sometimes accompany the body to the mortuary. As there was no mortuary at the secondary-level district hospital, one nurse had to leave the hospital to go with the body to the designated mortuary. This could result in a nurse being gone for an hour, leaving the remaining nurse in charge of all the patients.

Nurses, ANs, or the cleaner wiped down the bed and bedside table after the patient was taken to the mortuary. The following field observation describes what nurses did following the death of a patient in the tertiary hospital:

> The nurses and one doctor prepared the body to take to the mortuary. All catheters and tubes were removed. The nurses assisted with wrapping gauze around the jaw to keep it into place. They also wrote [the patient's] identification on paper and used broad scotch tape to secure the identifying information to both ankles. The patient was wrapped in his own sheet…. As the stretcher was about half a meter higher than the hospital bed and neither could be adjusted, the staff asked that male family members waiting outside be called to shift the body onto the stretcher. The shrouded body was then taken to the mortuary by the AN and a doctor. (Shift-13)

Following a death, nurses met with family members to determine what to do with leftover medications purchased by patients. They also tallied up expenses as with a normal discharge, and they instructed the family member to pay the bills at the hospital accounting office.

Documentation Tasks

There were many references in the fieldnotes to nurses doing documentation work. When nurses didn't have a task that required them to be with a patient, prepare for medication rounds, obtain supplies, or go somewhere such as to the lab or pharmacy or to find a doctor, they worked on documentation. There were a variety of documents that included patient charts, medication records, several logs and notebooks, order forms, and supply records. Nurses engaged in documentation tasks for the purpose of gleaning information and for recording data. They also assembled and located paper documents. The following presentation of findings on documentation includes 9 sub-sections as identified in Table 6:

Table 6. Nursing Documentation Tasks

Areas Requiring Nursing Action for Documentation	
1. Patient Charts 2. Medication 3. Vital Signs 4. Wound Care 5. Diagnostics & Blood Products	6. Obtaining Signatures for Documentation 7. Supplies 8. Dates of Expiry and Task Completion 9. Shift Summary

A nurse's shift was not complete until she finished all the required documentation. Documentation was often checked by the head nurse or other senior nurse as a way of assessing if nurses had completed all their work - both for carrying out doctors' orders as well as completing tasks according to the nursing care plan. As a result, nurses were careful to complete documentation. If nurses didn't record something, they were often verbally chastised. This expectation may have resulted in nurses documenting things they hadn't done or observed. There were two main ways that nurses were observed to chart things that hadn't been done: (i) charting in advance of completing something such

as giving medication and (ii) charting something that they hadn't fully done nor intended to do. Charting a full set of vital signs that had not been taken by the nurse was the most common observation of charting things that hadn’t been done, and possible reasons for this are provided in the discussion chapter.

Patient Charts

The patient chart [өвчний карт] is a document specific to patient care that is used by nurses and doctors to record assessments, care plans, and treatments while the patient is on the ward. An exploration in the fieldnotes of the frequency of the term ‘chart’ and its stemmed words (e.g., charting, charts) showed that it was the second most common term for a nursing task, with medication being the most frequently noted term. This supports the impression that nurses spent a significant amount of time doing the work of charting. Nurses documented the care provided to patients, such as admission assessments, vital signs, fluid intake and output, wound care, and the administration of medication. They assembled charts and kept tabs on where the charts were located at any one time. If a chart was missing, they looked for it. Nurses used information in the patient charts to structure their nursing activities. They reviewed doctors’ orders in the patient charts to determine what medications were ordered, what changes had been made regarding medications or treatments, and they followed-up on any lab tests that had been ordered. Each ward had a variety of different nursing logbooks. A list of logbooks seen on the three wards is shown in Table 7. Nurses were expected to write in these logbooks, however patient charts remained the primary record.

Table 7. Nursing Logbooks

Nursing Logbooks Requiring Hand Entries	
• Admission & Discharge Log • Antibiotic Allergy Test Results • Blood Product Disposal Record • Blood transfusion Patient & Product Record • Consultations • Linen Stock Log • Nursing Shift Reports	• Patient Census Log • Peripheral IV Record • Post-surgical Care Record • Sterilized Equipment Record • Stock & PRN Medications Record • Supplies Record • Waste Disposal Record • Wound Care Log

In Mongolia, most hospitals were still using paper charts with documentation done by hand at the time of the research. These patient charts were often constructed by putting together various documents in a clear cover with a sliding plastic binding bar. There was a standard administrative printout that listed the patient contact details, diagnosis, financial payment arrangement, allergies, and discharge information. Various documents such as lab reports, surgical records, and blood transfusion records were glued by nurses onto the A4-sized pages in the chart.

At the tertiary level, electronic charting was recently introduced, although they still maintained paper charts for each patient. Nurses who used the electronic charting system told me they preferred the electronic charts over the handwritten charts, in part because their wrists and hands didn't get as sore. Electronic charts were designed so that documentation to be done each shift was highlighted until completed. To gain access to e-charts, a healthcare worker needed to sign into the system. The nurses said that any of the hospital staff could access the electronic charts and that the administrators could read through patient charts. There didn't seem to be any concern about data privacy or timing of data entry. Thus, some of the nurses would 'pre-chart' to decrease potential overtime that would result if they waited until completing a task before charting. Other nurses charted after their shift had ended. The important thing seemed to be that the data was entered, regardless of the timing or whether one had completed the task as expected. A drawback of electronic charting was that the system was often slow.

Fluid balance records were signed and charted by the RNs. However, the measurement and recording of fluid intake and output was usually designated to the patient, CA, or when available, the AN. Nurses taught the patients and CAs how to measure and record as described by nurse Latifa:

> *We give instructions to the patients and caregivers if they have a caregiver. For example, we need someone to record liquid consumption and urine output. We have a paper template/sheet on which the amount of liquid taken through mouth, the amount of urine, the amount of liquid injected into the body, etc. needs to be*

> *recorded. The patient who is strong enough to write is taught to record when and what amount of liquid was consumed, what food was eaten, what was the amount of urine, etc. If the patient is too weak, then the caregiver does it for the patient. We give the template/sheet to the caregiver and teach them how to keep records. (Nurse Latifa)*

When fluid balance data was entered into a chart, it didn't necessarily mean that the exact amounts had been measured at the documented time. On one occasion I observed a nurse who took the total value for a patient's fluid output during a shift and divided it into smaller amounts. These smaller volumes were then entered into the different time slots on the patient record. The total was the same, but the timing of the recorded amounts was not always reflective of what had transpired during that shift.

E-charting systems that highlighted something not yet completed likely helped motivate nurses to complete all documentation in a timely manner as per protocols. However, on wards that exclusively used paper charts for patients, nurses might not have been as motivated to enter data for each shift if they had more pressing tasks they needed to do. This meant that prior to discharge or on nights, nurses would check over the patient chart and if there was some documentation missing, such as vital signs or a nursing assessment, they would fill that out before the chart was closed.

Medication Documentation

Nurses usually reviewed doctors' orders in patient charts at the start of their shift. A priority was checking the charts with the medication sheets. Medication sheets were written out by the doctor, however, if a change had been made in the chart but not on the medication sheet, the nurse sometimes transcribed it onto the medication sheet. The nurse also reviewed doctors' orders so they could compile a list of medications and related supplies needed over the next day or weekend. (See Medication Procurement, pp. 142-143.) On Ward C, in addition to patient medication sheets, there were three notebooks to record medications. One notebook kept a record of medications that had been distributed to patient's pharmacy baskets (Figure 16, p.131). The second notebook

was used to document medications given during a shift. The third notebook was a log of medications taken from the ward's stock medications.

Medication sheets were used to record medications that the patient had been given. Because the medication sheets had a list of the patients prescribed medications, nurses referred to this document when patients had questions about what medications they expected to receive as was observed on a night shift:

> The patients are aware of what medications they are taking and at what time. When there is a difference between what the patient thinks they are to have and what the nurse has written to give them, the nurse checks the official medication sheet by going back to the nursing post and looking at the patient's chart[8]. To a patient who disagreed with her and she checked the original chart she says: 'There is no doctor's order for (name of the medication). Maybe you had it before, but it is not there anymore.' The patient replied saying 'but I am to have it'. Caragana tells the patient 'I can't give it to you because it is not on the doctor's orders. I am only doing scheduled medications now.' (Shift-13)

On Wards A, B, and C, handwritten lists of night shift medications were written on a blank page of a notebook, usually by one of the day nurses. Occasionally the night nurse would write out her own list if the day shift nurses had been unable to prepare the list. These lists were organized according to the type, dosage, and frequency of medication. For example, under the drug 'ciprofloxacin' was a list of patient names receiving the medication. 'Ciprofloxacin 3/12' meant 3mL every 12 hours. 'Diclodenk 3o' meant the drug was to be delivered in a 3cc syringe. Metoclopramide 10x8 meant 10mg every 8 hours. A fictionalized example of what a list looked like is shown in Figure 13. Mongolians are usually identified by their first names as illustrated in this medication list. Sometimes an initial was used for the surname, however on the night medication lists I observed, often only first names and room numbers were noted.

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[8] On night shift medication rounds, most nurses only brought a handwritten list of medications and which patients were to receive them. The official medication sheets were usually at the nursing post.

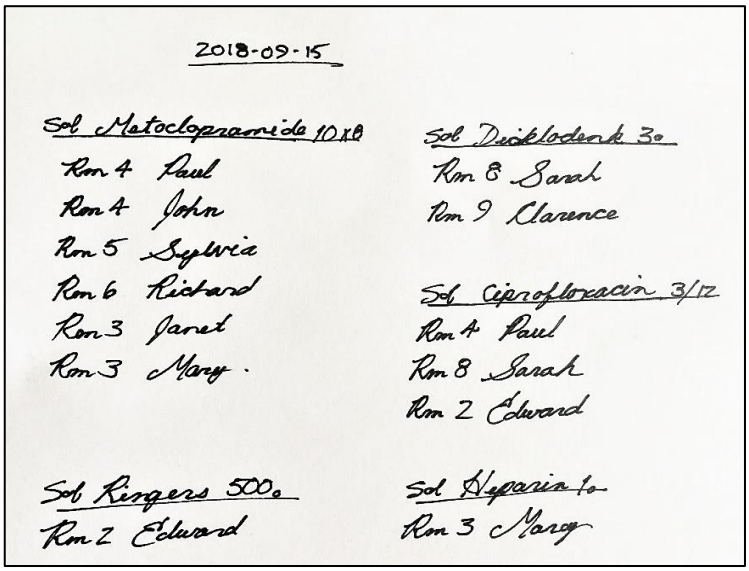


Figure 13. Night Shift Medication List Example

The night nurse took this list with her on medication rounds rather than the individual patient medication sheets. When possible, nurses starting a night shift would check the list that had been prepared by the day staff. Sometimes the nurse discovered errors in the handwritten list. The writing out of medications for the night shift was perceived as saving time for the night nurse. The following fieldnote excerpt is from a conversation with a nurse about the process of writing medication lists for night shifts:

> She shows me a notebook in which she is writing out the names of patients who will receive medications. It seems like the list of medications to be administered goes from the patient medical chart, to a hand-written list in a notebook, to her own list on a scrap of paper. I ask her if mistakes happen because of all the lists. She says 'of course!'. But she also says that everything is double checked by looking at the original medication sheet. I tell her that from my perspective the process is time consuming. She agrees, saying they constantly have to go back-and-forth between the different lists. (Shift-14)

Charting medications is supposed to be done at the time the medications are given. However, this was rarely observed throughout my time in the field. Without charting, giving medications was often very time consuming, especially on night shifts when nurses carried high patient loads and medication rounds could take over 2 hours. As a result, many nurses stayed overtime to complete charting, particularly on wards

where medications were charted both on paper medication sheets and electronic records. Some nurses privately acknowledged they charted in advance of giving medications. Although they knew it was against protocol, advance charting meant that they were better able to manage their time and avoid unpaid overtime.

A typical medication sheet covered an 8-day time-period. Each day was divided into three 8-hour checkboxes: [Өглөө] morning, [Өдөр] afternoon, and [Орой] evening/night (Figure 14). If the same medication was given twice during an 8-hour period, then the number of doses would be recorded as two in the corresponding box.

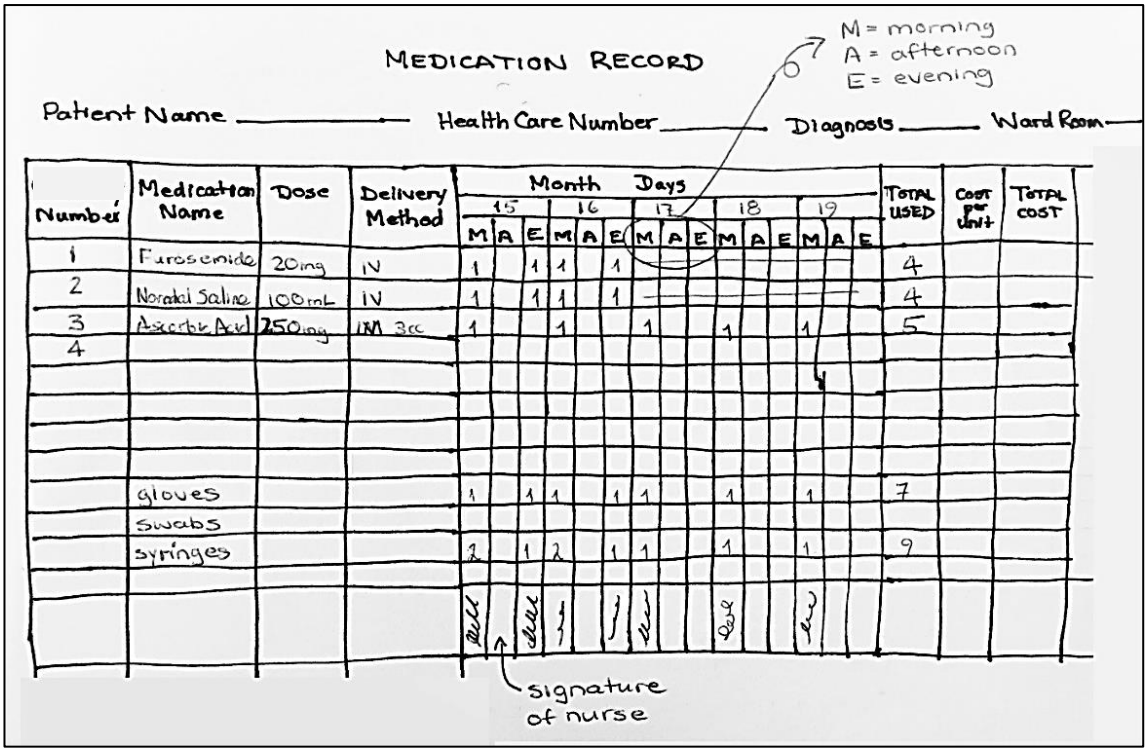


Figure 14. Medication Sheet Sample

At the beginning of the day shift, one of the first tasks nurses do is to calculate medication costs. Sometimes night nurses will also calculate costs at the end of their shift. Most of the nurses have memorized the prices for the various medications. When they are unfamiliar with the costs, they refer to a price list that is kept at the nursing post. They use calculators to tally the amounts. I never noticed any of the tallies being double checked. This may be due to the confidence they have in completing the calculations. It

may also be a function of time management as once the costs are calculated they are able to attend to other tasks such as medication administration.

Vital Signs Documentation

On wards with electronic charting, a different colour highlight that will only be removed once data is entered serves as a prompt for entering vital signs. On wards where there are only paper charts, each patient has a vital signs' record on which nurses manually enter the data. Thus, whether the chart is paper or electronic there are system checks to ensure that nurses have entered the vital signs. If nurses have not entered the data into patient records, they are usually verbally reprimanded by the head nurse.

During field observations, I noted that on many occasions there was a discrepancy between the number of times I observed vital signs being taken and the data entered into patient charts. Of all the vital signs, I most often saw the taking of BP. Temperatures were taken manually by axilla, usually only if the patient or their family member wanted it checked or the nurse suspected the patient had a fever. Sometimes a nurse would check the pulse, but only for a few seconds; I didn't observe any full 30 or 60-second pulse checks. I also never saw a nurse doing a count of the respiratory rate as recorded in my fieldnotes:

> I have sometimes looked at the patient charts (e.g., post-op records) and seen many more vital signs recorded than I observed being taken. Or when I notice the time that they go with a BP cuff to get a reading, the time of their return suggests to me that they didn't take other vital signs. [I once timed] leaving the desk and returning as about 2 minutes. Two nursing colleagues of mine (one who used to work at this hospital and another who works in a private hospital) have told me that nurses will often record data that they didn't take. (Shift-5)

During one of my shifts, I observed a nurse manually take the BPs of 5 patients. She didn't make any records of the readings but then went to the head nurse to give a verbal report of the BP values obtained. I asked the ward nurse if she had memorized all the BP values and she told me that she had. I rarely saw a nurse write down a blood pressure value on a scrap of paper so that she could later refer to it when entering data

into the patient chart, although I once observed a nurse taking a photo of the cardiac monitor screen so that she had actual data to enter in the patient chart. At first, I wrote in my fieldnotes that I was impressed with the ability of Mongolian nurses to memorize and recall specific values, but later I questioned this ability as described below:

> The nurses are busy charting vital signs in the charts: temperature, pulse, and respiration. At first, I think they are doing it from memory. But there are so many charts it is impossible to do all of it from memory. I also noticed that the pattern tends to follow very much a consistent up and down line. (Shift-18)

Wound Care Documentation

Two out of the three wards where field observations took place had patients with post-operative incisions and drainage tubes. The care of incisions and drainage tubes was recorded on electronic charts, paper charts, and on one of the wards it was also entered into a ward logbook. Both the procedures and the supplies used were documented. On wards with electronic charts, the wound care section was highlighted each shift until the nurses made an entry that the care had been completed. As with assessment and vital signs, there seemed to be times where nurses entered that something had been completed, even if it hadn't been done:

> I recall one point when the head nurse said to one of the nurses that a dressing had not been done, although it was documented as having been done. She said that nurses were not to lie and that the nurse needed to have done the dressing change as it was required to be changed twice a day. The nurse accused just stood and nodded without saying anything. (Shift-1)

On the ward where nurses and doctors had joint patient rounds, the wound care nurse made notes during rounds as to the patients needing dressings and care of drainage tubes. Each procedure she did was recorded in the wound care logbook. The notes she made during rounds were frequently checked to identify patients still needing wound or tube care.

The cost of wound care supplies was charged to the patient, and as with medications, the nurse recorded these supplies on a record sheet. As documented in the

fieldnotes, nurses calculated the total amount that a patient would be charged for wound care materials on discharge as noted below:

> Clausia is calculating the costs incurred by the patient who is being discharged home... The patient has been on the ward for 12 days and has incurred expenses of Tg 80,400 (£25) for materials used for wound care. Medication will be an additional expense. (Shift-9)

Diagnostics and Blood Products Documentation

Documentation for lab testing, blood products, and diagnostics seemed to be in a period of transition from exclusively hand-written documents, including labels, to a combination of handwritten and computer-generated documentation. For the wards that used computer charts and for those that used exclusively paper charts, phlebotomies still required both handwritten and computer-generated documentation.

Preparing documents for phlebotomies and urine samples sometimes required a significant amount of nursing time. On Ward C, during the month I was observing, two nurses were assigned on night shifts and were responsible for between 74-102 patients, with an average of 94 inpatients/day. The nurses had to review all the charts to check doctors' orders for lab tests & diagnostics, as well as for consultations and type of diet. This was described in the following fieldnote:

> Going through patient charts and writing out [lab] listings and labels takes about two hours [for one nurse] and then one more hour to enter this into the computer. The nurse also has to go downstairs to work on the computer in the emergency department (where the only printer is located). (Shift-18)

The photocopying and cutting of pieces of paper for requisitions was sometimes the Head Nurse's task. On wards that used computer charts more extensively and had a lab-label printer at the nursing post, the process seemed a little faster. However, there were also delays in ensuring documentation was complete as observed during a night shift on Ward B:

> Avens takes slips of paper that indicate which patients have had lab tests ordered by the doctors. She sits at the computer to enter data

> into the charts. She prints out lab codes for the blood samples to be taken. Some of the [information on the] slips of paper with the doctors' orders are not accepted into the computer. She will have to tell the doctors to re-enter the codes so that she can get the labels for the lab samples. Avens tells me that often the doctors think they have entered the codes, but sometimes they have only written out the order by hand. She says that sometimes it is also a problem with the computer programme. She shows me two of the errors that she has been notified of. One of them related to a computer network error, while the other [eventually] entered OK. (Shift-14)

For administration of blood products, nurses recorded patient details, blood product identification numbers, and the time and date given. Documentation for blood products is required at the blood bank, in the patient chart, and in a ward 'Blood Product' notebook that is kept at the nursing post. The notebook consists of rows and columns and as a page fills up, it was common to see nurses using rulers to draw lines and writing out headings in the notebooks while sitting at the nursing post. For hospitals that have blood products available on-site, there is still a significant amount of handwritten documentation that takes place when obtaining blood products as I observed when accompanying an AN to the lab:

> Pasque chatted to the lab technician while the lab technician was completing paperwork. She then got Pasque to sign the paperwork. Pasque put the blood bags into the cooler as the lab technician handed them to her. All the forms are done in duplicate. The duplicate forms are pages that have been photocopied. Two forms are on one page and they are cut with a ruler by tearing it along the edge. As Pasque takes the blood bags to put in the cooler she writes the name of each patient on their specific blood bag. She then signs that she collected the blood products in one of the lab record books [and on the duplicate forms]. (Shift-12)

When a hospital did not have blood products available on-site, it was the nurse who had to travel to one of the national blood bank locations. At the time of research, the National Blood Bank had recently switched to computer requisitions and records. Until the nurses learned this new system, it could be very time consuming. When familiar with the system, it took about 3 minutes to complete documentation, however the day I observed, it took the nurse over 15 minutes to enter the data correctly.

Obtaining Signatures for Documentation

Nurses reviewed patient charts to ensure that all documentation was complete prior to the end of their shift. This included doctors' orders and signatures for lab tests, blood products, and diagnostics, as well as gluing documents such as lab results into the chart. The timeliness of having this done was especially important for pre-surgical patients and for patients requiring blood products. Sometimes a nurses' signature was needed, however most of the time when a signature was needed, it was a medical doctor's signature. To obtain the signature, nurses had a variety of strategies. They would keep attentive to the comings and goings of people on the ward so that they would notice when the doctor whose signature was needed came onto the ward, or they would go and search the ward for the doctor, hand them the document, and wait until they signed it. At other times, they would leave the patient charts that required signatures in a prominent place at the nursing post. In some cases, they woke up doctors who had been sleeping or they would take the doctor's arm and physically guide the doctor to the charts that needed signatures.

Supplies Documentation

Documentation extended to the procurement, distribution, and recording of supplies. Nurses documented the numbers of supplies ordered, received, and used for a variety of things including medications, blood glucose testing strips, wound care supplies, sterilized instruments, and linens. Equipment such as the number of monitors, IV poles, thermometers, sphygmomanometers and electronic blood pressure monitors, computers, chairs, and keys were also counted and recorded on a regular basis.

At the start and end of each shift, some of the standard ward supplies such as stock medications for PRN use and emergency cart supplies were counted and recorded both by outgoing and incoming nursing staff. If there was a discrepancy between the counts, they had to find the reason for the miscount and ensure that the final count was accurate. Based on the shift end counts, nurses made orders to restock the ward and

emergency cart supplies. When nurses kept a running log throughout the shift of supplies taken and used, this made the ordering of supplies easier.

The process of ordering, collecting, and distributing medications and supplies required nurses to do three counts of these supplies. Nurses counted and recorded orders of patient medications at the time they compiled the pharmacy order, when they picked up the order, and when it arrived on the ward, usually at the time the nurses distributed it to the patients' pharmacy baskets. The content and purpose of pharmacy baskets are explained under the sub-section 'Medication Tasks' (p. 131).

On the wards where surgical procedures and care for wounds and drainage tubes are done, nurses procured, stocked, and recorded the use of supplies such as sterilized instruments and gauze. Nurses ordered supplies, picked them up, signed that they had received them, and then recounted and recorded what was brought to the ward. Any equipment and supplies that needed to be re-sterilized were also counted and recorded before being taken to the sterilization department.

Dates of Expiry and Task Completion Documentation

Some documentation was not officially recorded in notebooks or charts but was used to indicate when a task was completed. Practices varied among the wards. On one of the wards, one of the first and last tasks of the nursing shift was to clean the medication cart (trolley). On completion of this task, the nurse wrote the date it was cleaned and taped it to the cart. On Ward C, the nurses did not indicate when the medication cart was cleaned; instead, their task was to write the date the sharps' box was started. Ward C nurses also had to weigh rubbish bags prior to disposal and write the weight and date of disposal on a piece of paper which was then taped to the bag.

On Ward A, alcohol-based hand sanitizers were available for both patients and staff at various locations on the ward. As the in-house solution was considered effective for one week, one of the nurses was assigned to regularly refill the containers. She attached stickers to the containers with the expiry date written on the sticker. The head

nurse regularly checked the dates on these containers and made sure that the nurse refilled them as needed.

Each ward had various checklists. In addition to counting medications in the crash cart and medication stocks in the locked cabinet, one of the wards had two rooms set aside for care of wounds, surgical drains, and catheters. The following excerpt contains an example of a checklist of nursing tasks, this one being specific for the treatment room:

> Clausia goes over to the desk and takes down a checklist that is hanging on a hook on the wall. The list is of the tasks she needs to do (e.g. monitor room temperature and humidity using the thermometer on the wall, clean the room, disinfect specific items like the examining/treatment table, ensure hand sanitizers are stocked in all ward rooms, take the dirty instruments for cleaning, etc.) She signs off the items on the list. Most are daily tasks, although once/week a deep cleaning team [non-nursing] comes and cleans the room, including sanitizing the air in the room. (Shift-8)

Shift Summary Documentation

The shift summaries provided an overview of the inpatient ward as to patient census, diagnostics, treatments and procedures given, and the names of nurses who worked the shift. The shift summary logbooks on Wards A and B of the tertiary hospital were the same, although what the nurses noted in the blank notation section differed between wards and among nurses. Ward C used a different summary logbook. The primary data at the secondary-level hospital was patient census, the category of inpatients (medical, neurological, palliative), admission and discharge numbers, and the number of patients who were in hospital 16 or more days. In the bottom half of the page, there was blank space in which the nurse could write a summary. As in the tertiary hospital, the shift summary included numbers of injectable medications administered and lab tests ordered. The names of patients who were more acutely ill was also noted.

The shift report was typically written between midnight and 6AM medication rounds. From my observation of looking at the logbook, there was a lack of consistency in reporting with some reports for the 16-hour night shift alone, while other reports

covered a 24-hour period. There were also some days in which no shift summary had been written. Preparing the census and medication summaries required nurses to calculate the numbers using other documents as observed in the following field observation:

> Maple is hand counting a shift summary of meds given over the 16-hour shift. To calculate this, she uses the logbook with medications and the patients receiving it. This shift there will have been 64 intramuscular injections, 28 IV push medications, 20 IVs, and 22 subcutaneous (primarily heparin). She records this in the nursing shift [summary] logbook. (Shift-18)

There were also times when nurses wrote descriptions as recounted below:

> Pixie reads me a report that she is writing in the nursing logbook. Basically, it reads: Many patients tonight but it has been quiet. There are two critically ill patients. We started one IV line in a pregnant lady who had an elevated temperature. (Shift-19)

On weekdays, the shift summary was read out loud and reviewed during handover from night shift to day shift. During the weekend, the shift summary was usually combined for Saturday and Sunday and reviewed on Monday.

Handover Tasks

The process of nursing shift handovers varied slightly among different wards. There were two main shifts: the day shift and the night shift. For hospitals that had 24-hour shifts, the handover was done in the morning. RNs were assigned to ward rooms rather than individual patients. On all wards both the incoming and departing nurse would usually walk through the patient rooms, with the nurse who was going off-shift sharing information about the different patients and pointing out anything of note. If nothing was felt to be important, they often just walked by a patient and said '*тайван'* (quiet or stable) or '*байна'* ("here"). The following excerpt is a field observation of a room-to-room nursing handover:

> We go on nursing rounds, but without the head nurse. The main issues that are discussed between the day and night shift nurses are

> patient admissions and discharges, catheters, IVs, and tubes. (Shift-12)

On the surgical ward, the incoming day shift nurses, the departing night shift nurses, and the head nurse did joint rounds with the medical doctors and residents on weekdays. Except for the head nurse and one or two others, most nurses trailed behind the group of doctors and gave their own nurse-to-nurse reports. One nurse was designated to carry a box of gloves and hand sanitizer for use by doctors during the patient rounds. Nurses were not observed to volunteer information but when a doctor asked a ward nurse a direct question, such as what a patient's blood pressure was, the nurse would respond.

I did not observe nurses carrying notes with them in preparation for giving patient updates when on joint rounds. This may have contributed to frustration among the doctors as noted in the following fieldnote recounting a conversation I had with one of the physicians:

> [The physicians] want to have specific information about things like recorded vital signs and fluid intake and output figures. He said that the Mongolian doctors tended to get general information e.g., this patient is doing fine or BP was normal. (Shift-5)

Some nurses coming on shift had a pen and paper to make notations for what they were to attend to in the upcoming shift. The head nurse listened to treatment plans outlined by the doctor and checked to see if nursing care had been conducted appropriately, e.g., observing if urinary catheter bags were off the floor and the dates of initiation for peripheral IVs had been marked on bandages covering the IV sites. She would sometimes do a targeted physical assessment, for example, checking oedema or wounds. Occasionally the head nurse would check patients' pharmacy baskets to see if nurses had put in the right quantity of medications.

In addition to nurse-to-nurse handover reports, head nurses received reports from night shift nurses. At the secondary level hospital, the nursing director or her deputy also

received a night shift nursing report. At both secondary and tertiary hospitals, night nurses would read the shift summary out loud and add any additional comments they felt were important. If the Head Nurse felt information was missing or incorrect, she would ask for clarification and reinforce good nursing practice as observed in the following excerpt:

> One of the night nurses read her shift report as written in the shift logbook. She highlighted patients who had elevated temperatures, out-of-normal range BPs, pregnant patients, and when & the reason that doctors were called in. The head nurse asked: “What about the liquids?” [fluid balance] She tells the nurses that it is important to know this. (Shift-5)

At the start of weekday shifts, the Head Nurse gave nurses reminders, admonishments, and announcements. Examples of what was communicated included: dates of upcoming events, foreign medical visitors, naming RNs who needed continuing education credits for upcoming RN license renewals, reminders of best practices such as accurately documenting fluid balances, and upcoming tests on specific topics of nursing knowledge and procedures. On Ward A where the nurses joined medical doctors on morning rounds, this meeting of nurses would happen either before or after the medical rounds, depending on when the doctors came onto the ward. If the nurses started their meeting prior to joint rounds and the doctors arrived mid-way through, they would interrupt the meeting, and everyone would go on rounds. The nurses would then return to their meeting after rounds were completed.

Medication Tasks

Nurses were observed to spend significant portions of their shift on tasks related to administering medication. Nurses had responsibility for procuring and distributing injectable medications on their ward. Nurses recorded and tallied up the amount and cost of medications and related supplies for each patient prior to a patient's discharge. Nurses were responsible for the cleaning and stocking of the medication carts used on medication rounds. The main task of the nurse as viewed by patients, and by many

nurses themselves, was the administration of injectable medications. Included within the sub-section on 'administration of medications' are blood products and other fluids such as bladder irrigations because a nurse was required to administer them by infusion. Nurses did not administer oral medications unless it was a PRN medication. Patients were responsible for taking their own oral medications. At the tertiary-level hospital, the pharmacist distributed oral medications. At the secondary-level hospital, nurses gave patients the oral medications that went into their pharmacy baskets.

There were 7 main tasks associated with the work of the nurse in administering patient medication as noted in Table 8. As documentation has been previously discussed, the remaining 6 tasks are detailed within this section.

Table 8. Medication Tasks

Medication Tasks	
1. Medication Administration 2. Follow-up after Medication Administration 3. Administration of Blood Products 4. Medication Cart/Trolley	5. Procurement of Medications 6. Medication Distribution 7. Documentation

Medication Administration

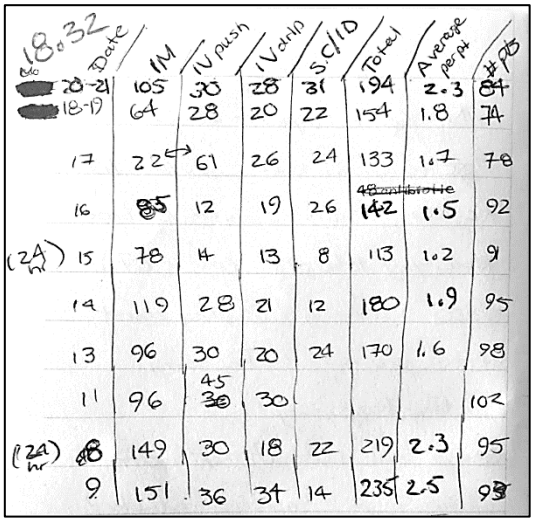
Medication administration in this research refers to the nursing responsibility of giving patients their medications. In Mongolia, RNs are responsible for administering injectable medications. Oral medications are expected to be self-administered by the patients, although nurses still chart them as having been given. ANs did not administer medications, however, they would assist the RNs with getting a patient's medication and at times they were observed reconstituting medication in the presence of the RN. ANs disconnected IV transfusions that had finished. If more than one bag of IV fluids was to be infused, ANs reconnected IV lines to a medication bags that had been prepared and hung in advance for that same patient.

Nurses gave intradermal injections to check for potential allergic reactions to newly prescribed antibiotics. The most common subcutaneous injection was heparin. Antibiotics and pain relievers were commonly given IM or IV. I was told that other

injectable medications such as vitamin C as well as medications for improving blood flow and brain function (e.g., Cavinton, Actovegin) have been commonly prescribed since the communist era. The types of medications given on each ward are almost always the same medications, making it easy for nurses to memorize the types of drugs they administer.

As IV infusions were usually for medication administration rather than re-hydration, small bags of 100 mL were most commonly used. IV pumps were only observed for those who were considered critically ill. Some wards didn't have any IV pumps, while 2 pumps were the most I observed on the wards where I did field observations.

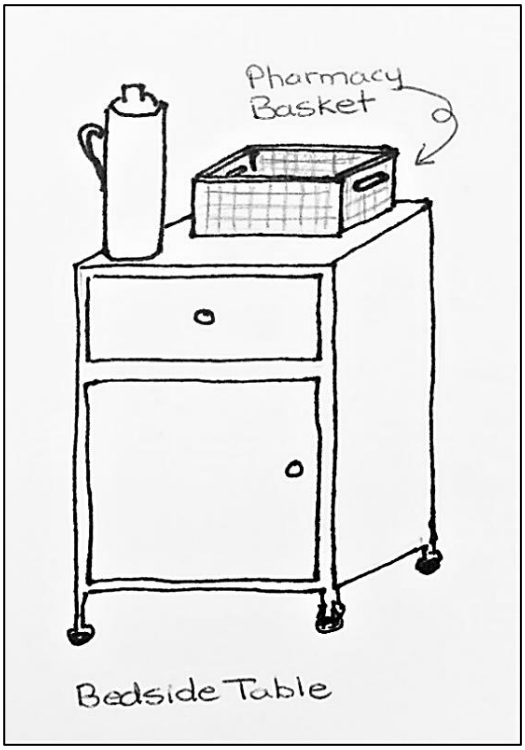
Medications were usually prescribed on a regular schedule, either daily, BID, TID, or QID, using the common times of 0600,1000,1400,1800, and 2200. Of these, the 0600 hours' medication round tended to be the heaviest as it included BID, TID, and QID medications. In addition, nurses frequently took blood samples at the same time as administering the 0600 scheduled medications. Given the typically high numbers of patients per nurse, medication rounds were observed to take an average of 1-3 hours to complete. Based on a sample of shift summary reports noted during field observations, nurses on Ward C gave an average of 160 injectable medications/24 hours, many of these being single-use, gravity-fed IV infusions (Figure 15).



18.32 Date	IM	IV push	IV drip	S.C/ID	Total	Average per pt	# pts
20-21	105	30	28	31	194	2.3	84
18-19	64	28	20	22	154	1.8	74
17	22	61	26	24	133	1.7	78
16	85	12	19	26	142 (48 antibiotic)	1.5	92
(24 hr) 15	78	14	13	8	113	1.2	91
14	119	28	21	12	180	1.9	95
13	96	30	20	24	170	1.6	98
11	96	45 30	30				102
(24 hr) 48	149	30	18	22	219	2.3	95
9	151	36	34	14	235	2.5	93

Figure 15. Numbers of Injectable Medications per Shift

During medication rounds, nurses were observed to identify a patient and the medication they were prescribed by: (1) referring to the patient chart or a list of patients and their medications (e.g., night medications list) and calling out each patient's name when they were the next patient to be attended to or (2) going directly to the patient's pharmacy basket (Figure 16) where the patient's supplies were kept and assuming that these medications belonged to the patient in the adjacent bed. There were no patient armbands or other methods of identification.



Items included in a pharmacy basket:

- Oral medications
- Injectable medications
- IV fluid
- Syringes
- IV Administration sets

Figure 16. Pharmacy Basket

If nurses didn't find the prescribed medication in a patient's pharmacy basket, nurses sometimes took an extra vial from a neighbouring patient's pharmacy basket so that the medication could still be given. If she did so, she informed the patient whose medication she had taken. Patients never questioned the nurses about the practice, and it was unclear if this may have been part of a complaint made by patients to doctors that they had paid for medications they didn't receive.

The knowledge of which medications to give at a specific time came primarily from seeing which medications were in the patient's pharmacy basket and knowing the time and frequency for each type of medication. Because medications tended to be routine and seldom addressed co-morbidities, experienced nurses knew the times and routes of medications without having to refer to patient charts. As described in the section on medication documentation, most night shift nurses took the list of medications to be administered rather than the stack of patient medication sheets. (See Figure 13, p. 117).

Some nurses would tell patients what medication they were administering and what it was for. When injecting medication into an IV bag for infusion, nurses would occasionally show the vial to the patient, tell them it was in the IV infusion, and then throw away the vial. Rarely was a nurse observed taping a vial to the IV bag or using a marker pen to write the name of the drug added on the IV bag. When I asked Willow, a key informant, about the observation of inconsistent labelling, she said that Mongolian nurses haven't had the habit of labelling medications added to an IV bag. She said she first learned about this during a practicum in South Korea. She also said that the current push for labelling added medications is coming from Mongolian doctors rather than nursing leaders. However, it is the nursing leaders who have responsibility for implementing the practice.

Most nurses were very quick at inserting the butterfly needles that came with the single-use IVs sets. For some patients, nurses inserted IVs without using a tourniquet. For patients with fragile or difficult to find veins, the nurse usually asked the patient where they wanted the IV inserted. In these cases, a tourniquet was used. Each nurse usually had one tourniquet on her cart. I observed a variety of types, including straps with a tightening and release tab, pneumatic tubes, and a rubber glove. For patients with indwelling peripheral IVs, medications were given through a port, although it was not always cleansed prior to use. For IV push medications, nurses would insert the needle

into a vein with one hand while they gave one or more IV push medications with their other hand, removing and inserting the barrel of syringes into the needle's hub with little-to-no blood leakage.

At the start of an IV infusion and while giving IV push medications, the nurse assessed for swelling or resistance that would indicate a needle had gone interstitial. Assessment of IV infusions was also done through conversation and observation as noted in the following field observation of a nurse administering IV fluids to a patient with a peripheral venous catheter:

> Statice hangs the bag and connects it to the port. The fluid is not flowing well. She adjusts the patient's arm position. A few more drops go in. The patient winces. Statice notices and asks if it hurts. "Yes" says the patient. She unwraps the gauze so she can assess the site. She takes a syringe and fills it with normal saline and injects it into the venous catheter. The patient winces. Again she asks if it hurts. The patient says yes. Statice looks at the flow rate which has increased. She asks the patient how her arm feels now and the patient says it is ok. (Shift-11)

Indwelling peripheral IVs were used on some wards more than others. Unlike the single-use IV sets with butterfly needles that nurses easily inserted while standing or bending over, nurses usually sat to insert a peripheral IV. Once inserted, the tourniquet would be released, and the nurse secured the cannula with gauze and tape. Often, a strip of gauze was wound around the cannula to further secure it. Each time this type of IV was inserted, the nurse wrote the date and time of insertion either on the tape or on the gauze. Nurses also recorded the procedure in one of the logbooks at the nursing post.

When an IV was removed by a nurse, the nurse pressed on the vein, quickly withdrew the needle, and then taped an alcohol swab over it. If it was a single-use IV, the alcohol swab was usually the same one that had first been put over the puncture site to secure the needle during the IV infusion. ANs also removed IVs. In addition, many patients (or their CAs) removed IVs when they noticed that the infusion had finished.

Intramuscular injections were almost always given in the dorsal-gluteal site. As described below, the nurse often tried to distract patients from the pain of the injection:

> Sometimes the nurse gives the IM to the patient when he/she is lying on their side; at other times the nurse gives the injection to them while they are standing. Most of the time when I watched the patients' faces, they would scrunch up their eyes when a needle pierced their skin. With an IM injection, they would scrunch their eyes up even more when the fluid was injected. Often, they would instinctively move their arm to the area of the injection and the nurse would tell them to wait until they were finished, or they would nudge their arm away from the site. After finishing, they would guide the patient's hand back so they could hold the [alcohol] swab in place. Sometimes I noticed the nurse tapping the skin about 1cm adjacent to the injection site when they sensed that the injection was painful to the patient. (Shift-2)

On Ward C, nurses would sometimes ask patients to come to the treatment room to receive their medications. This was observed for the 0600 hours medication round as well as at the end of a day shift when newly admitted patients were given their medications. One or two nurses set up their medication carts and patients lined up to receive injections. For IV medications, only IV push injections were done in these situations. It was unclear from my observations if the normal transfusion route using an IV bag was forfeited so that the more time efficient IV push could be given. There were no privacy measures taken other than the waiting patients standing back about 1-1.5 meters from the patient receiving medication. During the 0600-administration time, nurses also did phlebotomies.

Sometimes when a PRN medication was needed or when there was a new admission, doctors ordered medications verbally without writing them on the patient medication chart. The nurse was responsible to get this medication either from ward stock supplies or from the pharmacy. Some nurses had a system for double-checking verbal orders – such as showing the doctor the medication before preparing it for injection.

One nurse commented that doctors will sometimes change the medication or timing of the medication on the computer but neglect to make changes on the paper chart/form that they use on medication rounds:

> *You know sometimes injection prescription changes, for example, injection 'every 8 hours' can change to 'every 6 hours'. In our ward, it's very typical to change prescriptions - for example, injection 'every 12 hours' can change to 'every 8 hours'... But this change is not updated on the form and the date of the change is not specified. For instance, the elderly patient in Room 4 – his injection prescription was changed from 12 to 8 and I didn't know about it, so I injected as 12. Then the doctor scolded me saying that she changed the prescription to 8. Then I showed her the form saying that it's written as 12 on the form – but she didn't make any changes on the form. There is a computer system on which the doctors write notes & updates, but our ward still uses the paper form because the prescriptions change often and the patients are in critical conditions. (Nurse Margi)*

Nurses also have to negotiate specific requests of patients for administering medications they bought on their own but that aren't on the doctor's list of prescribed medications. There are no drug reference materials on the ward that nurses can refer to and I was not aware of any protocols for checking the compatibility and suitability of privately purchased medications. The following describes a request by a patient for a nurse to give an unprescribed medication:

> Back at the desk, a patient came and asked Serratula about a medication that he thought was to be given. Serratula checked the medication list but it wasn't on the doctor's list. The patient then explained that the patient's family bought it privately. So Serratula went and prepared the IV with the medication. (Shift-3)

When giving injectable medications, one nurse said that nurses were to use gloves when doing IVs, but that they didn't require gloves for IMs. Some nurses used hand sanitizer on a pair of gloves that they used for multiple patients. This practice saved both time and money. Some nurses knew they were supposed to use gloves but said they didn't for procedures such as venepuncture because they were not as skilled with the procedure when using gloves.

Nurses needed to have good time management skills when administering injectable medications because of the volume of medications to be given and because of frequent interruptions. Nurses tended to start at one end of the corridor and proceed through the rooms in a sequential manner, beginning with the ward's ICU or post-op room. I did not observe a practice of prioritizing time-sensitive medications. Interruptions that occurred during medication rounds included patients or their CAs asking questions, problem-solving IVs that had stopped infusing, disconnecting IVs that had finished, obtaining additional supplies such as IV sets, responding to requests from other nurses and doctors, and the need to double-check medications when there was a discrepancy between what the nurse expected to give and what the patient expected or what was available in the patient's pharmacy basket.

As the time of medication administration seemed to be the primary patient contact time, some nurses used this opportunity to provide patient education. Patient education most often consisted of telling the patient the name of the medication and its purpose. However, some nurses also took the opportunity to teach patients about proper diets, and give anticipatory teaching for upcoming surgery, diagnostics, or before being discharged home.

Patients frequently took the opportunity to give gifts to nurses when nurses were administering medication. The gifts I observed being offered to nurses were small gifts of food – chocolate, candies, fruit, and cookies. Some nurses told me they aren't supposed to take gifts from patients. However, patients were observed to be insistent that nurses take gifts, and nurses usually responded by putting the food either in their pockets or on the lower shelf of their medication cart until they had finished their medication rounds.

Follow-up After Medication Administration

Follow-up from medication administration is a demanding and time-intensive task for nurses. Examples of follow up include checking to see if an IV is finished, changing IV bags, removing IVs, trouble-shooting IVs, disposing of IV needles, tubing, and fluid bags,

assessing and securing IVs, checking for allergic reactions to an ID injection, getting and returning IV poles, and responding to patients' questions. Although documentation is part of follow-up, it is included in the section on documentation and is not repeated in this section.

The most observed follow-up task was removing IVs. As most IVs are single-use IVs, they must be removed once they have run through. Disconnecting and discarding the IV needle, tubing, and bag is usually done by a nurse or AN. However, patients and CAs will also remove IVs. When patients or CAs disconnected an IV, they usually left the IV paraphernalia hanging on a hook or IV pole for the nurse or AN to come and dispose of it. Sometimes they would carry it down the hall to the nursing post. Alternatively, some patients would simply use the roller clamp to shut off the line and wait for a nurse or AN to remove the IV.

When nurses or ANs removed IVs, they typically covered the insertion site with an alcohol cotton swab. Some nurses would place an alcohol swab under the butterfly IV needle during IV insertion to make it readily available for placing over the insertion site once the IV needed to be removed. Other nurses would get a fresh alcohol swab to press over the insertion site when removing the IV. Sometimes tape would be used to hold the swab in place; at other times, the patient or CA would hold the swab until the bleeding had stopped.

As almost all IVs were gravity fed IVs; there were no alarms for when an IV finished, or for when there was a blockage or air in the line. As a result, nurses and ANs would frequently check IVs during medication rounds by going back and forth between rooms. Patients and CAs frequently sounded the call-bell or sought out a nurse when they observed that an IV needed to be disconnected or if there were problems with the flow. As recorded in the following excerpt, patients and CAs were essential to the process because they would alert the nursing staff when there was a problem or when an IV had run through:

> A CA comes to the nursing post to ask that an IV be removed for a patient. Caragana goes to room #2 to remove the IV. The CA from one of the patients in [another room] came to let us know that the IV medication for one of the other patients needed to be switched over as one IV-bag had run through. (Shift-13)

Nurses were constantly interrupted during medication rounds to respond to follow-up needs for IVs that were blocked, had air or blood in the line, or that had finished. Although nurses typically completed the tasks quickly, such interruptions prolonged the time required to complete medication rounds.

Administration of Blood Products

Blood products were administered on each of the three wards where I conducted fieldwork. In some cases, doctors would verbally inform a nurse that a transfusion had been ordered. Types of products recorded in observational notes included fresh frozen plasma, cryoprecipitate, platelets, and whole blood. If no recent blood-type results were on the patient file, a blood sample had to be sent to the lab prior to administering blood products. This required a written order from the doctor before a nurse could take a blood sample.

At the tertiary hospital where blood products were available on site, once a patient's blood had been typed, a nurse went to the lab to pick up the blood product. When ANs were present, the task of getting the blood products was often delegated to them. At the secondary level hospital where there was no blood bank on site, one of the nurses would either be transported to a designated blood bank by the hospital's vehicle, or if a hospital vehicle was not available, by a private taxi. The nurse's colleague at the hospital would then be responsible for the patients of the nurse who had left to get the blood products. For example, when Pixie went to the blood centre during Shift 19, it meant that her colleague was responsible for 80 patients instead of 40.

When a bag of whole blood had been brought to the ward at the secondary level hospital, the nurse would cut off a section of the excess tubing that contained samples of the blood so that the hospital's lab could double check that it was compatible with the

patient's blood type. This step of the lab double-checking the blood product was not a responsibility of the nurses in the tertiary-level hospital. For both types of hospitals, nurses would record the details of the blood product in one of the handwritten logbooks at the ward's nursing post (Table 9).

Table 9. Blood Product Logbook Information

Blood Product Logbook: Categories Requiring Documentation	
• Date • Time Retrieved • Patient Surname • Age • Gender • Patient Code Number • Blood Type (A-B-O) • Rhesus • Signature of Person Preparing Product	• Serial Code on Blood Product • Donor Code • Volume • Date Prepared • Blood Test Results (Hgb, RBC) • Type of Blood Product • Patient Diagnosis • Name of RN Administering Blood • Signature of Medical Doctor

Preparation for giving blood included obtaining a blood transfusion kit. Sometimes these were available in the ward stock supplies; at other times the nurses had to go to the pharmacy to obtain the kits. Depending on the type of blood product and the timing for administration, nurses thawed frozen products in a basin or they placed the blood product in the refrigerator or cooler until they were ready to transfuse it. To initiate a transfusion, nurses either connected the IV to an existing peripheral IV or they initiated a new IV site. Although many countries hang of a bag of Normal Saline for the purpose of flushing the line and in case of an adverse reaction, this was only observed to be done when a doctor specifically requested the nurse to do this as observed in the following excerpt:

> Avens returned to the nursing post and continued to write out a list of medications to be given at 10 PM. She had been sitting for maybe one minute before a CA came by and announced that the blood had finished. Avens got up and went to change over to the second bag. She also checked on the other patient receiving blood. She then checked on the patient who had complained of stomach pain and fever. She returned to the nursing post. Less than one minute later after sitting down, the doctor came to the desk telling her that she needed to hang a bag of saline on the patient who was receiving blood. (Shift-14)

Prior to starting the blood transfusion, nurses sometimes double checked with patients or their CAs as to the name of the patient who was to receive the blood product. This step was not always done, and it was not obvious from my observations as to why some nurses specifically checked a patient's name while other nurses did not. Some nurses also double-checked with patients as to their blood type as recorded below:

> Avens goes to room #5 to check on the patients receiving blood. She asks a patient about what type of blood they have. There seems to be a difference from what has been ordered. She asks the CA to find the patient health records. The health record indicates the same blood type that has been ordered. Avens then administers the blood. (Shift-14)

Most nurses showed the patient and CA the blood product they were going to transfuse and let the patient know the number of blood bags to be transfused. Nurses also told the patient and CA to immediately notify the nurse if the patient experienced signs of an adverse reaction such as dizziness or pain. Sometimes nurses would take the patient's BP, temperature, and pulse rate prior to administering the blood product.

Once the blood product was transfusing, the nurse stayed to observe for any adverse reactions, asking the patient how they felt while assessing the patient's skin temperature, colour, and the quality of verbal responses. Nurses knew how long a blood bag could hang before it needed to be removed because of bacterial growth risk, however with the irregular rate of gravity-fed transfusions, I wondered if some transfusions took longer than the guidelines on blood safety. During one field observation, a patient receiving blood had 90 minutes elapse with no assessment while the nurse did her medication rounds.

As patients receiving blood were often not in direct view of the nurses, it was a challenge for nurses to constantly check infusion rates. Timing between assessments seemed to be based more on a nurse's availability and workload than on blood transfusion protocols. In addition, checking of vital signs was not always done by taking

an exact measurement. For example, instead of checking a patient's temperature by a thermometer, some nurses would instead touch the patient to determine warmth levels.

Once a transfusion was finished, the nurse, AN, or the patient or their CA would clamp the line. The nurse usually removed the IV and took the used blood bag and tubing to the nursing post where she would wrap it in a biohazard bag and put it in the refrigerator. To save money, some nurses were instructed to cut the biohazard bags to size and use clear packing tape to seal the bag. Bags were kept for a specific period of time so that if the patient had an adverse reaction, the bag that had been transfused could be checked.

Medication Cart/Trolley

Nurses used a small metal cart (trolley) during medication rounds (Figure 17). The cart was usually set up with hand sanitizer, alcohol swabs, iodine, single-use gloves, tape, gauze &/or cotton swabs, a few packets of syringes, a tourniquet, a couple small bags of IV fluids that were used for reconstitution of medications, a sharps' box, a regular rubbish bag, and a biohazard waste bag. There were almost no medications on the cart except for fluids used to reconstitute medications and a couple extra vials of the more commonly administered medications.

The working surface of the medication cart is relatively small. At the secondary-level hospital, the nurse would place a small, sterilized piece of linen cloth over the available working space and use this for the duration of her shift. The cloth was used to create a clean space on which to reconstitute and prepare medications. This hospital also had hand-made side baskets that hooked onto the side of the cart. The baskets were designed to store patient medication charts. At the tertiary level hospital, some nurses elected not to bring along the patient medication charts as the only space for them was on the same surface where they prepared their injectable medications. If they did bring the patient medication charts, they usually had a clear plastic folder cover into which they would put the paper charts and on top of which they would prepare

medications. The patient's chart for whom they were preparing medications was usually brought to the top of the pile inside the folder, and once finished, the nurse would put the paper chart at the bottom of the pile.

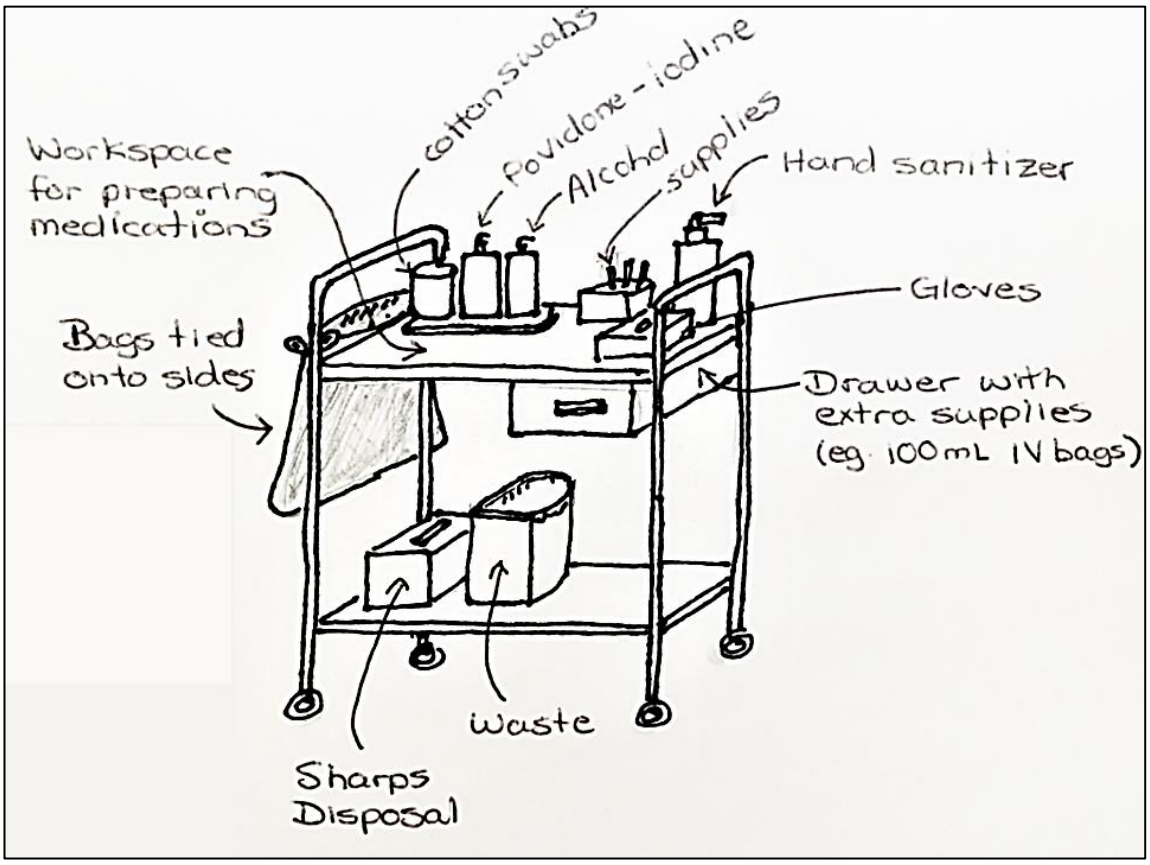


Figure 17. Medication Cart/Trolley

Medication carts were small enough that they could be taken into each room. Due to the light construction of the metal carts and the uneven floors, the cart often made a lot of noise. Most of the time the nurses ignored it. On wards where there were door sills, a nurse had to lift the cart over the door sill to get the cart in and out of the room.

Procurement of Medications

The nurse compiled and submitted orders of medications and supplies for all the patients and for the ward's stock supplies. Supplies included items such as IV fluid bags, syringes, needles, alcohol swabs, blood glucose testing strips, etc. Both medications and supplies were procured through the hospital's pharmacy. In the tertiary hospital, nurses

had to leave the ward to go to the pharmacy and then carry the supplies back up to the ward. In the secondary hospital, there was a pharmacy room on the same floor as the inpatient ward.

A senior nurse was usually assigned to review doctors' orders and compile a list of the type and quantity of medications and the supplies needed. Depending on the charting system, the nurse would either check the electronic or paper charts. If a doctor had not sent in medication orders by a certain time, the nurse would locate the doctor by phone or by walking through the ward and adjacent doctors' rooms until the doctor had been found. A key informant, Dr. Nonea, told me that she felt her life was dictated by the nurses who demanded she get her medication orders in by a certain time each day and who would pester her until she got her orders entered.

Once all the orders were accounted for, the nurse sent the list of medications and supplies to the hospital's pharmacy. At the tertiary hospital, the pharmacists would assemble all the items and then call the nurse once the order had been filled. The nurse would go to the pharmacy, bringing a copy of her order list. She went through the medication and supplies that had been assembled, checking off each item that she received and matching it to her order list.

At the secondary level hospital, once the doctors 'orders had all come in, the nurse would go to the pharmacy. If the pharmacist was in and had also received the doctors' orders, the nurse could begin filling the order immediately. If the pharmacist was not in, the nurse had to keep checking back until the pharmacist arrived. Once the pharmacist was ready, the two of them worked together to get the order filled.

Medication Distribution

Medications for patients were distributed to patients in advance by putting them in a basket referred to as an '*эмийн сав'*. I have translated this as a pharmacy basket. Pharmacy baskets were medium-sized plastic containers with no lid that were placed on top of the patient's bedside table as illustrated in Figure 16, p. 131.

Each ward had a pattern and system for the distribution of medications. Most medications were distributed to cover either a 2-day period or a weekend. This meant that Mondays, Wednesdays, and Fridays were the busiest days for distribution of medications and supplies. In addition, nurses obtained and distributed supplies each shift to replace ward stock supplies that had been used the previous shift, and to fill orders for new admissions and prescription changes for in-patients. The main time for distributing medications to patients was mid-morning. For new admissions, medications and supplies would normally be distributed near the end of the day shift with enough to last until the next distribution. The tertiary hospital usually had a senior nurse in charge of distributing the supplies. On night shifts, the team leader usually did the ordering. At the district hospital, while a senior ward nurse was responsible for the main distribution in the morning, the ward nurse assigned to the intensive care room did the late-afternoon distribution.

The nurses either delivered patients' supplies to them directly or they had the patients or their CAs bring their pharmacy baskets to the nurses' post where the nurses would fill them. If the nurses took supplies directly to the patients, they usually worked as a team with one nurse gathering each patient's medications and supplies and another nurse giving them to the patients or their CAs. At times, only one RN did the distribution as recorded below:

> Serratula is still distributing pharmacy supplies to the patients. She puts a pile together and then walks it to the patient. Returns and pulls out the supplies for the next patient, always checking against her list of supplies. (Shift-4)

Nurses were also observed to take a cart or stretcher full of medications and supplies down the ward's corridor rather than going back and forth from the nursing post to patient rooms. When going down the corridor, one of the nurses called out which room they would distribute items to next and the patients or their CAs from that room brought

their pharmacy baskets to the nurses to collect their medication and supplies as in the following description:

> Patients start to line up to get their medications. The nurses use a notebook with a list of medications on the top with the names and room numbers on the left. The nurse asks the name of the patient and the patient gives his/her name. Then the nurse checks the notebook with patient names and medications. She then [gives] the appropriate medication as ordered. The patients put the medications in their pharmacy baskets. (Shift-16)

When there is discrepancy between what a patient thinks they should be receiving and what the nurse is giving or not giving them, the nurse will usually check the patient's paper chart to clarify the doctor's order. Patients will also use this time to ask nurses questions about their medications, especially if there is a new medication or if a previous one has been discontinued.

Locating and Fetching Tasks

Nurses spent time searching for people, documents, and equipment during their shift. Nurses had to locate and fetch items such as thermometers, stethoscopes, and sphygmomanometers; a task that required extra time when the items were not at the nursing post as expected. As there was often only one thermometer and two stethoscopes on the ward, these items were sometimes in demand. Nurses also had to leave the ward to get supplies such as urine sample jars and test tubes from the laboratory, and equipment such as portable ultrasound, oxygen concentrators, or ECG machines that were not stored on the ward. However, most of the time spent in locating and fetching tasks was for finding doctors and documents.

Nurses often had to locate doctors and used a combination of strategies such as walking the length of the ward and checking the doctors' rooms or maintaining vigilance in listening and watching for doctors while they were simultaneously working on nursing documentation. Occasionally, nurses would phone doctors. If a nurse phoned a doctor, it

was usually related to a verbal medication order or when there was a concern or question about the health of a patient.

When a nurse was aware that blood tests were needed and she didn't see an order in the charts, she would usually search for the doctor and remind the doctor to put in the requisition. Nurses would also need to find doctors who had not submitted dietary or medication orders. An example of the effort nurses put into finding doctors is described as follows:

> Youngia [a senior nurse] goes back to working on the electronic chart. A [ward] nurse comes by to ask her about the diet for the older lady who was admitted this morning. Youngia gets up and goes to locate one of the doctors to ask what the diet should be. She first goes to the far end of the corridor, and seeing the doctor is not there she then goes down to the opposite end of the corridor. She finds the doctor and gets a dietary code. She goes back to the nursing post and enters the code in the electronic chart. (Shift-15)

At other times, nurses will be asked by doctors to relay a message to another doctor:

> The phone at the nursing post rings. It is the emergency doctor. My nurse goes to the palliative care room to convey the message received from the emergency doctor to the attending ward doctor. (Shift-18)

Nurses spent time looking for other nurses as well as patients. Nurses searched for one another when they needed assistance with something, had an errand to run, or when they discovered that a patient in a room assigned to their colleague needed nursing care. At other times, it was because a doctor wanted to relay a message to another nurse. Nurses also spent time looking for patients. When a patient was due for medication or a consultation, nurses would first look in the patient's room. If the patient was not in the room, the nurses would ask co-patients if they knew where the patient was.

As a result of requests for patient charts from doctors, nurses spent a moderate amount of time looking for or couriering charts, including medication sheets. While some doctors looked for specific charts on their own, most asked nurses to locate charts.

Doctors either came to the nursing post or they phoned the nurse to request that they be given patient charts or medication sheets. In the following observation at a secondary hospital, I included the time of day to provide an example showing the time nurses can spend fetching and delivering charts, often while multitasking:

> 09:10 We go to the [inpatient ward's] doctors' room and hand over the charts. (Note: I think that Penny waited upstairs for the doctor to write in the patient chart so that she didn't have to go back again later... the time it took to wait was less than the time it would take to return and check if the charting had been done). [After delivering the charts,] we go back up to the 4th floor. We meet the 80 yo patient and ask her where she is going. She says she is taking the stairs back to the inpatient ward. Penny goes and gets a chart from one of the doctor's consultation rooms and brings it back down to the inpatient ward's doctors' room.
>
> 0924…We go upstairs to the consultation area. Penny checks to see if one of the patients has showed up yet for their consult. She then goes to the psychiatrist's room. The patient is there for a consult. Penny washes her hands and then goes into the consultation room to give the patient an injection…
>
> 0945 …. We take the elevator to the [ambulatory department]. The young psychiatrist…says something to her about the patient chart. We then go to the ultrasound room. We wait for the MD to finish charting.
>
> 0951. We take the elevator to the inpatient ward. Penny collects charts of patients who had morning consults. She takes them to the [ward's doctors] so they can update the medications and any other tests or treatments. (Shift-16)

The sharing of paper charts and medication sheets between doctors and nurses meant that nurses also had to look for charts when they needed them for tasks such as checking a medication order. When charts were not at the nursing post, nurses usually found them in the doctors' rooms.

Infection Control Tasks

Nurses employed various routines and measures to prevent transmission of infections in the hospital setting. They had specific infection control tasks such as cleaning medication carts or examination tables. Hand hygiene, use of PPE, handling of clean and sterile items, cleaning of surfaces, and precautions taken when managing

contagion were all observed as being utilized to varying degrees during field observations.

Hand Hygiene

Handwashing habits varied among nurses. Often it was done only periodically during a shift. There was a sink available at the nursing post and in-patient rooms on each of the wards where I made field observations, however there was seldom anything for drying hands. Most nurses would air dry their hands by shaking them. Occasionally a nurse was observed to bring her own towel that she placed on a water radiator near the nursing post as it provided easy access and facilitated the drying of the towel. Soap was almost never observed at a sink although sometimes there was a dilute chlorhexidine disinfectant.

Hand sanitizers were available to nurses for cleaning their hands. The availability of hand sanitizing liquid was relatively recent as key informants told me that in the past, hand sanitizing liquid frequently ran out and was not replaced for prolonged periods of time or, if it was replaced, the volume was insufficient and would quickly run out. Even now, one nurse told me that hand sanitizer dispensers occasionally went missing and she suspected some patients took them home. Although the supply of hand sanitizer was observed as available and accessible, there were still potential infection transmission risks as the containers themselves weren't cleaned on the outside and the pump portion was never observed to be cleaned or replaced as long as it was working.

Personal Protective Equipment (PPE)

Boxes of gloves were available to nurses and were used primarily when nurses were exposed to blood and body fluids. Nurses would also fetch gloves for doctors when they requested it during patient rounds. During field observations, I didn't perceive a standard practice for the use of gloves. Usage seemed to be based on whether nurses anticipated coming into direct contact with blood or body fluids. The following excerpt is

from a discussion I had with a nurse about the use of gloves and her rationale for why they were not consistently used:

> I asked her if there is a policy on wearing gloves (I had not been able to notice any pattern in her use when doing medications, inserting IVs etc. Sometimes she wore gloves, sometimes she didn't, and sometimes she used sanitizer gel on her gloves when going between patients). She said they have to be careful with the use of gloves and other resources, so they don't run out when they really need it. (Shift-2)

Sterile gloves were used specifically for procedures such as catheterization that required aseptic technique. Regular gloves were used when cleaning patient wounds or coming into contact with blood and body fluids. On one shift, after a nurse cut herself while opening a glass ampule, she wore gloves the rest of the shift to keep her wound clean and to prevent bleeding.

Apart from the use of gloves, there were only a few times when I observed other PPE being used. Occasionally a sign on a door stated that certain PPE needed to be used, although there was not always the accompanying PPE supplied as noted below:

> In the room where the patient with sepsis continues to lie, there is a sign hanging from the IV pole above her bed indicating that gloves and an apron are to be worn. However, I have not seen these put on during rounds, and I've only seen a mask and gloves sometimes put on for direct patient care. (Shift-5)

The wound care nurse wore an OR gown and cap when doing wound care. She continued to use the same cap and gown throughout the morning when patients came for dressing changes, although she consistently changed gloves between patients.

Equipment & Disposal Containers

The types of sterilized equipment varied from ward to ward depending on the procedures that patients underwent. Most equipment tended to be metal and cloth rather than single-use disposable plastic and paper products. After a metal instrument was used, the nurse usually rinsed it with running water and placed it in a biohazard box that would be taken to the sterilization unit before the end of the shift.

When there was no biohazard box on the ward, the nurse had to go to another part of the hospital to get the box, although this was only done when she had the time to do so. Sometimes a few hours elapsed before she had time, and dirty instruments would be placed on a shelf until they could be transferred to the box. In addition to the biohazard box, there was a system of rubbish bags with the colour indicating the type of rubbish (e.g., regular, hazardous). At the tertiary hospital, rubbish bags and boxes were usually picked up by non-nurses and taken to the appropriate place for disposal. At the secondary level hospital, nurses were responsible for weighing, tagging, and taking the waste to the designated disposal room.

Maintaining Clean Spaces

Nurses and ANs were tasked with a number of cleaning jobs. Nurses cleaned the medication carts and examination tables. They also cleaned and tidied the nursing post. When something spilled on the floor such as blood and there was no housekeeper in the immediate vicinity, the nurse would clean it up.

At the tertiary hospital, when a patient moved out of a room, the housecleaner and AN usually cleaned the room and furniture. ANs also cleaned beds and bedside tables on a scheduled basis. When more extensive cleaning was needed, such as when a patient with MRSA was discharged, a special cleaning team came onto the ward. ANs sometimes helped with special cleaning. During one observation, the AN was tasked with setting up and taking down an ultraviolet light. She also removed the mattress cover and duvet belonging to the hospital and took it to the laundry's special cleaning room for MRSA contaminated linens. Placing patients with contagious pathogens such as MRSA in single rooms was usually not possible because of a lack of available rooms, as explained to me by a ward nurse:

> I asked what kind of infections they might have on the ward. She said that they have had HIV & MRSA… I asked her what protective measures they take. She says that they don't have the space for the patients to be put in isolation, so they remain in the general ward rooms. (Shift-2)

Sterile/Clean Fields

At the time of this research, head nurses and doctors were in the process of trying to change nursing practice for placement of IV bags and urinary catheter bags. On one shift, the head nurse told one of the ward nurses that IV fluid bags were not to be placed on the patient bed. More common was the problem of urinary catheter bags resting on the floor. As there were no hooks on catheter bags, nurses used strips of gauze to secure bags to the bed or to the patient.

As described in the section on medication administration, aseptic practices for injectable medications were not always maintained. Use of swabs to clean IV ports was rarely observed. The swab used to cover the needle during an infusion was usually used to cover the puncture site once the infusion was finished and the needle removed. A couple of key informants from other hospitals said they had observed IV tubing that had been left hanging at the bedside after being disconnected so it could be used again the next day. During my field observations, I never observed a single-use IV being used from one day to the next, but I did observe the re-use of an IV needle after the initial insertion site went interstitial as described below:

> A call bell goes for another room. We go check on the patient. Her intravenous line has gone interstitial. Pixie walked back to the treatment room and got a tray for giving a new IV. She returns to the patient room. She removes the intravenous. She runs fluid through the needle. She asks the patient what the name of the medication is that she was receiving intravenously. She then takes the needle that she had just removed and had run fluid through, and places it on the cloth on the medication cart. The needle was not capped. She then takes the patient's arm and looks for a new IV insertion place. She picks up the needle from the cloth and re-inserts it into the patient's arm and tapes it into place. (Shift-19)

Nurses needed to maintain a sterile field when doing catheterizations. On one of my field observations, I heard a doctor specifically tell a nurse to be careful to prevent infection during a catheterization. The process of catheterization required a high level of organization because there were no catheterization kits; the nurses needed to select and correctly position individual sterilized items while maintaining aseptic technique.

Laboratory Tasks

Nurses worked with the laboratory primarily in two areas: (1) obtaining and delivering lab specimens from patients and (2) collection of blood products for administration. Based on field observations, it seemed that night shift nurses did more lab tasks than did day shift nurses. As most lab samples are taken prior to breakfast, night nurses usually obtained these samples.

Nurses are the primary phlebotomists on the medical and surgical wards. They checked patient charts for doctors' lab orders and processed them by handwriting lists of those who were to have lab tests. Depending on the hospital and ward, nurses either wrote out specimen labels by hand or they printed them with a specific printer for lab labels. Occasional mix-ups were reported to occur with handwritten labels because there was no adhesive to affix them to sample containers.

Doctors often verbally notified nurses when a patient needed to have blood tests. However, nurses were not supposed to draw blood until there was an order in the patient chart. This frequently caused tension as doctors would be waiting for lab results while nurses were waiting on lab orders as observed during field observations:

> At one point during the rounds, a senior physician raised his voice… He had asked for a nurse to respond to a question but there was no response, so he had raised his voice and asked again. He wanted to know the lab results [for a patient] but the nurse said there was no blood sample taken because there had to be doctor's order first, so no lab order could be processed without it. (Shift-4)

Nurses assembled supplies needed for taking samples such as alcohol swabs, needles, vacutainers, and vials. Collecting supplies was not always a straightforward process and usually required the nurse to go off the ward as described below:

> Serratula gets a printout from a little machine on the nursing desk specific for printing labels to affix to specimens. She goes to the patient for whom the labels are for and draws the blood, putting it into vacutainers. We take the specimen to the lab. As we didn't have a urine collection container on the ward, Serratula asks the lab employee for a container. They tell her they don't have one and send her to the reception for lab patients. They tell her they don't

> have it, so she goes back to the lab. She explains that the lab reception sent her back and so they give her a small jam jar for the specimen. I ask Serratula about the use of a pre-used jar. She says that all the jars get sterilized and so they can be recycled. (Shift-3)

Nurses do phlebotomies and either take the samples to the lab themselves or request an AN to courier the samples. Nurses also collected urine samples and other samples according to doctor's orders. Technically, most of the nurses were easily able to withdraw blood. Only on one shift was a nurse observed to have difficulty obtaining a blood sample from an acutely ill patient. Nurses at the tertiary hospital tended to collect morning lab samples at the same time they did medication rounds. Nurses at the secondary hospital sometimes collected lab samples by asking patients to come to the treatment room instead of them going to each patient room. To collect urine samples, the nurse would tell patients when and how to collect a sample, giving them a container to urinate in. The patients brought the urine samples to the nursing post. The nurse put the samples into a basket that was later taken to the lab.

Wound and Drainage Tube Tasks

Nurses on medical & surgical wards were observed to provide treatment for various types of wounds, drainage tubes, and catheters (Table 10). In addition to the conditions mentioned in the table, nurses were responsible for regular assessment and cleansing of the areas around central venous and peripheral IV catheters.

Table 10. Wounds & Drainage Systems Observed on Medical and Surgical Wards

Wounds	Drainage Systems
• Surgical (clean, infected, dehisced) • Decubitus ulcers • Moisture-associated dermatitis • Oedematous limbs	• Surgical drains • Peritoneal drains • Suprapubic catheters • Urinary catheters • Chest tubes

On surgical and medical wards, most dressing changes were done in the treatment room rather than at a patient's bedside. Patients needing dressing changes

usually walked to the room by themselves or with the aid of a CA or AN. This made it easier for the nurse as she could stay in one room. It also afforded the patient greater privacy. On the surgical ward, the wound care nurse set up her supplies and equipment on a small table as described in the following observation:

> Clausia [the nurse] is setting up the trays. Clausia tells me that doing her job is frustrating when she knows she could have better supplies, such as single use instruments. For each patient she opens a sterilized kidney basin [that contains] one Kelly [forceps] and she opens up one package of gauze. But during the entire shift she has to use the one metal tray [on which she places her supplies], [one] plastic cup for the povidone-iodine, and one Kelly for dropping povidone-iodine soaked gauze pieces onto wounds. (Shift-9)

Nurses assessed the skin and cleaned and bandaged wounds and drainage sites. Nurses inserted, cleansed, and removed urinary catheters. They also cared for insertion sites and tubing such as venous and peritoneal catheters. In consultation with a medical doctor, nurses were observed removing surgical drains and central venous catheters. While nurses usually consulted with the doctor prior to removing a drain, there were times that the specialty nurse seemed to have the autonomy for deciding if a drain was ready to be removed.

From Monday-Friday during the day shift, the specialty nurse on the surgical ward did most of the care for patients' wounds, drains, and catheters. When the specialty nurse was not present, regular surgical ward nurses would assess, clean, and bandage wounds. As there was no specialty nurse on the medical floors, medical ward nurses performed care for wounds, drains, and catheters. When a patient had a stable, long-standing wound such as a decubitus ulcer, cleaning and dressing the wound was delegated to ANs.

Both medical and surgical wards had patients with urinary catheters. While nurses on both types of wards inserted catheters, it was not a task frequently done. On the ward with a specialty nurse, catheters were most often inserted by this nurse.

Inserting catheters required the nurse to be organized in selecting and preparing equipment and supplies as there were no single-use disposable catheter sets. During one shift, I observed a new nurse having trouble and taking longer with the process than more seasoned nurses. The head nurse informed me that it is her responsibility to ensure new nurses receive proper training and supervision when learning skills such as catheterization.

When patients are about to be discharged, the nurse doing the dressing change or removing a drain or catheter frequently gave basic advice to the patient. If follow-up was needed, the nurse told the patient where to come as an outpatient.

Transfer and Porter Tasks

Nurses and ANs, sometimes assisted by CAs and other patients, helped with moving patients between stretchers and beds. They also assisted patients in going to the ward's toilets, treatment room, and to appointments located in different areas of the hospital. Most transfers occurred on the surgical ward when patients returned to the ward from the OR. Pre-surgery, most patients were able to transfer to the stretcher on their own.

A challenge faced by nurses and ANs doing transfers between hospital beds and stretchers was that most of the beds and stretchers did not have the capacity to be easily raised and lowered. Assisted transfers usually took 2-3 people: one at the head, one at the feet, and one at the hips. Sometimes the AN or nurse stood on the patient's bed to better reach the sheets so that the patient could be lifted or lowered to the bed as observed at the tertiary hospital:

> We go to the post-op room where an AN has brought in a patient from surgery. The patient is wrapped in the duvet with their personal sheets that they would have gone up to surgery with. Due to the difference in height between the beds, the patient is slid to the [side] of the gurney [wheeled stretcher] and then lifted over the edge and 'eased/dropped' down to the height of the bed. (Shift-4)

Once a patient had been transferred, the nurse or AN checked that any attachments such as catheters, drains, or IVs were patent and appropriately placed, and that the bedsheets were straightened.

Either nurses or ANs would take patients on stretchers to and from the OR. As the OR was on a different floor than the ward, they had to take the elevator. There was an elevator designated for patients, but few visitors and staff observed this designation. As a result, nurses often waited until the elevator was sufficiently empty to fit the stretcher in. On occasion, the nurse took a patient on a stretcher to and from the emergency department; a task that could require a significant amount of time away from the ward. At one hospital, due to the grade of a ramp between two sections of the building, this process required a minimum of two people. As there were no porters, this meant that a doctor and nurse were usually needed to make the transfer and could be away from the ward for approximately 30 minutes.

Wheelchairs were used to transport patients from the ward to a medical or diagnostic appointment located in another part of the hospital, to transport patients from their wardroom to the ward toilet or shower room, or to sit a patient out of their bed so there could be a change of bedsheets. Patients were observed to manage most transfers on their own or with the guiding assistance of one person. However, some patients required significantly more assistance. There were no mechanical lifts on the wards, nor was there any assessment determining the type of transfers that were safe for patients and staff.

When patients had an appointment in a different part of the hospital, nurses or ANs would often accompany them to their appointment, even if the patients were able to walk on their own. If a patient had a CA, then sometimes the nurses would let the CA take the patient to the appointment. At the tertiary hospital, ANs most often took patients to appointments. On one shift I noted that it took 50 minutes from the time the AN went to take the patient to an appointment to the time they returned from the appointment.

Nurses at the secondary-level hospital were tasked to bring patients to appointments within the hospital as described below:

> Penny's first task seems to be finding patients and getting them to their specialist appointments. This means going to their rooms. Those independently able (or those with a CA) are told which floor and which room they need to go to. Penny accompanies those needing assistance or who are elderly. She tells me that it isn't right to make the elderly go on their own... But many patients are not in their rooms. So, my impression is that a lot of time is lost looking for patients on the ward or having to check with the specialists to see if the patient scheduled to meet with them has actually shown up. (Shift-16)

In addition to the challenge of finding patients, nurses at the district hospital sometimes searched for patients to take to appointments only to discover that the doctor had already seen them. Another challenge in the district hospital was that the one elevator was usually full of outpatients. Thus, nurses either took the stairs – sometimes with patients who were well enough to manage the stairs, or they had to get in the elevator when it was on the way down in order to secure space for the ride up to the floor where the consultation rooms were located.

Physical and Personal Care Tasks

Physical and personal care activities on observed medical and surgical wards was a shared task undertaken by RNs, ANs, and CAs. When there were ANs in the staffing mix, they did more personal care than did nurses. Although nurses helped with ADLs, most patients were able to mobilize independently and do their own personal care. Among patients that needed assistance, almost all of them had a CA who would stay with them 24 hours/day. The presence of CAs was usually very helpful to the work of the nurse as most CAs assisted with a patient's personal care and mobilization needs. However, this also meant that nurses seldom provided personal care and attention as reflected by one nurse:

> I asked one of the younger nurses (32yo) if what she does in nursing is what she thought it would be when she chose to become a nurse. She told me that it is very different. She says that a lot of what she

> thought nurses would do, especially provision of personal care to sick patients and giving advice is something they almost never do because they have so much other work to do. (Shift-16)

Although helping patients do activities that the patients would normally do on their own when healthy was not a significant part of nursing work, nurses still assisted when needed. Personal care activities that nurses were observed doing during field observations are noted in Table 11.

Table 11. Personal Care Activities

- Assisting with patient transfers
- Assisting with mobilisation (walking, wheelchair)
- Manually adjusting the height and angle of beds
- Positioning patients
- Skin care (massage, creams, footboard cushioning)
- Assisting with toileting (including giving enemas)
- Emptying urinary catheter bags
- Positioning urinary catheter bags (for mobilisation or bedrest)
- Obtaining and positioning basins for a patient to vomit in
- Bedmaking
- Transferring belongings when a patient is transferred to a different room
- Relocating patient beds as needed (e.g., out of cold drafts or direct sunlight)
- Errands (e.g., plugging in phones, retrieving items from bedside tables)
- Safety measures (e.g., tucking in hand cranks on beds)

Patient Teaching Tasks

Patient teaching or education that nurses engaged in was usually very brief. Some nurses were observed to do more patient teaching than other nurses. Patient education topics such as giving information on medications was noted on all field observation sites. In the tertiary hospital wards, the e-charts had a section on patient teaching that nurses were required to complete. Some nurses told me that doctors usually do the patient discharge teaching while others told me that neither the doctors nor nurses do much teaching.

On the surgical ward, nurses were observed to do both pre- and post-operative teaching, although there were no standardized checklists for teaching. Nurses told patients to abstain from eating or drinking prior to surgery, usually from midnight the day

before their scheduled operation. As some patients had surgery scheduled quite late in the day, nurses were supposed to change NPO timing as needed. Nurses told patients who had fingernail polish or jewellery that they were to be removed prior to surgery. Another component of pre-op instruction was providing information for those who were to have pre-op enemas. As patients had to buy their own enemas and related supplies, the nurse told them where they could be purchased. Nurses gave patients anticipatory guidance when giving enemas and told them how long they should wait before having a bowel movement.

Post-operative teaching was primarily about how to manage catheters and drains, and of the need for patients to drink lots of fluids and walk. If a patient had difficulty getting out of bed, the nurse would provide advice such as telling a patient to bend her knees and then grab hold of them to help her get up. I did not overhear any teaching on the importance of deep breathing, nor did I see other post-op recovery measures such as application of anti-embolism stockings. Discharge teaching was usually very brief, if it was done at all. It included instructions for how to care for wounds, where to return for outpatient appointments, and the need to drink lots of fluids, mobilize, and avoid getting chilled.

Health promotion teaching on most wards was minimal. On one medical ward, there was an expectation that nurses engage in health promotion teaching, specifically on diets. The following excerpt describes what one nurse understood as important for teaching:

> *We give them appropriate treatment advice. For instance, if they are just out of endoscopy, we advise them not to eat or drink solid or liquid hot food, and they have to consume primarily watery, liquid food for 7-21 days. If the patient suffered a haemorrhage, then we advise them not to get up abruptly. We have many patients whose blood vessels are thin and are at risk of haemorrhage. Therefore, we regularly give them relevant advice. Most advice & instructions are related to dietary instructions. We give advice relevant to the type of illness and treatments the patient has. (Nurse Latifa)*

Nurses did basic teaching for patients and their CAs about what was expected of them while in the hospital. Examples of topics I observed being taught to patients are identified in Table 12. I did not observe any teaching or modeling on safety practices such as the use of brakes or seatbelts on wheelchairs.

Table 12. Inpatient Teaching Topics

- Hand hygiene
- How to take one's own axilla temperature
- How to take one's own blood pressure
- How to give a urine sample
- How to record fluid intake and output
- The importance of keeping a urinary drainage bag off the floor
- How to position an absorbent pad under a patient
- How the pharmacy basket system works
- Foods and drinks that are acceptable and those that are harmful

Patient Communication Tasks

There were differences in the amount of communication that occurred on different shifts. My observations suggest that the frequency and extent of conversations seemed to depend on two things: workload and the personal character of a nurse. When workload was heavy, conversations were minimal. Talking also tended to decrease when the shift was closer to finishing – especially during nights.

Communication between nurses and patients occurred primarily during medication rounds. Most communication was on the topic of medications. Some nurses seemed to be more intentional than others with informing patients about their medications, treatments, and vital signs. Non-verbal communication included patient grimaces when receiving an injection, smiles, or silence.

Interactions between patients and nurses seldom included the use of personal names. Patients usually addressed nurses as 'nurse' and nurses usually managed to communicate with patients without using their names unless they were looking for a specific patient. Patients who were elderly were almost always referred to as 'grandfather' or 'grandmother' as is the cultural practice in Mongolia. All nurses

communicated in the official Mongolian language. However, there were times when communication was difficult because some patients from ethnic minorities only spoke and read their own language. Kazakh was the main minority language. In these situations, I observed that either the nurses went about their work in silence, or if the patient had a CA who could speak Mongolian, the nurse would converse with the CA.

Some patients and nurses would banter and tease each other. Occasionally there were confrontations that adversely affected the quality of the nurse-patient relationship. Nurses sometimes scolded patients, such as one young patient who would disconnect his own IV and eat whatever he wanted, despite instructions from the nurses. Another example was noted when a patient moved the pharmacy basket to the windowsill:

> When Maple went to get an IV bag for a patient, she had to take it from the pharmacy basket that had been placed beside an open window. She gently scolded the patient for putting the pharmacy box by the open window because it made the medication cold. She gave the IV bag to the patient to warm on [his] own skin. (Shift-18)

Patients and CAs often came to the nursing post to speak with the nurse. Most often communication was about medications, e.g., to notify the nurse that an IV had finished and needed to be disconnected or to clarify what medications had been prescribed and when they were to be given. Patients (or their CAs) also asked questions about how to use BP machines and they notified the nurse when they thought they might have a fever or elevated blood pressure, or when they had a headache. As nurses sitting at the nursing post were almost always working on charting or other types of documentation, they usually acknowledged the patients and told them they would respond once they had finished their current tasks.

According to field observations, ANs had more direct contact with patients and CAs than nurses and they frequently gave advice and information. ANs often asked questions and initiated conversations. At other times, patients or CAs asked ANs questions about medications or for directions about where a patient needed to go.

Cleaning Tasks

Nurses on both day and night shifts had various responsibilities for cleaning. In general, ANs did more cleaning than did RNs. RNs on night shifts were observed to spend more time doing cleaning functions than RNs on day shifts. This is possibly due to there being few or no housekeeping staff on the wards during night shifts. Cleaning responsibilities in this section are grouped into the type of cleaning job being undertaken.

Cleaning Medication Carts

Cleaning medication carts was a responsibility of ward nurses. At the tertiary hospital, night nurses usually cleaned and restocked the carts twice: at the beginning and end of their shift. Day shift nurses sometimes cleaned and restocked carts if the night nurses were running late. At the secondary hospital, nurses on both shifts were observed to clean their carts at the start and end of their shifts. On all wards, nurses used a wet cloth to wipe down medication carts. At the national hospital, disinfectant was used while at the district hospital, carts were cleaned with water and sometimes alcohol swabs. The following observation from the secondary hospital describes the process of a nurse cleaning carts primarily with supplies she kept in her locker:

> We go to the nurses' locker/break room. Penny gets some supplies. She tells me that if they leave the gloves out (box of gloves) then there will be none left by month's end. She says that she has worked here for many years and has a system worked out so she has everything ready for medication administration rounds. She says she buys her own [clear packing] tape for taping the sharps box (makes it more safe). She takes out 3 glass bottles with squirt dispensers: hand sanitizer, iodine, and alcohol. There is a metal jar with cotton swabs. We go to the medication administration room. She removes stickers from the jars and replaces them with new ones on which she has written today's date and refills the hand sanitizer. She gets out her cloth for wiping things down and a cleaning spray bottle. (Shift-16)

Based on a couple of timed field observations, the cleaning and restocking of a medication cart took an average of 10+ minutes per cart when all the supplies were readily available and there were no interruptions. On Ward A, nurses had to make their own sharp boxes from empty cardboard boxes as there were no official sharps boxes

available. When nurses were finished with a box, they taped it closed. On Wards B and C, official cardboard sharps' boxes were used. It is unclear if the reason for a lack of sharps' boxes on Ward A was because it was the end of the fiscal year and finances were low, or if it was because the hospitals only switched to official sharps' boxes in the new year. When official boxes were used, nurses still had to assemble them, with most nurses taping parts of them so that sharps were less likely to protrude or fall through gaps.

The task of cleaning medication carts took longer when nurses had to make their own sharps box, locate items such as rubbish bags or pump dispensers, or attend to something else mid-way through the task. As the cleaning of the carts takes place at or adjacent to the nursing post, nurses were often interrupted with various questions from patients or their CAs, doctors, and other nurses. The nurses were observed to respond to most questions without pausing from their cleaning activities. Unless urgent, nurses asked people to wait until the cart was cleaned and restocked before they would take on another task such as going to a patient's room, checking a chart, or running an errand.

Cleaning Medical Instruments, Basins & Bedpans

At the tertiary hospital, a nurse was tasked to go to the sterilization department to obtain a clean plastic biohazard box for the start of each day shift. During the shift, RNs rinsed used medical instruments and placed them in the biohazard box. Near the end of the shift, a nurse took the dirty instruments to the sterilization department for them to be cleaned and re-sterilized as observed on a weekday shift:

> *Clausia began to clean the treatment room in the same way she cleaned it this morning. She counted the dirty instruments, put them in the yellow biohazard box, and took the box to the sterilization unit. When she went to the window where dirty instruments are delivered, the nurse said something to her about not coming on time. Clausia said 'sorry'. Clausia told me that all supplies are supposed to be delivered between 2-3pm.* (Shift-8)

When there is no biohazard box, nurses will place used instruments on the surface where the biohazard box is usually kept. Once a clean biohazard box is brought onto the ward, the nurse or AN will transfer the items into the biohazard box.

As ANs are the most likely to assist patients with bathing and toileting, they are often the ones who will clean wash basins and rinse out bedpans. They will also instruct CAs how to use and clean bedpans.

Waste Disposal

Nurses were responsible for tying shut both hazardous and regular rubbish bags resulting from their work of administering medications, providing wound care, and any other medical treatments. On some wards, the nurses put rubbish bags in the corridor for housekeeping staff to collect and dispose. On other wards, the nurse was responsible to dispose of the rubbish as observed at the district hospital:

> [The nurse] tapes the safety box shut. She ties the tops of rubbish bags, weighs them, and tapes a piece of paper on which she has written the date, the weight of the bag and the name of the ward. She goes to a patient room to get IV tubing that had ran through. She tells me that she is supposed to get all finished supplies and dispose of them before day shift starts. She then takes the taped safety boxes and tied rubbish bags downstairs by going down the hall, down one flight of stairs, along the hall on the first floor, and leaving them outside the door of the waste disposal room. I noticed that she did not use gloves when carrying the biohazard bags.
>
> As the door is locked, she goes to the security desk to get the key. She returned to the waste disposal room and put the bags and boxes on the shelves in the room. She locks the room and returns the key to security. She then takes out a logbook at the security desk and writes down the number of bags and boxes that she put in the waste disposal room. (Shift-18)

Cleaning Rooms & Corridors

Nurses and ANs were expected to observe and take initiative in keeping the ward clean. ANs often assisted the housekeeper in cleaning rooms, including moving furniture between rooms as requested. Housekeeping services have primary responsibility for cleaning floors in patient rooms and the corridors. If a floor needs to be cleaned, the nurse will typically call the ward's housekeeper to wash the floor. At other times, if there

is an AN readily available, they will ask the AN to clean the floor, such as observed when one AN cleaned up after a patient who had a nosebleed. When neither are present, the nurse will clean the floor.

At the secondary-level district hospital, patients who had removed their own IVs sometimes left the IV tubing in the corridor adjacent to a wall for someone to retrieve and dispose. Nurses were usually the ones to do this, however sometimes there was a lag in time from when patients left the used IV paraphernalia in the hall until the nurses collected and disposed of them. This may have been the reason a ward doctor said that patients had complained that nurses were not picking up rubbish that had been left on the floor.

As noted in the previous chapter, nurses on all the wards were vigilant in ensuring that visitors did not dirty the floors and, according to standard protocol, nurses required visitors and CAs to change their footwear or wear shoe covers.

Cleaning Beds and Bedside Tables

Cleaning of beds and bedside tables was not a task that I observed nurses doing at the secondary hospital. However, at the tertiary hospital, cleaning of beds and bedside tables by ANs was conducted both on a regular basis and as needed, such as when a patient was discharged. One key informant told me that cleaning beds, bedside tables, and other areas on the ward, are tasks nursing students are often assigned to by nursing staff during student practicum placements. The cleaning of furniture in patient rooms as I observed it is described in the following excerpt:

> [One of the ANs] told me that she had arrived [early] at 0730 because she needed to finish cleaning (wiping down) the patient bed frames & bedside tables before physician rounds start. Patients or their CAs make their own beds. ANs help as needed or asked. ANs also wipe down the windowsills. Twice a week they lift up the mattresses and wipe the bed frame underneath. The cloth they use has been wet with water and disinfectant. The AN didn't rinse the cloth between patient beds but tended to do one room with the same cloth. The system for cleaning patient beds seems to be based on a schedule (e.g., a daily wipe down by the AN with the 2x weekly under-the-mattress cleaning). (Shift-7)

In the case of a patient who died, the AN sometimes moved the bed from the room into the hallway for cleaning. I was told this was culturally appropriate to distance the death of a patient from other patients who remained in the multi-bed room. Once the bed had been cleaned and some time elapsed, the bed was moved back into the room. If a new patient had no bedside table and one was available from a different room the ANs, and occasionally nurses, would wipe it down and carry it to where it was needed.

Hospital Inspections and Semi-Annual Cleaning

Hospitals had periodic inspections to assess a variety of areas, including the cleanliness of the ward. When the nursing staff was aware an inspection team was coming, they would be extra vigilant to ensure the ward was clean as noted below:

> We go to the head nurse's room. A nurse who will be working the day shift joined us. Maple was asked to go into each patient room to check how tidy it was, and to tell the patients to clean and tidy their rooms because the infection control team will be coming to inspect the ward today. (Shift-18)

In most public hospitals, there is a tradition of seasonal cleaning of the wards and nurses are required to participate. As I was not on the wards when this occurred, one nurse explained what seasonal cleaning entailed:

> *We clean windows once in the spring and in the fall. Just recently in May we cleaned our windows. In autumn, around end of September or October, we will clean and insulate windows. Also, there is an occasional spring cleaning – we clean everything except the floor. Spring cleaning takes place once in every 3 months…. We do the cleaning during regular work hours. We manage our time and somehow do it amongst the other tasks. We do it as and when the need arises, like now it's time to clean windows or clean rooms. Anyways, because these cleaning tasks are not frequent or occur occasionally, we somehow manage it.* (Nurse Latifa)

Mongolians also have a tradition of an annual environmental clean-up day in the springtime, after the snow has melted. Schools, workplaces, and special interest groups will pick up rubbish and tidy the surroundings. Hospital employees are expected to volunteer on the appointed day if they are not on duty in the hospital.

Laundry Tasks

Patients are responsible for bringing their own bedsheets and often their own pillow. Patients are therefore also responsible for the laundering of their own sheets. At the tertiary hospital, hospital linen was used in the post-op recovery room and only very occasionally when patients didn't have the means of purchasing it from the street vendors who often sold bedsheets, pyjamas, and other items outside the hospital entryway. Hospitals provided mattress covers and duvet inserts. Blankets were not observed as being provided.

At the tertiary hospital, RNs would get clean linen from the ward stock room to put on a bed or would strip hospital linen and put it in the ward laundry bag. However, it was the ANs who had primary responsibility for obtaining, removing, and returning hospital linens. ANs obtained linens from the hospital laundry services. They carried used linens down the ward corridor to put them in a large linen bag. Later they took the linen bag to the laundry. Other than the occasional use of gloves and a separate bag for linen that was for MRSA-positive patients, I did not observe any special receptacles or processes for transferring linens soiled by faeces or blood. The AN maintained a logbook of the linen count, as did the hospital's laundry. One of the ANs I shadowed told me that if linen was missing, the AN was responsible for the cost of replacement. The process of taking dirty linens to the laundry room and getting new supplies is described below:

> Pasque [the AN] takes the dirty linen from the bed to the dirty linen cart. Jasmine [the RN] tells her that there is more dirty linen in the treatment room. There is a notebook on top of the linen cart. We take the elevator to the first floor and go to the laundry. She removes the soiled sheets by hand. She counts as she loads each of them onto the laundry cart and writes the total in a notebook. She tells the laundry receptionist what the total count is [and the receptionist writes it in her logbook]. Pasque then goes to the clean section of the laundry room where ironing is being done. She asks for a list of items that is required for our ward. She looks for some of [the items]. She selects a mattress cover and some other linens. We then return to the ward. (Shift-12)

When a patient who was MRSA positive was discharged, the AN took the MRSA patient's hospital linens to a sterilizer in the laundry room, putting on a gown and gloves before picking it up to put it into the sterilizer.

Dietary Services Tasks

One of the roles of the RN was to write the list of diets prescribed by physicians and communicate this to dietary services. This was done by the night shift nurse. When a new patient was admitted during the day, the day nurses notified dietary services. Normally, someone from dietary services was responsible for bringing up the food cart and distributing food to patients. A typical meal included soup and tea which was served from a trolley that was pushed down the main corridor. Patients brought their own bowls and cups to be filled by the person serving the food. Responsibility for cleaning patient dishes resided with the patients themselves. At the national hospital, ANs distributed meals to patients on weekends. At the district hospital where there were only RNs staffing weekends, dietary services had one of their workers come to the ward to deliver food.

Nursing Roles

Nursing roles as defined in this research are descriptions that reflect the functions or purpose of the nurse. As such, they provide a concise way of communicating the work of nurses. Understanding one's own role and that of others contributes to social expectations that impact interactions and determines the types of activities in which one engages (Black et al 2019). Expectations for roles can vary in different cultures (Black et al 2019), therefore role descriptions and examples of tasks identified within that role help to provide clarity. The list of nursing roles in this research was compiled through a process of (1) reviewing raw data and asking the question 'What is the function or purpose of the nurse?' and (2) reviewing the descriptions of nursing tasks and identifying the purpose for which the task was undertaken.

The role descriptions of ward nurses on Mongolian medical-surgical wards resulting from this analysis are listed alphabetically in Table 13. Among the sixteen roles, two have sub-categories. The role of the nurse as a professional has a sub-category of 'Professional as Learner' and the role of the nurse as a clinical technician has eight sub-categories. The sub-categories of the clinical technician role are described in a separate table (Table 14). Cross-references indicate places in transcripts (fieldnotes and interviews) and within this thesis where descriptions are found that relate to the identified nursing role. These cross-references are not exhaustive but rather a sample of data collected.

Many of the tasks described earlier in this chapter fulfill more purposes than are contained within a single role. Thus, some of the same tasks are undertaken for a variety of different nursing roles. In keeping with the research objectives for this study, the focus was on identifying nursing roles and associated activities rather than determining the level of competence or appropriateness of nurses in carrying out these responsibilities. Details of what is entailed in each task can be found in the previous sections of this chapter.

Table 13. Nursing Roles

Nursing Role	Description	Tasks	Cross-references[9]
Accountant	The nurse calculates and reports expenses for patient medication and supplies that are sent to the accounts department. The nurse judiciously uses general ward supplies in order to keep hospital expenses to a minimum.	1. Calculates medication & supply expenses incurred by individual patients prior to discharge. 2. Sends in tallied expense totals to the accounts department for patient billing. 3. Keeps resource expenses to a minimum and uses cost-cutting measures as instructed and as appropriate.	Transcript Examples Shift 1; Shift2 @03:30; Shift 3 @09:13; Shift 9 @13:35; Shift 12 @11:06; Shift 18 @02:10; Int3 @18:35 Chapter References Ch4/Patient Wards/Resources and Supplies; Ch5/Discharge; Ch5/Medication Documentation/Figure 14; Ch5/Admin of Blood Products
Administrator	The nurse functions as the ward's receptionist. The nurse assembles, files, and updates charts with documentation such as lab results, consults, etc..	1. Assembles new patient charts, secures loose papers into charts e.g., diagnostic or lab printouts. 2. Records patient demographic & insurance information; stores patient documents. 3. Checks charts for new doctors' orders (medications, diets, diagnostics, consults). 4. Provides reception duties (orienting visitors, giving directions). 5. Answers phones.	Transcript Examples Shift2 @07:36; Shift 3 @09:13,14:09; Shift 4 @08:00,18:36; Shift 5 @12:19; Shift10 @14:00; Shift 13 @16:53; Shift 14 @21:10; Shift 15 @12:55; Shift17 @09:00; Shift 18 @07:20,19:00; Int 8 @10:28 Chapter References Ch4/Patient Wards/Nursing Workspaces; Ch4/Workload/Impact of New Technology;

[9] Locations within Field Notes ('Shift') and Interview ('Int') transcripts are identified either by the time entry recorded (e.g., @09:13 hours) or the heading from reflective notes (e.g., Research meeting). References from within the thesis are indicated by chapter and section, with a slash '/' between the sections and sub-sections in which they are located. If there are multiple references within a primary reference (e.g., Shift 1 or Ch5/Documentation), references are separated by commas. Primary reference sources are separated by a semi-colon. Cross-references in the table are a sampling rather than an exhaustive listing.

Nursing Role	Description	Tasks	Cross-references[9]
	The nurse manages ward stocks of supplies and equipment.	6. Finds charts or other documents for people. 7. Writes out or prints lab specimen labels. 8. Counts and records ward supply stocks and equipment. 9. Orders supplies for the ward (medication, equipment, linen, other supplies). 10. Processes disposal of items from a patient who has died. 11. Maintains records of rubbish bags and hazardous waste collected from nurses' medication rounds and treatment tasks.	Ch5/Admission; Ch5/Discharge; Ch5/Documentation Tasks: Patient Charts, Medication, Supplies; Ch5/Medication/Procurement of Medications; Ch5/Cleaning Tasks/Waste Disposal
Caregiver	The nurse assists the patient in activities that the patient is unable to do for themselves, caring for the patient as they would a cherished family member. *Note: Although part of caregiving includes non-direct care, those aspects are included in other nursing roles.*	1. Assists patient with ADLs. 2. Helps with bedmaking, straightening covers. 3. Assists with bowel & bladder care; administers enemas. 4. Prepares patient for appointments (e.g., ensures patient has voided, is wearing appropriate clothing). 5. Strives to care for patients with the same attitude as if caring for one's own family member.	Transcripts Shift2 @17:56; Shift3 @13:05; Shift4 @02:30; Shift6 @09:18; Shift12 @12:10,12:45,12:55,13:17; Shift16 @Impressions(1); Shift17 @Impressions-Nursing Responsibilities; Int3 @6:46,9:20; Int3 @01:07; Int4 @02:04,04:08; Int5 @25:08; Int6 @02:30,15:36; Int8 @41:58,59:30; Int9 @14:55 Chapter References Ch4/Socio-emotional Environment/Attitudes of Nurses Towards Patients; Ch4/Socio-Emotional Environment/Nursing as a Career Choice; Ch4/Visitors and Care Attendants; Ch5/Physical and Personal Care Tasks
Cleaner	The nurse does general cleaning to ensure a clean environment on the	1. Cleans medication carts/trolleys. 2. Tidies and dusts the nursing desk. 3. Cleans patient beds and side-tables (usually done by the AN).	Transcripts Shift 2 @06:48,17:11;18:58; Shift 4 @17:13; Shift 7 @08:07,10:09;12:07; Shift 8

Nursing Role	Description	Tasks	Cross-references[9]
	ward and in the community. *Note: This type of cleaning is different than cleaning a patient or using aseptic technique in treatment procedures.*	4. Rinses or washes bedpans, basins, and medical equipment. 5. Enforces visitor guidelines that promote cleanliness. 6. Disposes waste appropriately. 7. Cleans MRSA infected rooms with ultraviolet lighting. 8. Participates in designated intensive ward cleaning days (as scheduled and for inspections). Helps with seasonal weather-sealing of windows and doors. 9. Participates in civic environmental clean-up days.	@12:20,16:17; Shift 12 @09:50,10:30,12:10,13:55; Shift 13 @18:00; Shift17 @09:25,16:25; Shift 18 @02:20,07:20; Int 9 @40:37,41:30 Chapter References Ch5/Admission & Discharge/Discharge; Ch5/Documentation/Dates of Expiry; Ch5/Medication Tasks/Medication Cart; Ch5/Infection Control/Maintaining Clean Spaces; Ch5/Cleaning Tasks
Communicator	The nurse uses verbal and non-verbal communication for communication with nurses, doctors, patients, patient families, and senior managers.	1. Communicates with team members (e.g., what they plan to do, what they need, where they are going). 2. Communicates patient status to nurses during handover. 3. Checks and clarifies with doctors regarding patient status and treatment. 4. Listens & responds to patients and their CAs. 5. Conveys relevant information and instructions to patients (& CAs). 6. Monitors verbal and non-verbal communication patterns and attitudes.	Transcripts Shift2 @19:10,19:15; Shift10 @13:55; Shift3 @09:05,13:50; Shift 13 @23:26; Shift18 @21:00; Int2 @57:39; Int3 @03:41, 61:17; Int4 @46:31; Int5 @28:56; Int6 @0:24,07:22,13:54; Int8 @37:23; Int9 @21:53,33:06,34:17 Chapter References Ch4/Socio-Emotional Environment/Attitudes of Nurses Towards Other Nurses; Ch5/Documentation Tasks/Shift Summary Documentation; Ch5/Handover Task; Ch5/Patient Communication Tasks; Ch5/Medication Tasks/Medication Administration
Courier	The nurse carries, delivers, and transmits	1. Relays messages to other nurses, doctors, & patients. 2. Takes lab specimens to the laboratory.	Transcripts

Nursing Role	Description	Tasks	Cross-references[9]
	things or messages that are not their own.	3. Brings blood products from the blood bank to the ward. 4. Brings medications & supplies from pharmacy to the ward. 5. Distributes medication & supplies to each individual patient's bedside pharmacy basket. 6. Brings sterilized equipment and supplies from the sterilization department to the ward. 7. Returns contaminated equipment from the ward to the sterilization department. 8. Takes rubbish to the waste disposal room or other designated location. 9. Delivers hospital laundry to the ward and returns used laundry to the hospital's laundry services. (Usually ANs.)	Shift2 @21:40; Shift4 @01:12; Shift5 @12:40; Shift8 @08:50,14:45,16:17; Shift12 @11:40,12:05; Shift16 @08:40; Shift17 @13:47; Shift18 @07:20; Shift19 @13:50-15:15 Chapter References Ch4/Patient Wards/Nursing Workspaces; Ch5/Locating and Fetching Tasks; Ch4/Cleaning Tasks/Cleaning Medical Instruments; Ch5/Laundry Tasks; Ch5/Infection Control Tasks/Equipment and Disposal Containers; Ch5/Cleaning Tasks/Waste Disposal
Follower	Nurses follow doctors' orders, senior nurse directives, and hospital policies. Nurses are not expected in these situations to be creative or innovative. As a 'follower' the nurse does things according to how it is expected to be done.	1. Carries out doctors' orders (see also Team Member role). 2. Responds to doctors' requests/commands (e.g., takes vital signs or blood glucose; brings equipment to the ward such as ECG or Ultrasound). 3. Adopts best practices as taught to them by the nursing department and by physicians (e.g., labelling IVs with medication added, hanging 0.9% NaCl as a precaution when doing a blood transfusion, ensuring catheter bags are not touching the floor).	Transcripts Shift4 @00:27,01:30,02:15; Shift5 @08:35,12:05; Shift8 @13:15; Shift10 @14:30; Shift14 @20:07; Shift17 @08:30; Int1 @03:10-04:10; Int2 @40:44,43:30; Int4 @08:35,50:17, 68:00; Int6 @13:54,19:44; Int8 @02:45,06:13,41:58 Chapter References Ch4/Socio-emotional Environment/Attitudes of Nurses Towards Doctors, Attitudes of Doctors Towards Nurses
Helper	The nurse assists others as part of a	1. Listens to patients and responds appropriately to their needs.	Transcripts

Nursing Role	Description	Tasks	Cross-references[9]
	process to bring healing and help to patients in need.	2. Assists doctors with procedures. 3. Finds and brings charts to doctors or others as needed. 4. Helps with workload of other team members. 5. Provides helpful information, and creates a happy, friendly mood on the ward.	Shift4 @00:27,01:25; Shift6 @15:25; Shift8 @13:47; Shift9 @08:20; Shift10 @09:15,14:00,14:35; Int2 @64:34; Int4 @48:22,50:17 Chapter References Ch4/Socio-emotional Environment/Attitudes/ Nurses Towards Doctors, Nurses Towards Other Nurses, Nurses Towards Patients; Ch4/Socio-emotional Environment/Nursing as a Career Choice
Manager	The nurse organizes, monitors, and controls resources and tasks. Nurses problem-solve situations for best outcomes. Nurses manage their own stresses and situations arising from other people's emotional states.	1. Manages time efficiently. 2. Uses resources appropriately (gloves, bags, medication supplies). 3. Uses creative thinking in unplanned situations (e.g., when there is an electricity outage, when there is no hanger for catheter bags). 4. Assigns appropriate rooms to new patients. 5. Divides responsibilities among nursing team members (room & task assignments). 6. Plans and coordinates formal and informal nursing team events. 7. Manages personal stresses. 8. Manages anger directed towards them from colleagues (doctors, nurses) and patients.	Transcripts Shift12 @09:37; Int3 @15:03; Int4 @15:16,18:40,23:00,44:23; Int6 @10:51; Int8 @48:07; Int9 @29:45,38:21 Chapter References Ch4/Patient Wards/Resources and Supplies; Ch4/Patient Wards/Patient Rooms and Facilities; Ch4/Socio-Emotional Environment/Fear-Blame-Anger-Violence; Ch5/Documentation Tasks/Medication Documentation; Ch5/Medication Tasks/Medication Administration
Medications Coordinator	The nurse processes doctors' orders for prescribed medications,	1. Receives doctors' prescriptions and compiles a list of all medications and	Transcripts Shift2 @20:20,09:00; Shift4 @02:10, 07:35, 18:56, 19:32, 19:49, 19:54, 20:03; Shift5

Nursing Role	Description	Tasks	Cross-references[9]
	submits an order list, procures medications and related supplies, and distributes them to patients.	related supplies for the ward over a specific time-period. 2. Places orders and collects medication and supplies from the pharmacy. 3. Distributes medications and supplies to the patients' pharmacy baskets and to the ward's stock cabinets. 4. Provides patients with basic teaching about the medications.	@21:40; Shift 8 @14:45; Shift9 @12:30; Shift15 @14:02; Shift16 @10:21—11:37,1700; Shift19 @07:53 <u>Chapter References</u> Ch5/Documentation/Patient Charts, Medication Documentation, Obtaining Signatures, Supplies Documentation; Ch5/Medication Tasks/ Medication Administration, Procurement of Medications, Medication Distribution
Porter	The nurse transports patients from one place to another, usually off the ward. The role includes the process of transferring patients from beds to stretchers or wheelchairs.	1. Locates patients that need to be taken to a consult or procedure. 2. Brings patients to and from the doctor's medical consultation room or diagnostic testing room. 3. Brings patients to and from the OR. 4. Transfers patients from bed-to-stretcher and from bed-to-wheelchair and vice versa.	<u>Transcripts</u> Shift2 @07:15,18:16; Shift3 @13:05; Shift4 @04:18-04:45, 16:50,18:10,22:05; Shift7 @10:16; Shift16 @08:53,09:10; Shift17 @09:00,13:47; Shift18 @00:25 <u>Chapter References</u> Ch5/Transfer and Porter Tasks
Professional	The nurse maintains professional standards of appearance, continuing education requirements, research, and ethics for the purpose of meeting patient health needs.	1. Maintains a professional appearance. Is identified by a white nursing uniform. 2. Politely answers questions from patients and visitors. 3. Answers promptly when called. 4. Uses 'best practices' in all nursing care tasks. 5. Is disciplined in not allowing personal stresses to interfere with the quality of work being done.	<u>Transcripts</u> Shift2 @19:15; Int2 @32.45, 52.08; Int 3 @21:57, 24:45, 32:45, 36:28; Int4 @10:29, 61:18; Int6 @07:22,16:26; Int7 @13:16 <u>Chapter References</u> Ch4/Workload; Ch4/Socio-emotional Environment/Attitudes/ Nurses Towards Doctors, Nurses Towards Other Nurses; Ch5/Handover Task

Nursing Role	Description	Tasks	Cross-references[9]
		6. Continually updates knowledge and skills, including research knowledge. (see below)	
• Professional as Learner	The nurse regularly engages in formal and informal learning for the purpose of increasing nursing knowledge and skills.	1. Regularly takes nursing courses as part of fulfilling the continuing education requirements for maintaining RN registration and practice license. 2. Participates in orientation for new nurses. 3. Adopts new best practices. 4. Memorizes standard nursing procedures. 5. Regularly recertifies First Aid and CPR. 6. Participates in nursing in-services and the annual nursing research day. 7. Participates in research related to one's work.	Transcripts Shift5 @09:40,09:58; Shift7 @08:41,15:07; Shift8 @08:00,08:39,10:00-10:10; Shift17 @09:45; Shift18 @00:25,04:00; Annual Nurses Research Competition Meeting; Nurses Day Educational Meeting; Int2 @64:34; Int4 @11:53,59:30; Int8 @21:13,26:50; Chapter References Ch4/Patient Wards/Construction and Layout; Ch4/Socio-Emotional Environment
Recorder	The nurse documents the completion of nursing tasks, including assessments and treatments. The nurse ensures doctors' verbal orders are recorded appropriately.	1. Records all completed nursing tasks in the patient chart and handwritten logs. 2. Records Nursing Care Plans 3. Ensures patients sign a statement if refusing treatment or going off-ward and missing treatment. 4. Ensures doctors follow-up with written medication and lab orders after giving verbal orders (i.e., reminding doctors to write out orders).	Transcripts Shift2 @07:10,20:20,21:40; Shift 4 @03:40,18:36; Shift5 @08:50; Shift8 @09:12; Shift9 @10:38,12:50; Shift10 @13:10; Shift 15 @11:10,14:02; Shift 18 @07:20,19:00; Int2 @3:21; Int5:11:25,28:56; Int8 @43:48; Int9 @14:55,19:08 Chapter References Ch5/Documentation; Ch5/Medication Tasks; Ch5/Admission and Discharge Tasks; Ch5/Laboratory Tasks
Teacher	The nurse teaches patients and their CAs what is expected of	1. Provides patient orientation (e.g., how to record fluid intake & output, when to notify the nurse). 2. Gives information on medications (name and purpose).	Transcripts Shift3 @09:05; Shift4 @17:06; Shift5: 09:40; Shift15 @09:15; Int2 @53:28; Shift 3

Nursing Role	Description	Tasks	Cross-references[9]
	them during their hospital stay. The nurse provides health promotion and information teaching. Nurses with more experience help teach less experienced nurses.	3. Provides specialty teaching according to patient diagnosis and condition (e.g., wound care, catheter care, diet & nutrition, health promotion). 4. Provides discharge teaching. 5. More experienced nurses use formal or informal teaching to help new nurses and nursing students learn how to be a nurse.	@09:05,10:00; Shift15 @09:15; Int4 @05:48,08:39; Int9 @35:42,37:05 <u>Chapter References</u> Ch5/Patient Teaching; Ch5/Assessment/Fluid Balance; Ch5/Admission & Discharge/Discharge; Ch5/Documentation/Patient Charts/Fluid Balance Records; Ch5/Medication Tasks/Medication Administration; Ch5/Laboratory Tasks; Ch5/Wound and Drainage Tube Tasks
Team Member	The nurse is a member of a team and shares responsibilities by working together with nurses, doctors, and other hospital employees.	1. Is a member of the team in providing patient treatment (e.g., doctors assess & prescribe; nurses deliver treatment). 2. Reminds team members to complete unfinished tasks. 3. Shares workloads by helping others as needed. 4. Shares information: informing, notifying others; listening, learning from others. 5. Participates in joint rounds. 6. Participates in meetings & social events.	<u>Transcripts</u> Shift4 @02:00; Shift5 @08:35,08:57,09:15; Shift9 @08:20; Shift17 @09:00; Int3 @11:51; Int4 @33:24,40:01; Int8 @02:45; Int9 @29:45,30:39,33:06,38:21 <u>Chapter References</u> Ch4/Socio-Emotional Environment/Attitudes/Nurses Towards Other Nurses, Nurses Towards Doctors; Ch5/Medication Tasks/Medication Distribution; Ch5/Handover Tasks
Clinical Technician	The nurse uses professional knowledge and skills for completing patient-care tasks.	1. Administers medication. 2. Conducts assessments. 3. Collects specimens for analysis. 4. Cares for medical devices. 5. Provides wound & skin care. 6. Employs infection control procedures. 7. Uses computers & technology.	*Refer to Table 14 on the following page where descriptions of these 7 Technical tasks are provided in greater detail.*

Table 14. Roles of the Nurse as a Clinical Technician

Clinical Technician	Description	Tasks	Cross-References
Assessment & Monitoring	The nurse conducts patient assessments daily, on admission, on discharge, and as appropriate based on each patient's needs and treatment plan. Nurses monitor patients' health conditions. Nurses triage to determine which patients are highest risk and need close observation.	1. Monitors patients' health conditions and conducts a variety of assessments: • Physical assessment, vital signs, blood glucose • ECG (nurses take reading; doctors interpret results) • Targeted assessments: wound & skin integrity; catheters; IV sites; drainage tubes • Fluid balances • PRN assessments (e.g., patient complaint of fever, increased BP, blood in stool, headache) • Triage (determining which patients need the closest observation) 2. Documents findings from assessments. 3. Communicates assessment findings with doctors as requested or as needed. 4. Develops and evaluates nursing care plans.	Transcripts Shift2 @21:56; Shift9 @11:10,13:45; Shift10 @10:53; Shift15 @10:15; Int2 @9:49,12:39; Int4:02:04; Int5 @4:19,13:44; Int8 @46:48,48:07; Int9 @42:38 Chapter References Ch5/Assessment Tasks; Ch5/Admission and Discharge Tasks; Ch5/Medication Tasks/Medication Follow-up; Ch5/Wound and Drainage Tasks
Medication Administration	The nurse administers prescribed medication to patients.	1. Checks doctors' orders. 2. Clarifies with doctors when medication questions arise. 3. Administers injectable medications & blood products using proper processes and techniques. 4. Checks patients' pharmacy baskets to determine if patients have been taking oral medications as prescribed.	Transcripts Shift2 @22:00; Shift6 @09:50; Shift11 @08:50; Shift13 @1800; Int2 @9:49,15:03,52:55; Int3 @04:54; Int5 @20:24; Int6 @13:54; Int7 @18:52; Int8 @24:27,45:26; Chapter References Ch5/Documentation Tasks/Medication; Ch5/Medication Tasks/Medication

Clinical Technician	Description	Tasks	Cross-References
		5. Conducts follow-up assessments related to medication & treatments. 6. Disposes of medication & supplies appropriately. 7. Documents actions and maintains records.	Administration, Follow-Up, Administration of Blood Products
Use of Medical Devices	Nurses insert, assess, clean, and remove various medical devices as part of the patient's treatment plan.	1. Assesses, cleans, and removes surgical drains and tubes. 2. Inserts and removes peripheral IVs, and urinary catheters.	<u>Transcripts</u> Shift8 @09:12,10:00,10:20,10:45; Shift9 @09:05; Shift10 @09:15; Shift11 @09:35,10:00,15:15; Shift13 @23:55; <u>Chapter References</u> Ch5/Medication Tasks/Medication Administration; Ch5/Assessment/Catheters & Other Drainage Tubes; Ch5/Infection Control Tasks/Sterile-Clean Fields; Ch5/Wound and Drainage Tubes
Medical Procedures and Emergency Care	The nurse assists doctors with minor medical and surgical procedures conducted on the ward. The nurse provides emergency medical care.	1. Assists doctors with minor medical procedures. 2. Prepares patients for minor medical procedures. 3. Sets up room, including preparing instruments and equipment. 4. Assists with procedures as directed by the physician. 5. Cleans space and equipment following procedures conducted by physicians. 6. Performs CPR.	<u>Transcripts</u> Shift8 @13:47; Shift10 @09:15,14:35; Shift13 @17:47; Int2 @64:34; Int8 @24:27

Clinical Technician	Description	Tasks	Cross-References
Wound & Skin Care	Nurses assess skin integrity and decide if interventions are needed. Nurses clean and bandage wounds. Nurses consult with physicians when questions arise about wound treatment.	1. Assesses, cleans, and bandages wounds and reddened skin. 2. Prevents skin breakdown. -Teaches CAs skin care and how to turn a patient. -Ensures frequent turning of patients with limited mobility. 3. Consults with physicians as needed.	Transcripts Shift7 @11:15; Shift8 @09:35,09:51,10:45,11:24,11:55,14:05; Shift9 @09:05,09:45,09:55,10:27,13:20; Shift 18 @02:40 Chapter References Ch5/Assessment Tasks/Skin Integrity and Wound Assessment; Ch5/Wound and Drainage Tube Tasks
Specimen Collection	Nurses collect biological specimens (blood, urine, and other items such as insertable medical devices) that they send to the laboratory for analysis.	1. Obtains documentation required (doctor's order). 2. Chooses correct specimen containers. 3. Labels containers. 4. Obtains specimens (venepuncture, teaching patient how to collect urine). 5. Handles specimens correctly. 6. Delivers specimens to the lab for analysis.	Transcripts Shift2 @16:30,20:06; Shift3 @09:13; Shift10 @14:30; Shift13 @17:20,05:05,05:35,07:00; Shift18 @06:30,06:55,08:05 Chapter References Ch5/Laboratory Tasks; Ch5/Documentation/Diagnostics and Blood Products Documentation; Ch5/Locating & Fetching Tasks
Infection Control	Nurses employ infection control methods during individual nursing tasks, ensure the ward is adequately stocked with hand sanitizers (if available), use appropriate PPE (if	1. Appropriately uses aseptic and clean techniques for nursing tasks (e.g., IV administration, catheter insertion, wound cleaning). 2. Appropriately uses PPE (if available). 3. Keeps medication cart/trolley clean. 4. Appropriately disposes different classifications of waste and returns items requiring re-sterilization. 5. Stocks hand sanitizer.	Transcripts Shift2 @17:11;18:58; Shift4 @17:13,17:46,06:50; Shift5 @08:57; Shift8 @08:50,09:05,10:20,14:45,14:56,15:15,15:25, 15:55,16:17; Shift13 @05:35; Shift15 @Fieldnotes-Infection Prevention Chapter References

Clinical Technician	Description	Tasks	Cross-References
	available), and maintain proper hand hygiene.	6. Maintains documentation of sterilized supplies and dates of hand sanitizer refills. 7. Maintains proper hand hygiene.	Ch5/Infection Control Tasks; Ch5/Medication Tasks/Medication Administration; Ch5/Cleaning Tasks; Ch5/Documentation Tasks/Dates of Expiry
Computer & Technology Operator	Nurses use computers and hospital equipment for the purpose of fulfilling their nursing responsibilities. Nurses fix minor computer problems as they occur and request assistance as needed.	1. Problem-solves when computers aren't working properly. 2. Uses IV pumps and problem-solves as needed.	Transcripts Shift2 @18:35,19:27; Shift11 @09:35,09:53; Shift18 @1925

Summary

This chapter documented details about tasks, activities, and roles that are a part of nursing practice on Mongolian medical-surgical wards in Ulaanbaatar's public hospitals. Viewed together, knowledge about what Mongolian nurses do in their everyday work begins to emerge. These details help to answer the first research objective which was to describe the roles and work-related activities of nurses working in medical-surgical wards in Mongolian public hospitals.

Various types of nursing tasks and nursing roles identified in this chapter have also been identified in nursing practice in other countries. However, while terms such as nursing assessments or medication administration may be similar, it is in the details of what is done that we gain knowledge about what nursing practice on Mongolian medical-surgical wards entails and how it is carried out. This knowledge is useful in several ways. It can inform policymakers as to the reality of practice, thus giving them a knowledge base from which they can plan and allocate resources. It can inform nursing directors and hospital administrators as they seek to develop best practices in the hospital workplace. It can also be useful for guiding educators in what they teach, thereby facilitating a closer link between education and practice.

An overview of the tasks and roles detailed in this chapter suggests that a significant part of nurses' work focuses on the administrative and hands-on activities required for carrying out doctors' orders. Medication orders seemed to generate the greatest amount of work. Ward nurses began or ended their shift tallying costs of medications and supplies for patients who were to be discharged, they checked doctors' orders for medication changes, and they prepared for upcoming medication rounds. Nurses collated doctor's orders for medication and sent in orders to the pharmacy. Nurses picked up these orders from the pharmacy and distributed them on the ward. Medication rounds usually took between 1-2 hours, although depending on the shift, it

could take 3 or more hours. Nurses also followed-up after medications were given by removing finished IVs or blood products, charting medications given, and as appropriate, assessing the impact of medication on patients.

Nursing tasks were organised and divided among those on shift for the purpose of fulfilling certain functions. Ward nurses were assigned to patient rooms rather than to individual patients. Senior nurses were usually tasked with ordering and procuring medication for all patients. Sometimes a senior nurse was assigned to conduct and chart all the patient assessments. At other times, one nurse would prepare lists of all those needing lab tests, send in all the dietary codes to dietary services, and write out a list of medications that the night nurse needed to administer.

There were numerous times where nurses were observed to engage in friendly conversations with patients, usually during medication administration. Nurses expressed satisfaction when patients smiled or recovered enough to be discharged home. However, there was little evidence of interactions between the nurse and patient where the goal of the nurse was to develop an understanding of the patient for the purpose of tailoring nursing care to meet current or projected patient needs. In addition, the volume of patients assigned per nurse made it challenging for personalized care. The presence of CAs who could attend to their family members' needs may have further decreased the need for nurses to provide personalized patient care.

Nurses were aware of the need for cost-containment. This awareness resulted in actions such as re-using gloves and alcohol swabs, as well as finding ways to create items needed such as dispensers for iodine or a hanger for glass IV bottles. Knowing that patients had to carry the cost of prescribed medications and supplies may also have contributed to nursing decisions such as re-inserting an IV needle that had gone interstitial rather than re-starting with a new IV set. At times, pragmatism and cost-containment appeared to be the driver for nursing actions rather than best-practices in patient care.

Some of the nursing actions recorded in this chapter such as charting in advance of completing a task or charting something that wasn't done were acknowledged by Mongolian nurses to be poor practices. However, these practices existed, and various reasons were sometimes given or assumed for engaging in these actions, e.g., wanting to avoid overtime, avoiding potential negative consequences for not fulfilling expectations, or because the task was considered unnecessary or not of significance (e.g., deciding not to take admission vital signs because the doctor had already taken admission vital signs). My perception of the priority placed on completing work rather than aiming for best practices in patient care suggests an approach to nursing work that is task focused.

Nursing practice has been described as 'goal-oriented' with tasks undertaken by nurses contributing to the goal of facilitating patient health (Kim 2015). In professional nursing, tasks are not stand-alone activities, but are instead undertaken for specific purposes. These purposes (functions) shape the work of nurses. In this thesis, I have identified these functions as roles and provided descriptions of what these roles entail. The identification of nursing roles helps with understanding the purpose of the multitude of tasks undertaken by Mongolian ward nurses.

The numerous roles of the nurse that were identified in this research reflect the breadth of tasks which nurses were observed to undertake. Nurses on Mongolian medical-surgical wards have several roles that put them into direct contact with patients (e.g., technician, communicator, caregiver), however they also have many roles that can be considered supportive of ward functioning (e.g., administrator, cleaner, and courier). The various roles of nurses also reflect the degree of autonomy and nature of teamwork expected of Mongolian ward nurses. Nurses' actions were often in response to requests from doctors or senior nurses rather than generated from their own assessments and communication with patients. As the hospital staff on the wards were primarily nurses and doctors, nurses undertook many roles that could be done by non-nursing support

staff. The role of the nurse as a professional who engages with ongoing learning activities was observed in the regular assessment of nurses' knowledge of nursing practices and their participation in educational activities such as occurred during ward meetings and nursing research days.

Identification of nursing roles as observed in the actual practice setting helps with understanding what Mongolian nurses do. It provides a database that can be used for assessing the degree of similarity between current practice and official job descriptions. In addition, this data is useful for exploring similarities and differences between nursing practice on medical-surgical wards in Mongolian and other countries. The data presented in this chapter will be discussed further in Chapter 7 where it will be compared to both job descriptions for Mongolian medical and surgical ward nurses and to nursing practice in other countries as described in the following chapter (Chapter 6).

Chapter 6: Review of Literature on the Work of Nurses

Introduction

The purpose of this chapter is to explore published literature that describes the work of nurses. There are two major sections within this chapter: (1) an integrative literature review on the work of nurses and (2) an analysis of the Government of Mongolia's job descriptions for medical and surgical nurses. Relevant findings from these two reviews are discussed in Chapter 7 (Discussion) for the purpose of comparison with the findings on the roles and work activities of nurses from Mongolia that were summarized in Tables 13 and 14 (pp. 170-181).

The integrative review and analysis of job descriptions were conducted after the field observation and interview findings had been analyzed and summarized. There are varied opinions among researchers as to the value and influence of a comprehensive literature review conducted prior to or following qualitative data collection and analysis. Undertaking a literature review in advance of conducting research familiarizes the researcher with what is already known on the topic and helps identify knowledge gaps (Streubert and Carpenter 2011). However, Streubert and Caprenter (2011) caution that a literature review can also instill ideas that may bias the researcher's approach to data collection and analysis. Preliminary literature searches on the roles and work activities of medical-surgical ward nurses in Mongolia revealed a knowledge gap due to the paucity of published research on this topic. Therefore, I chose to complete the integrative literature review following analysis of field observations and interviews with the aims to (i) limit the influence of international research findings on the ethnographic research and, once the data was collected and analysed, (ii) to place the ethnographic findings within the context of what is known and published in the research literature.

Integrative Literature Review

Background to the Integrative Review

Hospitals are a major employer of nurses. Although research that provides comparative employment data among countries is not available because there is no systematic documentation for recording the types of facilities where nurses are hired, most nurses are assumed to work in acute care hospital settings (WHO 2020c). Some country-specific reports confirm this, for example a workforce study conducted in the USA showed that 55.7% of RNs are employed in hospitals (Smiley et al. 2018). In the UK, 63% of nurses work in acute care, including elderly care (Davies 2020). The WHO Regional Office for Europe reports that an average of 61.3 % of EU nurses work in hospitals, with a range among countries from 40.4% in Ireland to 100% in Austria and Greece (WHO Regional Office for Europe 2019). In Mongolia, 81.4% of all nurses are employed in Mongolian public service, with 66.5% of these nurses working in Mongolia's secondary and tertiary hospitals (WHO 2013).

Within hospitals, many acute care nurses work in general or specialty medical and surgical wards (Budden et al. 2013). Medical and surgical wards can be general in that there are a variety of specialties within a single ward, or they can be specific to a specialty such as cardiology or nephrology. A good understanding of what nurses do in hospitals and in medical and surgical specialties is important for the purpose of planning, policy development, and education.

The work of medical-surgical ward nurses has been described in a variety of ways including tasks, activities, workload, care, interventions, responsibilities, scope of practice, and roles. This suggests that the concept of 'nursing work' is challenging to define (Morris et al. 2007). A preliminary search of literature reviews on the work of medical-surgical ward nurses was undertaken prior to conducting this integrative review. There were few results for articles describing the general overview of ward nurses' roles and work responsibilities. Allen's (2004) literature review of ethnographic field studies as

published in books, book chapters, and journals on the general work of hospital and community nurses is one of the few examples of research providing an overview. Recent literature reviews on acute care nursing tend to cover a wide variety of specific practice issues. Examples of reviews on specific topics included nursing workload and staffing methodologies (Griffiths et al. 2020), the role of the nurse in bereavement care (Raymond, Lee et al. 2017), collaboration among different types of nurses in nursing teams (Moore et al. 2019), and advanced nursing roles (Hurlock-Chorostecki et al. 2014).

Nursing database systems such as NMDS (Nursing Minimum Data Set) and the ICN's International Classification on Nursing Practice (ICNP) can give insight into the work of nurses based on documentation of nursing diagnoses and interventions (Coenen 2003). While these are helpful for describing the direct patient care work undertaken by nurses, they omit other aspects of nursing such as meetings, administrative tasks, and continuing education. In addition, as these databases are comprehensive across all hospital and community nursing specialties, including the full database is not appropriate as there are many nursing diagnoses and interventions that do not apply to the unique role of the medical-surgical nurse.

Method

The purpose of this integrative review was to develop a broad overview of the work of medical-surgical nurses by describing the roles and activities that they engage in during working hours. Related questions such as the appropriateness or intensity of nursing work were not addressed in this review. The research question that guided this review was:

> *What are the roles and work activities of acute care nurses working in medical-surgical wards?*

Integrative reviews are appropriate when the goal is to summarize findings from the literature for the purpose of developing a more comprehensive understanding of a

topic (Whittemore and Knafl 2005). Integrative reviews incorporate a variety of research methodologies which allow for different perspectives and include research that is empirical or theory-based and qualitative, quantitative, or mixed-method (Whittemore and Knafl 2005, Grant and Booth 2009). As there were few reviews specific to the roles and activities of medical-surgical nurses, the integrative review gave scope to include a wider variety of articles which I hypothesized would contribute to a robust description of nursing roles and activities within that setting.

Search Terms and Strategy

Preliminary reading of research on this topic and exploration of both medical sub-headings (MeSH) and key-terms helped to identify search terms used in this review. An initial list of synonyms was developed based on how I had observed they were used in the literature (Appendix 23). Because no single term was fully synonymous with 'roles' or 'nursing activities', I decided to include a broad scope of synonyms to try and capture the range of ways that acute care nursing work is described in the literature.

Initial literature searches were conducted using the key search terms (1) roles, (2) tasks and/or activities, (3) scope of practice, and (4) Nursing Minimum Data Set. Work observation, including the method WOMBAT (Work Observation Method By Activity Timing) was added after reviewing research references that identified several studies using this methodology, but which had not shown up on initial searches. Ethnography as a search term was subsequently added to increase the potential catchment of qualitative research that provided a summary of nursing roles and/or responsibilities, but which had also been missed in searches of key terms. Preliminary searches using the terms 'nursing care' and 'fundamental nursing care' yielded such diverse results that these search terms were not included in this review. The word 'responsibilities' was not used as a search term as preliminary searches yielded very few relevant articles using this term.

A 'nursing activity' was defined in this review as an action that the nurse engages in during working hours, including personal breaks. The term is broad in scope and includes direct and indirect care, nursing interventions, and nursing and non-nursing tasks. Table 15 shows the breakdown of articles selected for this review according to database and search terms. The articles selected are cross-referenced in tables found in Appendix 24. The detailed record of the searches, including search phrases and limits, can be found in Appendix 25.

Table 15. Integrative Review Search Terms and Databases Yields

Search Terms	Scopus	PubMed	NAHD	Duplicate	Total N
ward or unit ethnography	1	0	1	1[a]	1
NMDS	4	2	1	0	7
role	5	0	1	0	6
scope of practice	5	1	2	2[b]	6
task or activity	1	7	1	0	9
work observation	3	1	1	1[c]	3

Notes re duplicates from Multiple Databases:
a. 1 duplicate article found in NAHD & Scopus
b. 2 duplicate articles: (i) 1 found in NAHD & Scopus; (ii) 1 from PubMed & Scopus
c. 1 duplicate articles found in all three databases

Inclusion and Exclusion Criteria

This review was limited to full-text, peer-reviewed research articles in the English language. Eligible articles were those published prior to the search date of June 2020. There was no limitation on dates of publication. Articles that contained tables, lists, or textual schematics with descriptions of nursing roles and/or activities were included. This purposeful selection of a subset of articles on nursing work as presented in data tables, lists, and schematics was to facilitate the goal of developing a composite description of nursing work.

As the understanding of 'who is a nurse' and 'what nurses do' vary among and sometimes within countries, it was important to establish a definition that guided the inclusion and exclusion criteria. *The term 'nurse' as used in this review was understood*

broadly to include any type of caregiver who provides care that falls under the responsibility of the nursing team. This definition considers that what one country might delegate to a caregiver who is not officially a nurse but who is under the authority of a qualified nurse, another country might delegate to a qualified nurse. The broad definition results in the ability to respectfully include research data from a variety of countries.

Only articles including acute care adult wards were selected, thus research that was conducted exclusively on pediatrics or maternal/newborn units were excluded. Also excluded were articles specific to critical care, psychiatry, geriatrics, or other acute care wards such as oncology that were located within hospitals and which did not indicate the inclusion of adult medical-surgical patients. If research had been conducted on a variety of hospital wards with inclusion of both medical-surgical and other wards such as pediatrics or psychiatry, these were accepted into the review as medical-surgical nursing was also included. As the focus of this review was on ward staff nurses for the purpose of comparing roles and work activities with Mongolia, articles describing other types of nursing roles such as advanced practice nursing, education, or management were excluded.

Data Evaluation and Extraction

Identification and preliminary screening of articles was done simultaneously according to (1) title and (2) the presence of a table or list of summarized findings, resulting in 156 articles, including duplicates. Eligibility was further assessed by reading each abstract and assessing it according to inclusion and exclusion criteria, resulting in 55 articles. The selected articles were then read in their entirety and details were entered into an Excel worksheet. Characteristics of the articles were extracted and entered under headings in the Excel worksheet that included: Purpose, Design, Sample, Data Collected, Analysis, Presence/Absence of a list or table for (a) tasks/activities and (b) roles, source of tables/lists, Countries, and Results. Reasons for inclusion or exclusion were also noted. Articles that did not meet the criteria or were duplicates were discarded,

resulting in a final inclusion of 32 articles (Appendix 26). The process for selection is illustrated in Figure 18.

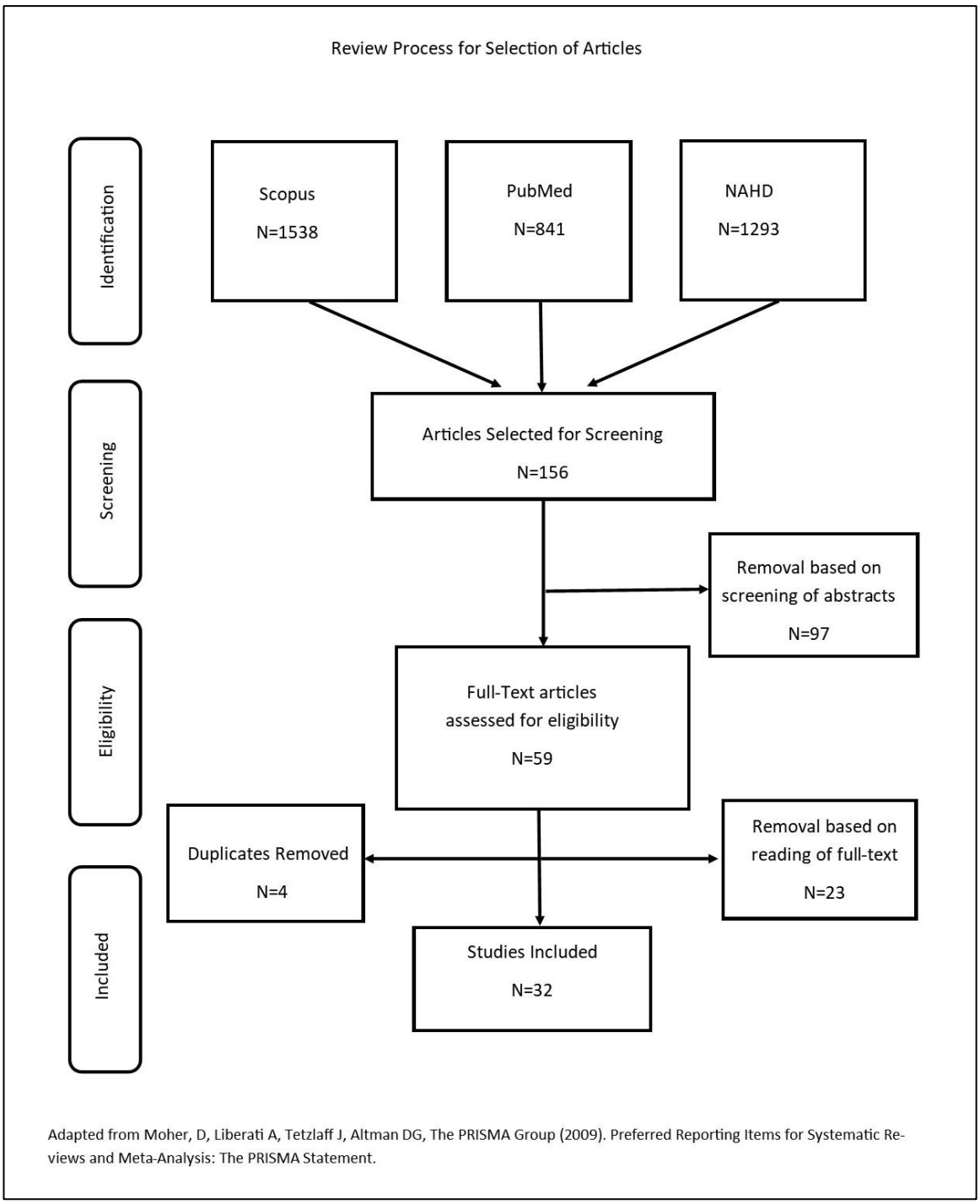


Figure 18. Integrative Review Article Selection Process

A methodological assessment of each article was not conducted as the source of the data to be extracted for analysis varied; for some articles, the lists of activities or roles were sections from tools used to collect data, while for other articles, the lists were

the primary research findings. Methodological assessment was therefore limited to the source of the data being extracted for this review. Apart from Simborg (1976), all the researchers provided details as to the source of the tables, lists, or figures that detailed nursing activities.

Nursing Activities: Data Extraction and Analysis

All 32 articles in this review had tables, lists, or figures with summarized text descriptions of ward nursing activities (Appendix 27). These provided a convenient and comparable format for extracting data for the purpose of synthesis. Descriptions of nursing activities were copied into an Excel Worksheet. When there was more than one descriptor in a single phrase or sentence, each distinct descriptor was separated and entered into its own cell in the Excel Worksheet. If the meaning of the descriptor was unclear, the text of the article was re-read for clarification purposes. To enhance reliability, the sources were entered alongside the descriptors thereby making it easy to identify from which research article it had been extracted.

A total of 888 descriptors were entered into the Excel Sheet. Descriptors were coded iteratively using constant-comparison techniques (Whittemore and Knafl 2005, Streubert and Carpenter 2011). A total of 48 categories were initially created. These were then re-grouped into broader categories and re-coded, resulting in 22 categories (Appendix 28). To stay true to the original data and intent of the authors, some categories were not fully mutually exclusive. For example, some authors considered patient dignity as a safety issue whereas others identified it as coming under psycho-social-emotional-spiritual care.

To develop a more abstract description of the 22 categories of nursing activities, the two categories containing vague descriptions were dropped and the remaining 20 categories were further analysed using a card-sort employing constant-comparison techniques (Streubert and Carpenter 2011). The question *'What is the purpose of the nursing activities described?* was posed for each of the activity descriptors to elicit a

clearer understanding of the overarching nursing role for which activities were undertaken. Descriptors of nursing activities (see Table 27, pp. 204-210) were printed onto separate pieces of paper. Each activity was grouped with similar activities and resulted in 3 broad functional descriptions for activities undertaken by acute care ward nurses.

Nursing Roles: Data Extraction and Analysis

Of the 32 articles in this review, only 12 included a list, table, or schematic identifying a role for nurses (Appendix 27). The original intent for the analysis of nursing roles was to describe the functional role or scope of practice of nurses. However, as authors frequently described nursing roles in terms of RNs, practical nurses, and nursing assistants, I decided to include job titles or qualifications as nursing roles. Therefore, a description was considered to be a role when either it was:

i. *a category or theme describing a nursing function (e.g., direct patient care, safeguarding, independent role) or*
ii. *a type of nurse assigned to specific functions or tasks (e.g., RN, Assistant)*.

These two types of data were conceptually dissimilar and not easily combined. I therefore decided to limit my exploration on nursing roles in this review to an identification of how roles were used in the selected articles.

Findings

Backgrounds for Research

The desire to understand variables that influence nursing goals for ensuring quality nursing care and promoting good patient outcomes was frequently identified as a rational for research in this review. Descriptions provided in the introductory section of the articles or in the abstract itself revealed that a common reason for conducting research was related to financial pressures in acute care settings. For some researchers, rationalization of the cost of nursing was discussed as it related to identification of

nursing tasks either completed or missed. Other researchers looked at changes in staffing introduced to compensate for nursing shortages or the cost of employing different types of nursing staff. For example, in many places there are now a variety of qualifications on nursing teams that can range from assistants to advanced practice nurses. Background reasons given for research are listed in Table 16. As many research articles included more than one reason, articles may be in more than one category of background context.

Table 16. Background Rationale for Research

Background Context	**N[1] (%)**	**References** (Alphabetical by First Author)
Cost of Nursing *(cost-cutting, efficiency)*	22 (43.1%)	Ball (2016), Briatte (2019), Butler (2006), Dochterman (2005), Farquharson (2013), Goossen (2000), Goossen (2001), Grosso (2019), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Lima (2020), Morris (2014), Park (2015), Ranegger (2015), Schluter (2011), Schubert (2008), Turtiainen (2000), van den Oetelaar, Westbrook (2009), Westbrook (2011)
Staffing Issues *(workload, staff-mix, satisfaction)*	16 (31.4%)	Al-Kandari (2009), Ball (2006), Bekker (2015), Briatte (2019), Chang (1998), Farquharson (2013) Grosso (2019), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Lee (2018), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), van den Oetelaar (2018)
Nursing Contribution *(visibility)*	7 (13.7%)	Asmirajanti (2019), Butler (2006), Goossen (2000), Goossen (2001), Morris (2014), Simborg (1976), Turtiainen (2000)
Changing Healthcare Context *(e.g., demographics, patient acuity, nursing work)*	3 (5.8%)	Park (2016), Ranegger (2014), Roche (2016)
Nursing Productivity *(impact of new technology)*	2 (3.9%)	Westbrook (2009), Westbrook (2011)
Value of Person-Centered Care	1 (1.9%)	van Belle (2020)

Notes:
1. N=number of articles according to rationale given for research. There were a total of (N=51) cited reasons among the 32 articles selected for the integrative review. Percentages reflect the portion of articles citing a particular background rationale.

Characteristics of Articles

Of the thirty-two articles, 19 (59.3%) reported use of quantitative methods, eight (25.0%) reported mixed methods, and five (15.7%) were qualitative as shown in Table 17.

Table 17. Research Design of Integrative Review Articles

Research Design	**N**	**%**	**References** (Alphabetical by First Author)
Quantitative	19	59.3	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Briatte (2019), Chang (1998), Dochterman (2005), Farquharson (2013), Goossen (2001), Jacob (2014), Lima (2020), Morris (2014), Roche (2016), Schubert (2008), Shuriquie (2008), Simborg (1976), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
Qualitative	5	15.7	Butler (2006), Grosso (2019), Kusi-Appiah (2019), Schluter (2011), van Belle (2020)
Mixed Methods	8	25.0	Goossen (2000), Jackson (2014), Lee (2018), Park (2015), Park (2016), Ranegger (2014), Ranegger (2015), Turtiainen (2000)

Nineteen different countries were represented in the selected research with just under half coming from Europe (n=14) (Table 18). The largest number of articles from any country was from Australia (n=5) (Jacob, McKenna and D'Amore. 2014, Roche et al. 2016, Schluter, Seaton and Chaboyer 2011, Westbrook and Ampt 2009, Westbrook, Duffield and Creswick 2011), followed by the Netherlands (n=4) (Goossen et al. 2000, Goossen et al 2001, van Belle et al. 2020, van den Oetelaar et al. 2020), and South Korea (n=3) (Lee and Yu 2018, Park and Lee 2015, Park et al. 2016). Countries with 2 articles included Austria (Ranegger, Hackl and Ammenwerth 2014, Ranegger, Renate, Hackl and Ammenwerth 2015), Ireland (Butler et al. 2006, Morris, Matthews and Scott 2014), Canada (Jackson, White et al. 2014, Kusi-Appiah et al. 2019), and the USA (Dochterman et al. 2005, Simborg 1976). Countries represented by one article were South Africa, Hong Kong, Indonesia, Brazil, Finland, France, Italy, Sweden, Switzerland, the UK, Jordon, and Kuwait (Appendix 26). Although this sample represents a variety of regions, the research literature is still dominated by 'Western' nations as Europe, North America, and Australia made up 23/32 articles (71.9%).

Table 18. Regional Allocation of Research Articles

Region	**N**	**%**	**References** (Alphabetical by First Author)
Europe	14	43.8	Ball (2016), Briatte (2019), Butler (2006), Farquharson (2013), Goossen (2000), Goossen (2001), Grosso (2019), Morris (2014), Ranegger (2014), Ranegger (2015), Schubert (2008), Turtiainen (2000), van Belle (2020), van den Oetelaar (2018)
Oceania	5	15.6	Jacob (2014), Roche (2016), Schluter (2011), Westbrook (2009), Westbrook (2011)
Asia	5	15.6	Asmirajanti (2019), Chang (1998), Lee (2018), Park (2015), Park (2016)
North America	4	12.5	Dochterman (2005), Jackson (2014), Kusi-Appiah (2019), Simborg (1976)
Middle East	2	6.3	Al-Kandari (2009), Shuriquie (2008)
Africa	1	3.1	Bekker (2015)
Latin America	1	3.1	Lima (2020)

The greatest number of articles meeting the inclusion criteria were published since 2015 (Table 19). It is possible that the higher numbers of recent publications on this topic is reflective of concerns about work activities and staffing that have been impacted by changing demographics or financial pressures within healthcare systems.

Table 19. Publication Dates of Research Articles

Year of Publication	**N**	**%**	**References** (Alphabetical by First Author)
2015-2020	14	43.7	Asmirajanti (2019), Ball (2016), Bekker (2015), Briatte (2019), Grosso (2019), Kusi-Appiah (2019), Lee (2018), Lima (2020), Park (2015), Park (2016), Ranegger (2015), Roche (2016), van den Oetelaar (2018), van Belle (2020)
2010-2014	7	21.9	Farquharson (2013), Jackson (2014), Jacob (2014), Morris (2014), Ranegger (2014), Schluter (2011), Westbrook (2011)
2005-2009	6	18.8	Al-Kandari (2009), Butler (2006), Dochterman (2005), Schubert (2008), Shuriquie (2008), Westbrook (2009)
2000-2004	3	9.4	Goossen (2000), Goossen (2001), Turtiainen (2000)
1995-1999	1	3.1	Chang (1998)
1990-1994	0	0	
1985-1989	0	0	
1980-1984	0	0	
1975-1979	1	3.1	Simborg (1976)

Nursing activities described in this review were inclusive of terms used within research articles such as nursing work, interventions, tasks, activities, care, and roles. The earliest article included in this review was published in 1976 (Simborg, 1976) at a

time when electronic health records (EHR) were first being piloted. The EHR has increasingly been adopted since then and has become a data source from which nursing work can be assessed. Four articles exclusively used EHR or patient records to identify nursing activities (Asmirajanti, Hamid and Hariyati 2019, Dochterman et al. 2005, Lee and Yu 2018, Ranegger, Hackl and Ammerwerth 2015), while an additional 4 studies used a combination of patient records and other methods, including interviews and dissertations (Chang, Lam, and Lam 1998, Goossen et al., 2001, Park and Lee 2015, Turtiainen et al. 2000). The remaining studies obtained at least some of their data from nurses – through self-report, interview, observation, or nursing experts (Table 20).

Table 20. Data Collection Methods Reported in Research Articles

Data Collection Methods	**N**	**%**	**References** (Alphabetical by First Author)
Multiple Methods *(records, interviews, observation, self-report, literature, survey, expert, consensus)*	11	34.4	Briatte (2019), Butler (2006), Chang (1998), Goossen (2000), Goossen (2001), Jackson (2014), Park (2015), Park (2016), Simborg (1976), Turtiainen (2000), Westbrook (2009)
Survey	8	25.0	Al-Kandari (2009), Ball (2016), Bekker (2015), Jacob (2014), Lima (2020), Roche (2016), Schubert (2008), Shuriquie (2008)
Patient Records	4	12.5	Asmirajanti (2019), Dochterman (2005), Lee (2018), Ranegger (2015)
Interview	4	12.5	Grosso (2019), Kusi-Appiah (2019), Ranegger (2014), Schluter (2011)
Observation	3	9.4	van Belle (2020), van den Oetelaar (2018), Westbrook (2011)
Self-Report (activities)	2	6.2	Farquharson (2013), Morris (2014)

All the studies conducted research in acute care hospitals with medical-surgical wards. Research specific to medical and surgical wards were reported in fourteen articles. Among the remaining 18 articles, either the hospital was noted as having medical and surgical wards or the hospital was identified as an acute care hospital (Table 21). As acute care hospitals are generally understood to have medical and surgical patients, they were included in this review.

Table 21. Research Settings of Integrative Review Articles

Research Setting	**N**	**%**	**References** (Alphabetical by First Author)
Medical wards	2	6.3	Jackson (2014), Simborg (1976)
Surgical wards	1	3.2	Van den Oetelaar (2018)
Separate Medical and Surgical wards	6	18.7	Ball (2016), Bekker (2015), Farquharson (2013), Morris (2014), Ranegger (2015), Schluter (2011)
Mixed medical & surgical	5	15.6	Al-Kandari (2009), Asmirajanti (2019), Roche (2016), Shuriquie (2008), Westbrook (2011)
Hospitals including medical & surgical wards	18	56.2	Briatte (2019), Butler (2006), Chang (1998), Dochterman (2005), Goossen (2000), Goossen (2001), Grosso (2019), Jacob (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Park (2015), Park (2016), Ranegger (2014), Schubert (2008), Turtiainen (2000), van Belle (2020), Westbrook (2009)

Twenty-four articles (75%) included nurses in their research sample. Nurses who were part of the research samples were usually described according to country-specific licensing, job titles, or educational programmes. Of the twenty-four articles which identified nurses as part of the research sample (Table 22), 11 revealed mixed nursing teams while one article from Korea (Lee and Yu 2018) noted that family members undertook care that nurses would otherwise provide. Mixed nursing teams is a description of contexts where there are a variety of qualifications among nursing care providers, e.g., registered nurses, practical nurses, assistants, and family care providers. In countries such as Canada (Jackson et al. 2014, Kusi-Appiah et al. 2019) and Australia (Jacob, McKenna and D'Amore 2014, Schluter, Seaton and Chaboyer 2011) where mixed teams are increasingly common, research describing the work of nurses was undertaken to help better understand the work of different types of caregivers.

Table 22. Research Samples with Ward Nurses

Research Samples	**N**	**%**	**References** (Alphabetical by First Author)
Mixed Nursing Teams *(may include family members if they perform nursing care tasks)*	12	50.0	Briatte (2019), Chang (1998), Jackson (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Roche (2016), Schluter (2011), Shuriquie (2008), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
RNs, Professional, General, or Staff Nurses *(may include managers)*	8	33.3	Al-Kandari (2009), Ball (2016), Bekker (2015), Butler (2006), Farquharson (2013), Grosso (2019), Jacob (2014), van Belle (2020)

Research Samples	**N**	**%**	**References** (Alphabetical by First Author)
Nurses *(Type of nursing designation not specified)*	4	16.6	Goossen (2001), Park (2016), Ranegger (2014), Schubert (2008)
Note: Only 24 articles (n=24) described their samples as including nurses. Percentages in this table reflect the proportion of types of nurses sampled as described in the 24 articles.			

Identification of nursing interventions, nursing tasks, and scope of practice were given as the purpose for research in 11 articles, some of which also explored relationships with additional variables, e.g., job satisfaction (Table 23). Other purposes for research included the development of nursing databases, measuring the frequency of nursing activities, time spent in various activities, and occurrences of missed care.

Table 23. Purposes for Research On Nursing Work

Purpose for Identifying Nursing Activities	**N**	**%**	**References** (Alphabetical by First Author)
Scope of Practice *(e.g., identification of tasks; job satisfaction related to tasks)*	11	33.3	Asmirajanti (2019), Bekker (2015), Grosso (2019), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Roche (2016), Schluter (2011), Shuriquie (2008), Simborg (1976), van Belle (2020)
Nursing Database Development	8	24.2	Butler (2006), Goossen (2000), Goossen (2001), Morris (2014), Park (2015), Ranegger (2014), Ranegger (2015), Turtiainen (2000)
Frequency of Nursing Activities	5	15.1	Chang (1998), Dochterman (2005), Farquharson (2013), Lee (2018), Park (2016)
Missed care	5	15.1	Al-Kandari (2009), Ball (2016), Bekker (2015), Lima (2020), Schubert (2008)
Time Spent in Activity	4	12.1	Briatte (2019), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
Note: The research purpose identified by Bekker et al (2015) included both identification of tasks and missed care, thus it has been allocated to 2 categories. All other articles are counted in only one category. Thus, total articles identified in this table is n=33.			

Nine studies (28% of all studies included in the review) tested tools or databases either for the purpose of refining how nursing interventions are recorded in patient charts (e.g., country-specific nursing database items) or for tracking nurses' activities (e.g., work sampling tools) (Table 24).

Table 24. Methodological Research Studies

Methodological Studies	N	References (Alphabetical by First Author)
Nursing Language Databases (e.g., NMDS)	8	Butler (2006), Goossen (2000), Goossen (2001), Morris (2014), Park (2015), Ranegger (2014), Ranegger (2015), Turtiainen (2000)
Time Observation	1	Westbrook (2009)

Nursing Activities

Nursing activities identified in the research articles were either outcomes from the research itself or they were determined from a pre-existing list. Twenty-four articles (75%) identified pre-determined lists that covered a wide range of nursing activities as identified through nursing interventions, workload assessment, work sampling, nursing competencies, and theory and expert opinion (Table 25). The most common source for pre-determined lists came from Nursing Intervention Classification (NIC) terminology. Although the purpose and methodology of development for each type of source for nursing activities was different, the commonality was the identification of what nurses do or are expected to do.

Table 25. Sources for Nursing Activity Lists

Source for Predetermined Lists of Nursing Activity Descriptors	**N** (n=24)	**References (**Alphabetical by First Author)
Australian Nursing Competencies	1	Jacob (2014)
BERNCA	2	Ball (2016), Schubert (2008)
Function Analysis Tool	1	Jackson (2014)
Hovenga's Activity Sampling	1	Chang (1998)
International Hospitals Outcome Consortium Tool	1	Al-Kandari (2009)
King's Nurse Performance Scale	1	Shuriquie (2008)
MISS-CARE	1	Lima (2020)
Nursing Intervention Classification (NIC)	7	Dochterman (2005), Goossen (2000), Goossen (2001), Morris (2014), Park (2015), Ranegger (2015), Turtiainen (2000)
NZi Workload Management	1	van den Oetelaar (2018)
RN4CAST	1	Bekker (2015)
SIIPS Nursing Intensity	1	Briatte (2019)
WOMBAT	2	Farquharson (2013), Westbrook (2011)
Other *(compilation from other research findings)*	4	Asmirajanti (2019), Roche (2016), Simborg (1976), Westbrook (2009)

The remaining eight studies (25%) included in this review had generated tables, lists, and diagrams of nursing activities and roles as a research outcome (Table 26).

Table 26. Identification of Nursing Activities as a Research Outcome

Source for Nursing Activity Descriptors	N	**References** (Alphabetical by First Author)
Research Outcome	8	Butler (2006), Grosso (2019), Kusi-Appiah (2019), Lee (2018), Park (2016), Ranegger (2014), Schluter (2011), van Belle (2020)

Extracted data items from the lists of nursing activities in each of the 32 articles were analysed using constant comparison. The question: 'What is the purpose of the nursing activity?' guided the analysis. The amount of detail for activity items varied; some were broad in definition, while others were very specific. For example, some authors stated that nurses provided oral hygiene while others simply noted that nurses performed Activities of Daily Living (ADL). In the initial analysis of listed work (Appendix 28), specific activities such as oral care were assigned into their own category. Subsequent analysis combined these specific items into broader categories. This resulted in a final list of 22 nursing activity areas (Table 27). These have been listed alphabetically and descriptions provided for each category to facilitate understanding of each nursing activity. The proportion of articles and countries per activity area was also analysed and can be found in the second part of Appendix 28.

The list of combined activities indicate that nurses regularly provided personal care such as feeding, dressing, toileting, and assistance with mobilization. In settings where nurses do a significant amount of personal care tasks, the level of patient dependency or acuity may be high as patients are not able to do these activities independently. However, apart from Ball et al. (2016) and Briatte et al. (2019), most authors did not provide descriptions of patient acuity levels.

Table 27. Description of Nursing Activities Identified from the Integrative Review

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
ADL (Activities of Daily Living)	Activities normally done by individuals when they are healthy. Includes wound prevention and care. *Note: Wound prevention and care was included in ADL as (i) wound prevention was often listed as part of skin care and (ii) prevention and wound care were often grouped together in descriptions of tasks.*	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Dochterman (2005), Farquharson (2013), Goossen (2000), Goossen (2001), Grosso (2019), Jackson (2014), Jacob (2014), Lee (2018), Lima (2020), Morris (2014), Park (2015), Park (2016), Ranegger (2014), Ranegger (2015), Roche (2016), Shuriquie (2008), Turtiainen (2000), van Belle (2020), van den Oetelaar (2018)
ADMINISTRATION	Tasks such as answering phones, arranging for tests & appointments, checking orders, placing orders (e.g., meals, supplies), clerical (e.g., filing), and coordinating services.	Al-Kandari (2009), Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Farquharson (2013), Grosso (2019), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Schluter (2011), Schubert (2008), Shuriquie (2008), Simborg (1976), Westbrook (2011)
ADMISSION & DISCHARGE	Tasks such as admission assessments, history taking, discharge planning and coordination, and discharge teaching. Does not include documentation.	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Chang (1998), Dochterman (2005), Jacob (2014), Lee (2018), Lima (2020), Park (2016), Roche (2016), Schubert (2008), Shuriquie (2008), Simborg (1976), Turtiainen (2000), van den Oetelaar (2018)
ASSESSMENT	Any assessment of patients during their hospitalization as distinct from admission & discharge assessments. Examples include vital signs, allergy & blood glucose checks, responding to call bells for assessment of needs, cultural and emotional assessments, mental	Al-Kandari (2009), Asmirajanti (2019), Butler (2006), Chang (1998), Dochterman (2005), Farquharson (2013), Goossen (2000), Goossen (2001), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Morris (2014),

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
	status, general appearance & physical checks, fall risk, pressure ulcers, weight, self-care ability, and pain assessments.	Park (2016), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), Turtiainen (2000), van Belle (2020), van den Oetelaar (2018)
COMMUNICATION: COLLEAGUES	Any verbal communication with colleagues including shift reports, meetings, conversations, and conflict management.	Briatte (2019), Butler (2006), Chang (1998), Farquharson (2013), Jacob (2014), Lee (2018), Park (2016), Shuriquie (2008), Simborg (1976), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
COMMUNICATION: PATIENTS	Any verbal communication with patients and their visitors that requires conversation. Examples include psycho-social support, answering questions, listening, orientation, and fear reduction. Formal patient teaching is not included.	Briatte (2019), Butler (2006), Chang (1998), Farquharson (2013), Goossen (2000), Goossen (2001), Jacob (2014), Morris (2014), Ranegger (2015), Schluter (2011), Schubert (2008), Shuriquie (2008), Simborg (1976), van Belle (2020), van den Oetelaar (2018)
DOCUMENTATION	Documentation on patient charts including records of admission & discharge, nursing care, medication, appointments & services, input/output, adverse incidents, and patient services. Does not include Nursing Care Plans.	Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Chang (1998), Farquharson (2013), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Morris (2014), Park (2016), Roche (2016), Schubert (2008), Shuriquie (2008), Simborg (1976), Westbrook (2009), Westbrook (2011)

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
HOUSEKEEPING	Tasks undertaken for the physical upkeep of the ward and its cleanliness. Includes bedmaking, moving furniture and equipment, cleaning rooms & equipment, gathering & returning equipment, handling linens, rubbish disposal, and supervision of cleaning.	Al-Kandari (2009), Ball (2016), Bekker (2015), Briatte (2019), Farquharson (2013), Grosso (2019), Jacob (2014), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), van den Oetelaar (2018)
LABORATORY	Tasks associated with the work of the medical laboratory including collection of samples for analysis, ordering & storing of lab supplies, and interpretation of lab results.	Ball (2016), Bekker (2015), Briatte (2019), Goossen (2000), Jacob (2014), Roche (2016), Shuriquie (2008), Turtiainen (2000), van den Oetelaar (2018)
MANAGEMENT	Management and coordination of activities for patient & nursing services. Includes staffing, bed management & patient flow, delegation, supervision, enforcing policies, setting priorities & managing resources, developing standards & criteria, coordinating multidisciplinary communication, coordinating with families, and organizing nursing care & planning.	Briatte (2019), Butler (2006), Chang (1998), Farquharson (2013), Jackson (2014), Jacob (2014), Kusi-Appiah (2019), Morris (2014), Park (2016), Ranegger (2015), Schluter (2011), Shuriquie (2008), Simborg (1976), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
MEDICATION	Tasks related to medication, including blood products, that require the nurse to administer, order, receive, store, prepare, control, check, clarify, and monitor. Includes routine and prn medications. Timeliness of administration as a task is also included. *Documentation on patient charts is included under nursing responsibilities for 'Documentation'.*	Al-Kandari (2009), Ball (2016), Bekker (2015), Briatte (2019), Chang (1998), Dochterman (2005), Farquharson (2013), Goossen (2000), Jackson (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Morris (2014), Park (2015), Park (2016), Ranegger (2014), Ranegger (2015), Roche (2016), Schluter (2011), Shuriquie (2008), Simborg (1976), Turtiainen (2000), van Belle (2020), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
MONITORING	Continuous or regular intermittent monitoring of patient status by direct patient observation and analysis of patient data as collected through observation, vital signs, or test results.	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Chang (1998), Farquharson (2013), Goossen (2000), Jackson (2014), Lima (2020), Morris (2014), Park (2016), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008)
NURSING CARE PLANS	The work of the nurse specific to the development of nursing care plans and their documentation including formulation of nursing diagnoses, planning, implementation, evaluation, and updates.	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Butler (2006), Chang (1998), Farquharson (2013), Goossen (2000), Jacob (2014), Morris (2014), Park (2016), Roche (2016), Shuriquie (2008), Simborg (1976)
PROFESSION	Activities considered to be characteristic of professions including knowledge & research, ethics, appearance & conduct, critical thinking & judgement, accountability, professional meetings, and self-care including breaks, socialization, and ergonomics.	Briatte (2019), Chang (1998), Farquharson (2013), Schubert (2008), Shuriquie (2008), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)
PSYCHO-SOCIO-SPIRITUAL CARE	Activities initiated to promote the pyscho-social-spiritual wellbeing of the patient. Included were listening, reassurance, empathy, comforting, presence, helping to cope, stress reduction, managing mood & anxiety, managing behavioural issues including substance abuse related issues, spiritual care, meaning of illness, and handling refusal of care requests.	Ball (2016), Bekker (2015), Butler (2006), Jacob (2014), Kusi-Appiah (2019), Lee (2018), Lima (2020), Morris (2014), Park (2016), Ranegger (2014), Roche (2016), Schubert (2008), Shuriquie (2008), Turtiainen (2000), van Belle (2020)
SAFETY	Activities that foster a physical and emotional climate of safety including infection prevention & control, handwashing, isolation measures, patient dignity,	Asmirajanti (2019), Briatte (2019), Butler (2006), Dochterman (2005), Farquharson (2013), Goossen (2000), Jackson (2014), Jacob (2014), Kusi-Appiah

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
	privacy, patient identification, risk prevention & management, fall prevention, and environmental safety.	(2019), Lima (2020), Morris (2014), Park (2015), Park (2016), Ranegger (2014), Ranegger (2015), Schluter (2011), Schubert (2008), Shuriquie (2008), Turtiainen (2000), van Belle (2020)
SPECIALTY CARE *(emergency, elimination, fluid balance, nutrition, respiration, pain management, & health promotion,)*	Activities related to specific foci of nursing care & interventions excluding medication, ADL, and psycho-socio-spiritual care. Each could be a category of their own but have been grouped together for the purpose of this research. *Emergency*: CPR & ALS, emergency response, disaster preparedness. *Elimination*: urinary & bowel care, enemas, suppositories, catheter insertion & removal. *Fluid Balance*: monitoring & restoration of fluids, management of fluids. *Nutrition*: meal ordering, delivery, preparation, & feeding; tube feeding; assessment re appropriateness of diet, nutrition management. *Respiration*: oxygen administration, administering BiPAP, tracheostomy suctioning & care, airway management, promotion of deep coughing & breathing, easing breathing problems. *Pain Management*: pharmacological & non-pharmacological pain management and control.	Al-Kandari (2009), Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Dochterman (2005), Farquharson (2013), Goossen (2000), Grosso (2019), Jacob (2014), Lima (2020), Morris (2014), Park (2015), Park (2016), Ranegger (2014), Ranegger (2015), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), Simborg (1976), Turtiainen (2000), van Belle (2020), van den Oetelaar (2018)

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
	Health Promotion (for inpatients): encouraging adherence to treatment, sleep assessment, exercise promotion & therapy, sexual & reproductive health.	
TEACHING	Teaching activities for (i) patients and families and (ii) staff and students. *Patients & Families*: assessing learning needs, giving of information & advice, medication teaching, teaching self-care, health promotion, guidance on health system. Note: *Discharge teaching is included under the nursing responsibility 'Admission & Discharge'.* *Staff & students*: preceptor for students, teaching skills, coaching, in-services, staff development.	Al-Kandari (2009), Asmirajanti (2019), Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Chang (1998), Dochterman (2005), Goossen (2000), Jackson (2014), Jacob (2014), Lee (2018), Lima (2020), Morris (2014), Park (2015), Park (2016), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), Simborg (1976), Turtiainen (2000), van den Oetelaar (2018)
TEAM	Activities related to the wellbeing and functioning of the nursing and inter-professional teams. Includes: emotional assessment, collaboration, liaison, leadership, supervision, task-shifting, helping & supporting one another, understanding roles.	Ball (2016), Bekker (2015), Briatte (2019), Chang (1998), Farquharson (2013), Goossen (2000), Jacob (2014), Kusi-Appiah (2019), Lima (2020), Morris (2014), Park (2016), Roche (2016), Schluter (2011), Schubert (2008), Shuriquie (2008), Simborg (1976), van den Oetelaar (2018)
TRANSPORT	Activities requiring the movement of the nurse between different areas. Includes: transit between tasks, errands, finding doctors, walking to different departments (pharmacy, lab, kitchen, supplies, administration), and transporting patients (OR, x-ray, smoking areas, mortuary).	Al-Kandari (2009), Ball (2016), Bekker (2015), Briatte (2019), Farquharson (2013), Goossen (2000), Jackson (2014), Jacob (2014), Roche (2016), Schluter (2011), Shuriquie (2008), van den Oetelaar (2018), Westbrook (2009), Westbrook (2011)

Nursing Responsibilities	Description of Activities	Cross-references to Articles (Alphabetical by First Author)
UNSPECIFIED CARE & TREATMENT	Activities identified as care or interventions but vague as to details (e.g., advocacy, alleviating side effects of treatment, care of tubes, routine care, palliative care, treatments & procedures, diagnostic procedures).	Ball (2016), Bekker (2015), Briatte (2019), Butler (2006), Chang (1998), Dochterman (2005), Goossen (2000), Jackson (2014), Jacob (2014), Morris (2014), Park (2016), Ranegger (2015), Shuriquie (2008), Turtiainen (2000)
OTHER	Activities identified as (i) Direct or Indirect Care but without details (ii) vague descriptions (e.g., other)	Chang (1998), Farquharson (2013), Kusi-Appiah (2019), Morris (2014), Ranegger (2014), Ranegger (2015), Simborg (1976), Westbrook (2009), Westbrook (2011)

Nursing Roles

Lists, tables, or schematics identifying nursing roles were found in 12 of the 32 articles (Appendix 27). Only three of these twelve studies were exclusively qualitative (Grosso et al. 2019, Kusi-Appiah et al. 2019, Roche et al. 2016). Of the remaining studies, one used mixed-methods (Jackson et al. 2014), and the remaining used quantitative measures, primarily collecting data through surveys or work observations. As noted in Table 28, roles were identified in articles from 7 countries. Five of these nations are considered high-income, western region nations and 10 out of the 12 articles (83.3%) describing roles were from these nations.

With the exception of the Ball et al. article (2016), all articles referred to the professional designation or job title of the nurse as a role. Examples of designations for nursing team members included: RN, Staff Nurses, Enrolled and Practical Nurses, Assistants in Nursing, Technicians, and Health Care Aides. However, the lack of consistency among and within countries as to professional designations, job titles, and education programs makes it challenging to analyse different nursing roles according to professional designations as presented in the research literature.

Role descriptions other than professional designations indicated the type of work the nurse engaged in. These included nursing and non-nursing roles (Grosso et al. 2019), categories or themes for the types of activities that nurses undertook (Kusi-Appiah et al. 2019, Jackson et al. 2014, Shuriquie, While and Fitzpatrick 2008, Schluter, Seaton and Chaboyer 2011), and the role of the nurse in providing direct care (Ball et al. 2016). Although the term ‘role’ was found in each of the articles, there were no theoretical definitions of the term ‘role’ and the term ‘role’ could be used in more than one way within a single article (i.e., authors identified roles according to both professional designation and types of activities).

Table 28. *Nursing Role Descriptions*

Nursing Roles Descriptions	Background to Research	Purpose of Research	Country	Reference (First Author)
• Professional classification	• Financial (cost-cutting) • Staffing (shortages, staff-mix)	Identify role expectations for new diploma and degree nurses.	Australia	Jacob (2014)
• Professional classification	• Staffing (shortages, staff-mix) • Changing Healthcare Context (increased patient acuity)	Identify tasks performed, delayed, or not completed.	Australia	Roche (2016)
• Professional classification • Role Dimensions (Themes)	• Staffing (shortages, staff-mix)	Describe the nursing role and scope of practice according to nursing classification.	Australia	Schluter (2011)
• Professional classification	• Financial (efficiency) • Nursing productivity (time)	Test a workplace activity observation tool.	Australia	Westbrook (2009)
• Professional classification	• Financial (efficiency) • Nursing productivity (time)	Identify changing patterns of how nurses spend their time across tasks.	Australia	Westbrook (2011)
• Professional classification	• Staffing (resources & communication) • Financial (resources)	Describe prevalence and reasons for missed care.	Brazil	Lima (2020)
• Professional classification • Role Accountabilities	• Financial (cost-cutting) • Staffing issues (shortages) • Quality of Care	Evaluate a job redesign as to nurses' role accountabilities and patient outcomes.	Canada	Jackson (2014)
• Professional classification • Activity Clusters	• Financial (cost-cutting) • Staffing (staff-mix)	Describe how nursing team members perceive each other's roles.	Canada	Kusi-Appiah (2019)
• Professional classification & educational program • Nursing vs. Non-nursing role	• Financial (cost-cutting) • Staffing (staff-mix)	Describe non-nursing tasks.	Italy	Grosso (2019)
• Professional classification • Role Attribution (Activity)	• Staffing (shortages, lack of regulation)	Describe nurses' own perception of the nursing role.	Jordon	Shuriquie (2008)
• Professional classification	• Financial (optimizing resources) • Staffing (ratios)	Describe how nurses spend their days and identify differences between wards.	Netherlands	Van den Oetelaar (2018)

Nursing Roles Descriptions	Background to Research	Purpose of Research	Country	Reference (First Author)
• Degree of direct care responsibilities	• Staffing (RN staffing levels)	Identify factors associated with undone care.	Sweden	Ball (2016)

Discussion

The purpose for this integrative review was to develop an overview of the type and range of activities that medical-surgical ward nurses engage in during nursing shifts. As the focus was on identifying nursing work, variations as to expectations, staffing mix, and workload, were not considered in this review. Thus, the activities described in Table 27 (pp. 204-210) are a composite of all activities from the 32 articles and may not be representative of the practices within any single hospital.

Data extraction was facilitated by selecting only research articles that displayed lists, tables, or schematics with descriptions of nursing activities or roles. This resulted in a subset of articles on the roles and responsibilities of nurses as presented in journals. Although not comprehensive, it provides a window into the work of medical-surgical nurses from an international perspective. Inclusion of research using a variety of methods for assessing nursing activities further strengthens the findings from this integrative review.

Contexts for Research on Nursing Work

An exploration of the rationale for research as described by authors in the background section of the articles revealed that fiscal restraint was a common issue. Research on the impact of fiscal restraint on nursing was approached in different ways. Early research, such as done by Simborg (1976), sought to make nursing work visible through patient records, thereby providing rationale for the expense of nursing services. This research took place at the time computers were being introduced into hospital settings and electronic nursing databases were being developed. In this review, four of the five earliest published articles focused on nursing language databases (Simborg 1976, Goossen et al. 2000, Goossen et al. 2001, Turtiainen et al. 2000). More recent published methodological research on nursing databases (Park and Lee 2015, Ranegger, Hackl and Ammerwerth 2014, Morris, Matthews and Scott 2014) may be reflective of the development of nursing as a profession within these countries either

through the use of nursing databases in electronic health records, or a refinement of the databases to reflect changing healthcare needs or unique cultural characteristics (e.g., increased patient acuity and age, role of family).

In the late 1990s O'Brien-Pallas et al. (1997) identified staffing levels as one of the contributing factors that impacted nursing workload and patient outcomes. Reference to staffing levels was often cited in the articles included in this review. Articles with research backgrounds citing staffing issues (Table 16, p. 196) aimed to describe what nurses do, quantify time spent with patients, identify nursing tasks left undone, describe nursing interventions and patient outcomes, or explore nurses' job satisfaction. Of the sixteen articles citing staffing as a background issue half (n=8) were published since 2015 (Table 16) and nine reported a mix of nursing qualifications among the sampled nurses (as cross-referenced to Table 22). This suggests that staffing issues related to staff-mix is a more recent factor being explored as to its impact on the work of nurses.

Qualitative Research on Nursing Work Activities

Few qualitative studies met the inclusion criteria. During the screening process, several qualitative studies seemed to have rich descriptions of nursing work but were excluded because the findings were not presented in a table, list, or schematic. Details of nursing work and roles presented in qualitative studies usually required data extraction from the text using content analysis techniques. This may suggest a reluctance by qualitative researchers to reduce their research to text that fits into a table or list with a potential loss of context or voice. This predominant presentation style on descriptions within the text in qualitative research articles may unintentionally contribute to a readership that has a high degree of English fluency, including the ability to understand the context in which the research occurred.

Tools Used to Identify Nursing Activities

The majority of studies with descriptions of tasks, responsibilities, or activities used quantitative analyses. Among the quantitative design studies, there was no

comprehensive identification of every work activity as summarized in tables, lists, or schematics. Tables that identified nursing work based on a NMDS often included Nursing Intervention Classification (NIC) items from patient health records. However, as a complete NMDS contains more items than can be included in one research article, only partial descriptions were provided such as those with a sample of NMDS interventions (Goossen et al. 2000) or tables showing the frequency that interventions were used (Park and Lee 2015). The original NMDS was developed in the USA and some of the articles in this review focused on testing its relevance in a different culture. Minor differences were sometimes noted which reflect the varied contexts and responsibilities of nurses working in different countries.

It is important to note that studies focusing on NMDS or nursing interventions do not include nursing work such as documentation, preparation of medications, and meetings. Thus, using a NMDS to determine the work of the nurse only partially covers what nurses do. However, using an NMDS to determine which nursing interventions are most and least common can give insight into nurses' direct care activities as well as country-specific trends related to demographics, changes in the frequencies of nursing interventions over time, or changes in the level of care provider carrying out nursing care.

In addition to NMDSs there were other tools used to describe the work of nurses. Each tool comes with their own assumptions and strengths and limitations. For example, research on 'missed care' focuses on patient care that is either omitted or delayed (Kalisch 2006). As the focus is on patient care activities, non-patient care aspects of nursing work may not always be included. Although the MISSCARE tool is well tested, the fact that it is usually adapted to different countries supports the hypothesis that nursing work has both similarities and differences among countries.

Nursing Roles

There were 12 articles that included some aspect of role description (Table 28, pp. 212-213). Eleven of these included descriptions of nursing teams that had more than

one type of nursing qualification represented. This suggests that clarification of roles may be of greater interest for mixed teams than when the nursing team is homogenous. When mixed teams are present, understanding each other's roles and responsibilities is important for good team functioning (Eagar et al. 2010, Jackson et al. 2014).

The lists and tables in the selected articles used a variety of ways for describing the role of nurses, including professional designation, function, educational level, and theoretical descriptions. In the text or tables of the article, authors sometimes referred to nursing roles in more than one way. In one article, under the theme of 'perceptions of own role', those who had an RN role (professional designation) also identified 4 key groupings of tasks (functional roles) (Kusi-Appiah et al. 2019). Use of theory to describe nursing roles was employed by Jackson et al. (2014) who used the Nursing Role Effectiveness Model to organize their findings on nursing roles and by Ball et al. (2016) who described the roles of the nurse according to direct or indirect care.

Given the variety of ways that the nursing role was conceived among research articles included in this review, it was not possible to conduct a synthesis of roles with the same methodology used to synthesize findings on nursing activities. Factors contributing to this included (i) the nature of a role description which tends to be socially constructed and (ii) the variation among countries as to the education, job titles, and scope of practice for nurses. For future research, limiting search parameters to either professional designation, function, or theory may help provide greater consistency with finding research suitable for a systematic review.

There was no indication of a term or phrase that was universal for capturing what nurses do. In this review, a variety of terms were used, and the results yielded relatively similar counts of articles selected (Table 15, p. 191). Despite efforts over the years to describe the work of nursing, the lack of consistent terminology persists. As most nurses engage in a wide variety of activities, often doing what needs to be done to keep wards functioning and patient care happening, use of 'nursing care' as a term is insufficient to

cover the breadth of nursing work. The lack of consistent terminology makes it difficult to conduct searches on this topic as it requires a broad search strategy to encompass all the work done by nurses.

Nursing Activities

According to the summary of findings from the articles in this review (Table 27, pp. 204-210) nurses engage in a variety of work that includes patient care activities, tasks aimed to support the ideal functioning of the ward, and professional activities. Nurses are responsible for patient care activities carried out directly with the patient such as assisting with ADLs, patient assessment and monitoring, a variety of nursing procedures and treatments, medication administration, psycho-socio-emotional-spiritual care, and health promotion and teaching. In two articles, the importance of direct care was discussed as to the value it holds for nurses (Farquharson et al. 2013, Kusi-Appiah et al. 2019). Direct care is an important part of nursing because it helps with the monitoring of patients and it gives opportunity to tangibly demonstrate caring, an activity which many nurses feel is a valued part of their identity as a nurse (Kalisch 2006).

Nursing activities related to patient care but conducted away from the bedside are often classified as indirect care activities, although some take a broader view of indirect care as including activities not directly related to patient care (Myny et al. 2011). Regardless of which definition one uses for indirect care, there are a significant number of indirect activities undertaken by nurses. Examples from the findings of this integrative review for what could be described as indirect care are noted in Table 29.

Table 29. Indirect Nursing Care Activities

Indirect Care Activities Directly Liked to Individual Patients	Indirect Care Activities Not Directly Linked to Individual Patients
• Charting • Nursing Care plans • Reviewing of test results • Reviewing of doctors' orders • Discharge planning	• Obtaining and delivering items from the laboratory or other departments • Housekeeping duties • Management and care of equipment • Ordering of supplies • Clerical work • Time walking between patients or tasks

Ward nurses are also expected to engage in professional activities such as continuing education, research, and participation in meetings. Nurses on mixed nursing teams are increasingly involved in coordination of patient care, including ensuring the physical and emotional safety of patients, and the supervision of nursing team members.

Dichotomies such as direct & indirect care and nursing & non-nursing tasks have been used in nursing literature to try and capture the breadth of what nurses do, however some activities are not well-described by use of a dichotomous description (van den Oetelaar et al. 2018). A common understanding of what fits into each category is not always clear as noted by Kusi-Appiah et al. (2019) who observed that terms such as direct and indirect care have been used inconsistently within the nursing literature.

Inconsistencies with nursing and non-nursing task categories have also been noted. A non-nursing task has been described as either not requiring professional nursing skills, not related to direct patient care, or below the nursing scope of practice (Al-Kandari and Thomas 2009, Bekker et al. 2015). One of the weaknesses of designating tasks as nursing and non-nursing is that what some countries consider to be a nursing task might not be considered a nursing task in other countries. Arranging discharge referrals and transport was described by Bekker et al. (2015) as a non-nursing task, while Butler et al. (2006) described it as an indirect intervention, and Roche et al. (2016) described it in terms of a task that was either performed, delayed, or not completed. Spiritual care is another example of a task that in some countries may be provided by nurses, while in other countries where there is legal separation of religion and state, it is not recognized as a patient need in public hospitals. Thus, such a dichotomy may be more useful within an institution or country rather than internationally.

To describe what nursing work is, Morris et al. (2007) created a model from the ICN's definition of nursing. The model consists of three overlapping circles: direct care, indirect care, and non-patient care nursing activities. The model avoids the challenge of developing lists of nursing and non-nursing tasks which may not be universal in their

conception or application and simply identifies all activities the nurse undertakes as ‘nursing work’. However, limitations of this model include (1) the use of the terms direct and indirect nursing care, the latter of which is still sometimes unclear as to what it comprises, and (2) a lack of cohesiveness in understanding how all the nursing activities meaningfully fit together, especially as it relates to the most common definition of nursing which focuses on the care of individuals, families, and communities (International Council of Nurses 2002).

Conceptual Model of Acute Care Nursing Work

Based on analysis of nursing work activities extracted from this literature review, I have developed a conceptual model of the work of acute care ward nurses that gives a visual representation of the purposes for which nursing activities are undertaken. Like the model developed by Morris et al (2007), the Model of Acute Care Nursing Work includes overlapping areas for nursing activities that fulfil multiple purposes. The shift away from descriptors of nursing work and activities solely by location (e.g., direct care) and judgement as to what is nursing or non-nursing tasks is important as the profession seeks to define meaningful and relevant work for all its members. Patient care, ward functioning, and professionalism were identified as the three main purposes for which nursing activities were undertaken (Figure 19). The allocation of activities according to function is shown in Table 30. An explanation of the process of allocation into each category and the individual totals for each nursing activity category are found in Appendix 29.

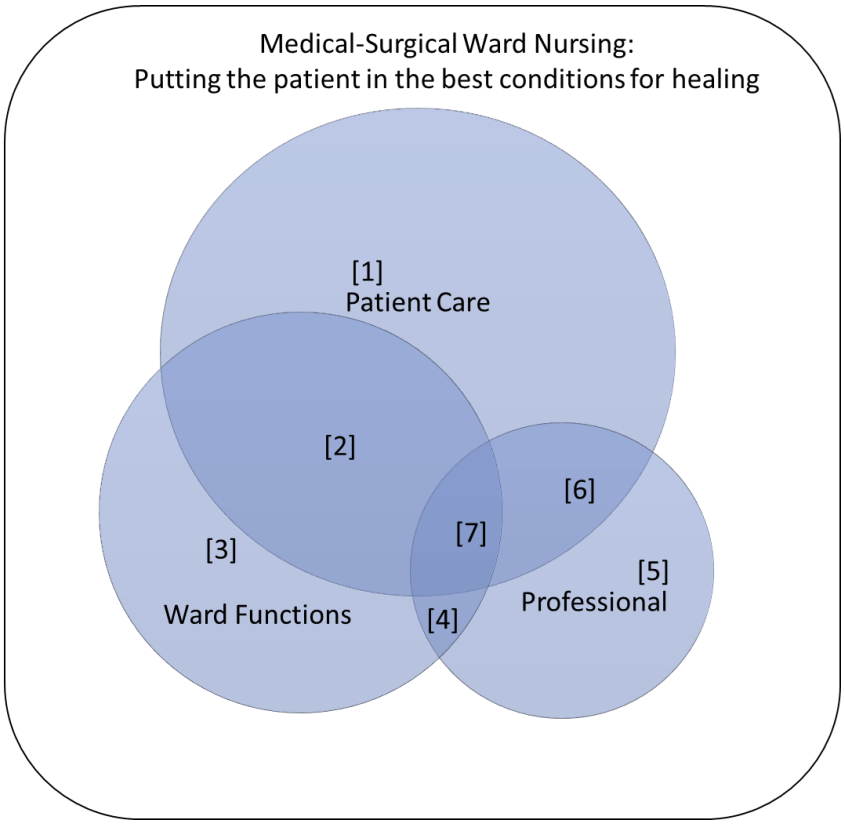


Figure 19. Model of Acute Care Nursing Work

Table 30. Nursing Activities According to Purpose

Purpose (Function)	Categories of Activities (N=20)	Extracted data items*
[1] Patient Care	ADL, Admission & Discharge, Assessment, Communication with patients, Monitoring, Procedures & Treatments, Psycho-socio-spiritual care	N=441 (50.9%)
[2] Patient Care & Ward Functioning	Administration, Communication with Colleagues, Laboratory, Management, Medication, Safety, Transport/Transit	N=243 (28.0%)
[3] Ward Functioning	Housekeeping	N=22 (2.5%)
[4] Ward Functioning & Professionalism	Teamwork	N=30 (3.5%)
[5] Professionalism	Professional Aspects (e.g., knowledge, service, accountability)	N=31 (3.6%)
[6] Patient Care & Professionalism	Nursing Care Plans, Teaching	N=67 (7.7%)
[7] Patient care, Professionalism, & Ward Functioning	Documentation	N=33 (3.8%)
** Total n=867 as calculated from descriptions of nursing activities extracted from articles (n=888), minus 'other' (n=21)*		

According to the counts of data grouped into categories of activities (Table 30 & Appendix 29), patient care was the primary focus of ward nurses and has therefore been depicted as the largest of the three overlapping circles. Activities such as helping patients with ADLs, patient assessment, discharge planning, psycho-socio-spiritual care, and performing various treatments or procedures are nursing tasks that were conducted for individual patients for the purpose of patient care and treatment. There were also many activities, such as medication administration, that had both a direct care component (e.g., administering medications) and an indirect component (e.g., checking supplies, ordering medications as needed, and preparing medications). Often there was an aspect of managing or facilitating ward functioning that related to the care and treatment of the patient, including sometimes taking on tasks that non-nurses might also do. Examples of activities that combine patient care aspects and ward functioning included ordering and stocking of medications, assembling and filing of patient charts, ordering and administering laboratory tests, obtaining and returning equipment, communicating with other professionals, and promoting a safe environment.

Some ward functioning activities were not as obviously related to patient care or treatments, although they contribute to putting the patient in the best conditions for healing. According to the data extracted for this review, some nurses were responsible for tasks such as laundry, bedmaking, tidying, and cleaning – either by undertaking the tasks themselves or by ensuring that they were done by other hospital staff or lesser qualified members of the nursing team. Working with team members to ensure the carrying out of responsibilities was considered as both facilitating ward functioning and a professional activity as it usually included aspects of leadership and delegation.

Professional activity was the third functional category of activities. As the data count for professional activities extracted from this literature review was proportionately the smallest, it is represented by the smallest circle in the model. Nursing meetings, in-services, continuing education, participation on hospital committees, and social

gatherings are included as examples of activities specific to the nursing profession but not necessarily overlapping with patient care or ward functioning. Professional activities that overlapped with patient care occurred with patient teaching and the unique professional task of planning, implementing, and evaluating nursing care plans.

Documentation, a professional responsibility, was included in the intersection of patient care, ward functioning, and professionalism as nurses have documentation responsibilities in each of these three core functions. It includes documentation of nursing interventions and nursing care plans, as well as documentation of ward stocks, incident reports, and ward statistics. The task of documentation keeps the nurse accountable as to work completed. It provides an information source for other team members as to the status, plans, and outcomes of patients as well as serving as a legal document. Documentation assists with management of the ward by keeping track of supplies and services. Documentation and has also been used for research on trends and for assessment of quality of care.

The model is flexible for how it represents the proportion of nursing activities that can be attributed to each of the three functions of the nurse. In the model depicted in Figure 19, the sizes of the circles are illustrative of the number of nursing activities identified in the integrative review, with patient care activities comprising the largest proportion. However, one must avoid assuming that the size of the circles is representative of nursing in every context. While the three acute care ward nursing functions are hypothesized to remain similar internationally, findings from the literature suggest that the type and proportion of activities within these core functions may vary among and within countries. Thus, further research is needed to test the applicability of this model in different contexts and to explore factors that influence the activities for which nurses are responsible.

Limitations

The table and model summarizing nursing activities need to be cautiously interpreted as the number of tasks, articles, and countries are specific to the articles included in this study and may not be representative globally. Some of the research included in this review was broader than medical-surgical ward nursing as inclusion criteria allowed for research settings that included all hospital wards if medical-surgical wards were represented in the sample. Potential bias in the findings comes from the uneven representation of nursing from different regions.

The articles included in the integrative review were limited to having tables, lists, or figures that described the work of nurses. While resulting in a broad subset of data on nursing activities that was comparable for the purpose of compilation and analysis, some relevant articles on the topic were excluded because they did not meet this inclusion criteria. In addition, researchers using nursing databases only reported partial lists of activities or interventions, thus the activities included in this integrative review were not exhaustive. Hand-searches and grey literature are frequently included in literature reviews, however a decision was made not to include these as the initial search result yielded a reasonable number and variety of articles for conducting the review and consideration was made regarding reasonable use of time and resources of the researcher.

Conclusion

The purpose of this integrative review was to provide an overall summary of the roles and responsibilities of nurses from an international perspective. Although it was not possible to provide a role description due to the lack of similarity in articles discussing the role of the nurse, the combination of descriptions for the types of activities that nurses undertake resulted in a functional summary of the work nurses are responsible for: patient care, ward functioning, and professionalism.

These three core functions formed the basis for a new model to describe the work of nurses that situates the wide range of activities under the overall purpose of ensuring that patients are put in the best conditions for healing, an adaptation of Nightingale's description of nursing as "putting the patient in the best conditions for nature to act upon him" (Nightingale 2017, pp. 61). Identification of an overall purpose is helpful for understanding why nursing activities that are sometimes described by researchers as non-nursing are being done by nurses. Examples include tasks such as housekeeping duties which affect the safety of the ward environment or nurses doing the work of other professionals so that patients still receive care even when those providers are not available.

Discussion as to the appropriateness of various nursing activities is beyond the scope of this review. However, by recognizing that nursing work includes more than just patient care, the model may be useful for educators in preparing students for practice by providing a simple yet comprehensive overview of different aspects of nurses' work, the functions of which are intended to put the patient in the best condition for healing. With this understanding, tensions experienced by new graduates relating to differences between the ideal nursing practice focusing on patient care and the realities of the workplace (Duchscher and Myrick 2008) may be ameliorated. Researchers may also find this model useful when considering how to define and circumscribe research on nursing work activities. Finally, as nursing teams in many parts of the world become more diverse through hiring of people with various levels of qualifications, the model provides an overview of the work expected of qualified nurses who are increasingly tasked with (1) overseeing patient care carried out by lesser qualified staff and as noted by (Allen 2004), (2) undertaking roles in management, coordination, and mediation.

This integrative review resulted in a description from an international perspective of medical-surgical ward nursing activities and the purposes for which they are undertaken. The next section of this chapter will identify nursing activities from the

Mongolian Ministry of Health job descriptions for medical and surgical ward nurses at secondary and tertiary level hospitals. These two sets of findings, along with findings from field observations and interviews (Chapters 4 and 5) are key for meeting the research objective to compare findings from Mongolia to research from other countries where the roles and work of nurses has been documented.

Job Descriptions for Mongolian Medical & Surgical Ward Nurses

Mongolia's healthcare system has been centrally planned and controlled by the national government since the first national healthcare system was put in place during the communist era in the early-mid 1990s (WHO 2013). The Ministry of Health (MOH) develops, implements, and monitors laws and orders related to nursing registration, licensing, practice (including job descriptions), standards, and guidelines. The job descriptions in place at the time of this research were issued by the MOH on May 18, 2012. According to key informants, the MOH developed the description to set the standard for what the government expected of nurses, rather than it being a description of what was current practice at the time of the job description roll-out.

An analysis of the job descriptions for medical and surgical nurses was undertaken for comparison with findings from (i) field research and (ii) the integrative review. The questions guiding the analysis were:

(1) What roles do medical-surgical ward nurses have when undertaking job description activities as matched to the list of nursing roles from field work findings? (Table 13, pp. 170-77)

(2) According to the MOH job descriptions for medical-surgical ward nurses, what are nurses' functional roles as described by the Model of Acute-Care Nursing Work developed from the integrative review? (Table 30, p. 221)

(3) What are the similarities and differences between the Mongolian medical and surgical ward nurse job descriptions and the findings from the ethnography (Table 13) and integrative review (Table 30)?

Method of Analysis

Translated copies of the government job description templates for medical ward nurses and surgical ward nurses at the district and state central levels (n=4) were used for conducting the analysis (Appendix 18). There were 5 sections in each of the job descriptions: (1) a summary, including key objectives, (2) a list of responsibilities according to each key objective, (3) requirements of the nurse, (4) collaborative and organizational responsibilities, and (5) a place for signatures. The job descriptions were read in their entirety in both Mongolian and in English. Digital summary notes in English were kept on the Mongolian copies and subsequently compared with the translated copies to verify accuracy in translation (Appendix 18).

The same method used to extract data for the integrative literature review was adopted for this analysis. Individual activities and responsibilities identified within sentences or bulleted points were each entered in a cell on an Excel worksheet. As the job descriptions for medical and surgical nurses working in tertiary and secondary level facilities were virtually identical, activities and responsibilities from sections 2 and 4 that were identical in the different job descriptions were only entered once, resulting in a final list of 54 items.

There were two main differences between job descriptions. The first difference was an additional objective and related tasks specific for surgical nursing. The second difference was in the wording within the section entitled ‘Provision of Emergency Care and Services’. Nurses working at the tertiary centres were to provide specialized care and services in emergency situations, sometimes going to rural areas if needed. This differed slightly from the expectation for nurses working in secondary level centres who were to accompany the doctor to wherever there was a need for emergency care.

To answer the question as to what role the nurse undertook in carrying out each activity, the data items were coded three times. Items were initially coded using an inductive approach of constant comparison that sought to clarify the main purpose of the activity. The data items were then coded according to the 21 roles and descriptions as summarized from the ethnographic findings detailed in Chapter 5 (Table 13). Finally, the data items were coded using the categories identified in the Model of Acute Care Nursing Work that was developed out of the integrative literature review. (Appendix 29)

Findings

Coding According to Mongolian Nursing Roles

There were 54 items identified in the job descriptions: 41 work activities identified in section 2 (key duties) and 13 activities from section 4 (additional items/factors). Of the 16 key roles identified from the ethnographic findings (Table 13), job description activities fit into eleven categories (Appendix 30). Some items were appropriate for more than one category such as ‘following standards and guidelines”. Following standards and guidelines was coded as a professional responsibility, however it also fits under ‘follower’ as the wording clearly states that nurses are expected to ‘follow’. Similarly, activities such as going with doctors to provide emergency care puts nurses in the role of a helper as well as a professional providing service beyond their normal responsibilities.

Admission as an activity was also given multiple codes: technician-clinician (assessment), administration, and recorder as the admission process as noted in Chapter 5 described nurses conducting assessments and putting together charts for new admissions (pp. 109-110). This was the one item from the job description that fit with the role of administration. However, other aspects of administration detailed in chapter 5 such as updating files by attaching reports was not specified in the job description. Roles that did not have any job description items included: accountant, cleaner, courier, medications coordinator, and porter.

The job description item ‘providing nursing care and services’ likely includes work as a technician-clinician, but it is sufficiently vague as to be able to include almost any of the roles and related work activities that were described in chapter 5. Within the sub-categories of the technician-clinician role, specific mention was made of emergency care, infection control, and assessment and monitoring. Nursing procedures as a work activity fits in the general category of technician-clinician, as well as its sub-category ‘medical devices’. There was no reference in the job description for medication administration or for specimen collection tasks such as phlebotomies, although both of these activities could be assumed as part of ‘nursing care and services’. Competency in computers was a job requirement mentioned in section C, but it was not specified as a work activity in sections B and D of the job descriptions.

Coding According to the Model of Acute Care Nursing Work

The 54 job description items were also coded according to the Model of Acute Care Nursing Work that was described in the previous section of this chapter (Figure 19, p. 221). Some functional codes given to job description items differed from the allocation of activity codes in the model as first developed from the integrative literature review. For example, specialty care in the job description referred to the expectation that the nurse would respond to emergencies as requested by those in authority. It therefore included aspects of ward functioning (team) and professionalism (service) in addition to patient care. In cases such as this when there was a difference between coding for the original model and coding for the job description, the coding decisions for these items were entered as notes in the original Excel worksheet.

Another example of an activity code being assigned a functional code different from the original conception of the model is for the relatively vague job description phrase “follows standards & requirements”. This was coded as ‘7’ because some of the Mongolian standards and requirements relate to nursing care standards (e.g., for the purpose of patient care), for ward functioning (e.g., collaboration with senior nurses for

ensuring quality care and processes on the ward), and professionalism (e.g., uniform, continuing education requirements).

Following coding of items according to the proposed model, the numbers of items for each of the seven categories were converted into percentages. Percentages provide an alternate way to view the allocation of activities within the Model of Acute Care Nursing Work. Percentages also facilitated comparison with the proportions of nursing activities allocated to the model from the integrative review (Table 31). As these two data sets are different in nature (i.e., the job description is intended to cover the breadth of ward nursing responsibilities while the integrative review included detailed findings from practice) statistical comparison is not valid. However, the exercise of comparison can highlight areas for further exploration. For example, as seen in Table 31, the Mongolian job description does not contain any references to tasks that are solely within ward functioning tasks (i.e., housekeeping tasks). As housekeeping tasks done by nurses have been reported in this research as well as in other countries (Al-Kandari and Thomas 2009, Ball et al. 2016, Bekker et al. 2015, Briatte et al. 2019, Grosso et al. 2019, Jacob, McKenna and D'Amore 2014), it warrants discussion as to both the practice and appropriateness of nurses undertaking housekeeping tasks. Other differences noted are a higher proportion of activities in Mongolia that are associated with the nursing profession and a lower proportion of activities associated with patient care. These will be discussed further in Chapter 7 (Discussion).

Table 31. Comparison of Job Description & Integrative Review Findings

Purpose (Function)	Categories of Activities	Integrative Review Activity Items (total N)	Job Description Activity Items (total N)	Integrative Review Activity Items (% of total N)	Job Description Activity Items (% of total N)
[1] Patient Care	ADL, Admission & Discharge, Assessment, Communication with patients, Monitoring, Procedures & Treatments, Psycho-socio-spiritual care	N=441	N=10	50.87	18.87
[2] Patient Care & Ward Functioning	Administration, Communication with Colleagues, Laboratory, Management, Medication, Safety, Transport/ Transit	N=243	N=7	28.03	13.21
[3] Ward Functioning	Housekeeping	N=22	N=0	2.54	0
[4] Ward Functioning & Professionalism	Teamwork	N=30	N=13	3.46	24.53
[5] Professionalism	Professional Aspects (knowledge, service, accountability)	N=31	N=13	3.57	24.53
[6] Patient Care & Professionalism	Nursing Care Plans, Teaching	N=67	N=4	7.73	7.55
[7] Patient care, Professionalism, & Ward Functioning	Documentation	N=33	N=6	3.81	11.32
Totals		867[1]	53[2]	100.01%	100.01%

Notes:
1. Integrative Review activity items under 'other' (n=21) were deleted from the total N (n=888) due to insufficient descriptors for this analysis.
2. Job description activity item under 'other' (n=1) was deleted from the total N (n=54) due to insufficient descriptors for this analysis.

Conclusion

The findings from the analysis of the Mongolian job descriptions for medical and surgical ward nurses working at secondary and tertiary level hospitals reveal a breadth of activities that encompass patient care, professionalism, and ward functioning. In the next chapter (Chapter 7), findings from (1) ethnographic field observations and interviews, (2) integrative review, and (3) Mongolian medical and surgical ward nursing job descriptions will be compared and discussed as to similarities and differences. These comparisons are important for answering the second and third research objectives that seek to compare findings from Mongolia to research from other countries where the roles and work of nurses have been documented, and to propose reasons for differences found between Mongolia and other countries.

Chapter 7: Discussion

Introduction

Understanding what nurses from different countries do and the context that shapes their work has been an area of interest for me since I began working internationally as a nurse. The opportunity to spend a significant period of time in Mongolia, learn the language, and interact with Mongolian nurses both within the country and at international conferences raised my awareness that while nurses around the world use similar terms to describe their work, the details of what they actually do are sometimes quite different. The purpose of this discussion chapter is to explore some of the differences and similarities between medical-surgical ward nursing in Mongolia's public hospitals and that of other countries.

There are three sections in this chapter.

1. An exploration of similarities and differences with findings from Chapter 4 and 5 (Ethnographic Field Research) and Chapter 6 (Integrative Review and Job Descriptions).
2. A discussion of the fit of research findings with the conceptual Model of Acute Care Nursing Work. Six factors that may account for differences in work done by Mongolian ward nurses as compared to international research findings on nursing work are introduced and discussed.
3. A summary of key discussion points, including the recommendation that future changes to nursing work in Mongolia will require changes broader than simply within the Mongolian nursing profession.

Comparison of Ethnographic, Integrative Review, and Job Description Findings

In this research, two sets of descriptive categories were created to describe the work of medical-surgical ward nurses. Role categories were developed out of the analysis of findings from ethnographic field observations and interviews. Roles identified in this research are used to describe a set of activities and behaviours that serve a specific purpose. Work activity categories presented in this comparison were developed from the integrative review on nursing work. Work activities describe the types of activities nurses do as part of their work. Although role descriptions and work activities are two different concepts, they are complementary as roles are made up of work activities (Squires 2004). Variations in the types of roles and work activities attributed to them may occur between and among people from different countries because roles are social constructions and are best understood within the unique contexts in which they occur. The detailed descriptions recorded in Chapters 4 and 5 are therefore essential to the process of identifying similarities and differences in work activities and the context in which they occur. Detailed descriptions for roles as elicited from the ethnographic research data are found in Table 13 (pp. 170-177), while Table 27 (pp. 204-210) identifies work activities from an international perspective as identified from the integrative review.

The comparison of roles with work activities suggests that many roles and work activities are similar between Mongolian nurses and nurses in other countries (Table 32, Columns 1 & 4, pp. 236-237). For example, work activity categories of assessment, monitoring, and specialty care correspond with the role of a technician/clinician, documentation corresponds with the recording role, and the activity of 'team' corresponds to the roles of manager and team member. The roles and work activity categories were both used to analyse the Mongolian job description, the findings of which are included in Table 32, Columns 2 & 3). For example, the duty of providing

information and advice to patients and their carers was coded as the role of teacher and as the work activity of teaching. When there was no direct fit between the work activities found in the literature and the role codes from the ethnographic findings, the box in the row corresponding to the role codes in Table 32 was left blank. In the same way, when there was no direct fit of the items in the job description to (1) roles or (2) activities, the corresponding box was left empty. When a task in the job description such as lab specimen collection and handling was not specifically mentioned, I have refrained from assuming that it is a nursing task. This is because lab tasks, as well as some other tasks, can be done by nurses or other healthcare workers depending on the hospital culture and resources. Potential explanations for why the same task might be done by different health professionals will be discussed later in this chapter in the section describing the Model of Acute Care Nursing Work.

By looking at the description of activities and the role for which they are undertaken, it is possible to identify some of the similarities and differences between:

a) what Mongolian nurses were observed to do in comparison with the findings of nursing activities from the integrative review,
b) what Mongolian nurses were observed to do versus what their job descriptions entail, and,
c) what is described in the Mongolian job descriptions compared with the nursing work activities generated from the integrative review.

Table 32. Comparison of Ethnographic, Integrative Review, and Job Description Findings

Roles (Ethnography)	**Mongolian Nursing Job Description**		**Work Activities** (Integrative Review)
	Roles	Work Activities	
Accountant			
Administrator	Administrator	Admission & Discharge	Administration
Caregiver	Caregiver/Treatment	Unspecified Care	ADL Psycho-socio-emotional-spiritual Care Unspecified care
Cleaner			Housekeeping
Communicator	Communicator	Communication: Colleagues Communication: Patients	Communication: Colleagues Communication: Patients

Roles (Ethnography)	**Mongolian Nursing Job Description**		**Work Activities** (Integrative Review)
	Roles	Work Activities	
Courier			Transport
Follower	Follower	Profession Safety	
Helper	Helper	Team	Team
Manager	Manager	Team Management	Management
Medications Coordinator			Medication
Porter			Transport
Professional	Professional	Profession	Profession
• Professional (Learner)	• Professional (Learner)	Profession	Profession
Recorder	Recorder	Documentation	Documentation
Teacher	Teacher	Teaching Team	Teaching
Team Member	Team Member	Team Profession	Team
Technician-Clinician[1]	Technician-Clinician	Unspecified Care Unspecified Treatment	Specialty Care Unspecified Care Unspecified Treatment
• *Assessment & Monitoring*	• *Assessment & Monitoring*	• *Admission & Discharge* • *Assessment* • *Monitor*	• *Admission & Discharge* • *Assessment* • *Monitor*
• *Medication Administration*	*Note:* [2]	*Note:* [2]	• *Medication*
• *Use of Medical Devices*	*Note:* [2]	*Note:* [2]	• *Unspecified Treatment & Use of Equipment*
• *Medical Procedures & Emergency Care*	• *Medical*[3] *Procedures & Emergency care*	• *Specialty Care*	• *Specialty Care*
• *Wound and skin care*	*Note:* [2]	*Note:* [2]	• *ADLs, Specialty Care*
• *Specimen Collection*	*Note:* [2]	*Note:* [2]	• *Laboratory*
• *Infection Control*	• *Infection control*	• *Safety*	• *Safety*
• *Computer & technology operator*	• *Computer skills as a job requirement*		

Notes:
1. The 7 sub-categories of the Technician-Clinician role are in italics below the thick grey line.
2. There was no reference in the job description to specific tasks such as medication administration, ADLs, or wound care. However, the phrase *'nursing care and services' was used* in the job description may include these items.
3. Although the nursing job description used the term 'nursing care & services', the term 'medical' was used in this table as this is the role code that came from the ethnography

Ethnographic and Integrative Review Findings

Most of the roles identified through field research and interviews in Mongolia were reflected in work activities found in the international research literature, although there was variation in the way and extent that nursing activities were completed. Three roles without corresponding references to work activities from the integrative review finding included: accountant, follower, and computer & technology operator. It is quite possible that nurses in other countries engage in these roles, however these were not described in the research that was included in the integrative review. The fact that these were not described could reflect a gap in the research literature, or they could be a result of actual differences in Mongolian nursing as compared with other countries. The following discussion highlights Mongolian nurses' work in these roles.

Accountant: The role of the Mongolian ward nurse as an accountant included calculating patient pharmaceutical expenses and supplies, as well as consciously rationing supplies so as not to incur extra costs for the hospital or patient. Calculating patient expenses was not identified as a ward nursing activity in the international research literature. The role of nurses in controlling spending by rationing supplies (e.g., sanitizing gloves between patients) was also not mentioned in the research literature, although rationing of nursing care was identified in the literature as a quality-of-care issue related to nursing workload (Schubert et al., 2008; Mantovan et al. 2020).

Follower: The role of the nurse as someone who does things without questioning or hesitation according to what is ordered or expected was not a role that was supported according to the work activities found in the research literature. However, it could be argued that nurses are followers when they carry out doctors' orders for administering medications or other prescribed therapeutic interventions. Nurses could also be considered as followers when participating in team interventions such as resuscitation attempts. However, findings from field observations and interviews suggest that the role of the Mongolian nurse as a follower occurs in more than just the professional role for

carrying out interventions and upholding nursing standards. Recorded observations are suggestive of a hierarchical culture in doctor-nurse relationships and in senior-ward nurse relationships rather than a flatter structure where mutual respect and discussion is encouraged.

Computer Technician: The third role that was not reflected in the work activities was that of a computer technician. With increasing use of electronic health records and computers, it is expected that nurses around the world must be knowledgeable and skilled with computers. The degree of knowledge and skill may be dependent on availability of IT workers, especially during evenings, nights, and weekends. In Mongolia, when computer problems occurred because of multiple power outages during a night shift, nurses were observed trying to get their computers working by switching them on and off and by reconnecting wires and cables. This suggests that nurses not only have to know how to use computers, but they also need to know how to fix them.

Differences within Similar Roles and Work Activities

Although only three roles had no corresponding work activities identified from the international research, differences were found when reviewing details of what and how tasks were done. Field notes provide a record showing that Mongolian nurses spent a significant amount of time in activities that were indirectly related to patient care. Definitions of indirect care vary, but in this research, it is understood as care that is for a patient although it is not done in the presence of the patient. Ordering, procuring, and distributing medications and supplies is one example of a series of indirect patient care activities. Ordering and procuring medications were tasks identified in articles from France and from the UK (Briatte et al. 2019, Farquharson et al. 2013).

The description in the article from the UK was brief and without details as to whether this activity required significant time investment by nurses. The article from France described it in the context of a reorganization strategy in 2012 when pharmacy technicians were hired to service the wards rather than requiring nurses go to the

pharmacy. This suggests that prior to reorganization, some medication coordination responsibilities by nurses were similar to work currently done by Mongolian ward nurses. According to Briatte et al. (2019), French nurses also used to have responsibilities for ordering meals, transporting lab specimens, cleaning, and providing various courier services; work still done by Mongolian nurses. However, following the establishment of cleaning teams that were independent from the wards, and the hiring of logistic professionals who were tasked with transporting and storing materials, supplies, meals, and laboratory specimens, nurses in the French hospital began to spend more time in direct patient care (Briatte et al. 2019).

Patient care encompassed the largest proportion of work activity data items from the articles included in the integrative review. (See Table 30, p. 221). Most of these activities can be classified as care done in the presence of the patient and included assistance with ADLs, assessment and monitoring, admission and discharge, communication with patients, nursing procedures and treatments, and psycho-socio-spiritual care. Of these, assistance with ADLs and specialty care (nursing procedures and treatments) comprised the majority of patient care activities. (See Appendix 29 for work activity allocations).

In contrast, it is interesting to note that Mongolian nurses were seldom observed to assist with ADLs on nursing wards. This suggests a major difference in the work activities of Mongolian nurses as compared with nurses in countries represented in the integrative review. One of the possible reasons for this was lower acuity levels among Mongolian patients. As there was no system in place at the time of field observations for measuring patient acuity, a lower acuity level was assumed by the researcher due to the observation that most Mongolian patients were able to independently manage their own ADLs, including walking down the corridor to the toilet facilities. At the secondary-level hospital, some patients were well enough to leave the ward to eat or to go home where they could shower. Throughout the 208 hours of ward observations, there were only a

few patients who required a nurse to take them by wheelchair to the toilet facilities or to assist them with walking.

When a patient was not able to independently manage ADLs, a family member was almost always present to help with these needs. This is similar to South Korea where family caregivers often assist hospitalised family members with ADLs. Lee and Yu (2018) compared wards with family caregivers to those without family caregivers and noted that when family caregivers were not present, the ratio of nurses to patients needed to increase from an average of 1:15 to 1:8. They also observed that when family members were not present, nurses were more attentive to checking patient needs by incorporating regular rounds to assess patients' conditions and charting their observations.

Nursing Procedures and Treatments

Nursing procedures and treatments (coded as 'specialty care' in Table 27) was a work activity category containing a large proportion of all activity items extracted from the research articles (Appendices 28-29). Nurses were described as managing elimination needs, fluid balances, emergency care, nutritional needs, pain relief, providing wound care, and assisting with respiratory needs. These are compared with findings from the ethnographic research as follows:

Elimination Needs: Both nurses from Mongolia and nurses from countries represented in the integrative review gave patients enemas and suppositories. They managed patient's urinary catheters and bags. Nurses would also assist with putting incontinence pads on or under patients, although in Mongolia, this was most often done by a patient's family member. In Mongolia, it was the responsibility of the patient's family to purchase supplies (e.g., enemas, incontinence pads) as they were not provided by the hospitals.

Fluid Balances: Managing patient fluid balances was a nursing responsibility

internationally and in Mongolia. In the research literature, nurses were described as promoting hydration and managing fluid balances by monitoring, controlling, and restoring fluids. Nurses in Mongolia were observed as monitoring fluids primarily by reading and documenting fluid balance sheets that were completed each shift, usually by family members. Restoration of fluids was seldom seen, apart from blood transfusions, as IV infusions were primarily for the purpose of medication administration and volumes infused were small (e.g., 100 mL).

Nutrition: Nursing work around nutrition seemed to entail more tasks as reported in the research articles than was observed on the Mongolian wards. While both Mongolian and nurses internationally were noted to have responsibilities for submitting patient diets to dietary services, nurses in other countries seemed to do more NG tube insertions, NG tube feedings, parenteral feedings, assistance with regular feedings, and making and distributing food or tea. During my field observations, I never saw NG tube feedings and I only once saw a parenteral feeding. This may reflect a lower level of acuity on Mongolian medical and surgical wards than on wards represented in the international research literature.

There were no facilities nor food supplies on Mongolian wards for making tea or offering patients something to eat. Therefore, unlike other countries, Mongolian nurses do not prepare patients' food or bring them something to drink. However, as family members often brought food and drink onto the wards, Mongolian nurses had to be vigilant to prevent patients from consuming what was harmful for them. Nurses also had to deal with patients suffering from stomach pain, vomiting, or bleeding that had been triggered by consuming inappropriate food and drink.

Respiratory Care: On Mongolian medical and surgical wards, oxygen was seldom used. Apart from a single 3-bed room for critically ill patients on one medical ward, none of the rooms on the wards had oxygen outlets. When oxygen was needed, either oxygen canisters or an oxygen saturation machine had to be set up in the room. Respiratory

assessments were also not observed being done by nurses, even when there was obvious respiratory distress such as wheezing or laboured breathing. Once, when I asked the nurse what she would do about a patient who had an audible wheeze, she said that she would tell the doctor. This contrasts with work expectations of nurses in other countries where they are expected to conduct and document independent respiratory assessments and where they frequently administer oxygen.

An additional work activity not observed on the three wards where field observations took place but present in the literature was tracheostomy care. On the Mongolian wards, suctioning equipment was not standard, although a portable machine could potentially be brought if needed. The absence of Mongolian patients with tracheostomies may be the result of only observing 3 wards, none of which were specific to respiratory care. The lack of need for tracheostomy care on the wards observed may also be reflective of a lower level of patient acuity or a different pattern of illnesses and hospitalisation than occurs in other countries.

Pain Control: In Mongolia, pain relief was observed as being managed primarily through administration of medication. Most patients received analgesics on a regularly scheduled basis. Like nurses in other countries, when PRN medications were assessed as being needed, nurses would check to see if they were ordered, and phone the doctor if needed. In contrast to international research findings, Mongolian nurses were not observed as having many non-pharmaceutical pain relief work activities. For example, ice and heat packs were not available and relaxation techniques were not observed as being taught by nurses. The most common non-pharmaceutical intervention was helping patients manage pain at the time of receiving an injection by tapping the skin adjacent to the injection site or distracting the patient through conversation.

Wound Care: Mongolian nurses had responsibility for care of wounds as do nurses from other countries. In Mongolia, almost all wounds observed were a result of surgery and required either clean or aseptic techniques. Checking skin condition for

prevention and early detection of wounds was also a nursing responsibility, however unlike some other countries, there was no specific assessment tool being used (e.g., Braden scale). Mongolian nurses were only observed checking skin condition on bedridden patients, patients with incontinence, and those with existing pressure injuries. Only four patients were observed during field observations who required assistance with regular position changes to prevent skin breakdown and these position changes were most often done by family members. Therefore, unlike many other countries, skin assessment and wound prevention were not a significant time requirement for Mongolian medical-surgical ward nurses. On surgical wards in the tertiary hospital, a specialized wound care nurse who worked weekday shifts attended to surgical wounds. Thus, surgical ward nurses usually only assumed responsibility for wounds on evenings and weekends.

Medication Delivery: Timeliness of medication delivery was an expectation of both Mongolian nurses and nurses from other countries. Missed or delayed medication can negatively impact a patient's health and nurses' job satisfaction can also be adversely affected (Kalisch 2006). In surveys on missed care, routine medication delivered 30 minutes before or after the scheduled time is considered an error, as is PRN medication that is administered after a delay of more than 15 minutes from the time of request (Hübsch et al. 2020, Griffiths et al. 2018). Among articles in the literature review, delays in medication administration and the changing of IV fluids was noted as occurring in Kuwait (Al-Kandari and Thomas 2009). Timeliness of medication delivery was also observed to be a problem in Mongolia. Medication rounds sometimes took over 2 hours and there were no protocols for administering time-sensitive medications. During medication rounds, Mongolian nurses usually only gave injectable medications as patients were expected to manage their own oral medications.

Patient Safety: Maintaining patient safety was identified in the research literature as a nursing task. This includes infection prevention and control, handwashing, isolation

measures, patient dignity, privacy, patient identification, risk prevention and management, fall prevention, environmental safety, and tracking of outcomes. According to findings from field observations and interviews, the primary work of Mongolian nurses in maintaining patient safety was infection prevention activities. Nurses were responsible for stocking hand sanitizers in designated areas that included medication carts and public spaces, a task often done by support workers in other countries. Nurses also cleaned the medications carts they used on medication rounds.

Due to resource constraints such as limited supplies of gloves, intermittent availability of hand cleansers at sinks, lack of supplies for drying hands after washing, and efforts to keep expenses low by extending the use of materials, infection prevention activities were frequently observed as not meeting international guidelines (ADB 2020, WHO 2009). However, even when nurses had adequate supplies, this research and that conducted by Luvsanzundui (2016) found that nurses inconsistently applied aseptic techniques when undertaking tasks such as venepuncture. Isolation measures were noted as difficult to maintain due to inadequate supplies of PPE and a lack of rooms designed specifically for isolation protocols (WHO 2020b). Most hospital rooms ranged from 3-8 beds and had one sink but no toilet or bathing facilities.

Prevention of falls was identified in the literature as a safety task. In Mongolia, this was not observed as an activity in which nurses regularly engaged. Most of the beds did not have functioning side rails, and when there were side rails, these were seldom used. Almost all patients were cognitively aware and independent with ADLs. There was a paucity of equipment on the wards, thus except for extension cords on the floor or the elevated door sills observed on one of the wards, potential hazards for tripping were minimal.

Patients did not have identification bracelets and there were no names above patient beds. Unlike standard practice in other countries, nurses were not observed to routinely check patients' identities, perhaps because of the relatively high level of

functioning among inpatients. If nurses wanted to identify patients, they asked patients their names. Patients were either cognitively aware or had family caregivers present if unable to respond. Mongolian patients also had longer lengths of stay (on average 6.7-8.6 days) (Center for Health Development 2018) which may have facilitated identification of patients.

Maintaining patient privacy and dignity as a nursing task was noted in the international literature. Ways that nurses did this were not outlined in the selected research, although according to information from the UK, it can include communication that makes patients feel valued and informed, creating private spaces for conversations and examinations, promoting independence, and maintaining confidentiality (RCN 2016). Creating private spaces in Mongolia was difficult due to the furnishings of patient rooms and the close spacing between beds. Apart from the 4-bed recovery room on the surgical unit, the 3-bed critical care room on one of the medical wards, and one treatment room, none of the rooms on the wards where I conducted field observations had curtains that could be used for privacy purposes.

Discharge: Providing patients and their families with discharge information and advice was an activity common to nurses from all countries. However, the extent of teaching may vary as discussed in the following section comparing ethnographic findings with Mongolian job descriptions. Discharge planning activities identified in the research but not observed in Mongolia included ward nurses meeting with patients and their families to discuss patient needs, arranging for support services, making referrals, and arranging for transportation. As there are no home care services in Mongolia unless arranged and paid for privately, neither nurses nor doctors have responsibilities to arrange for home care or other support services. An appointment at the ambulatory clinic associated with the hospital is the primary way that a patient receives follow-up after discharge, and this is arranged by the doctor. Families of patients arrange transportation home. One discharge task done by Mongolian nurses but not present in the international

literature was the task of tallying patient expenses for medications and supplies that was subsequently sent to the billing department for the patient to pay before leaving the hospital.

Summary

The above discussion, while not comprehensive, brings attention to both similarities and differences in the work of Mongolian nurses and nurses from other countries. Where similarities exist, further exploration reveals that there are often different expectations and practices in carrying out nursing tasks. Potential reasons for some of these differences are discussed further in this chapter in the section on the Model of Acute Care Nursing Work (pp. 254-274).

Ethnographic Findings and Job Descriptions

The first objective identified in the Mongolian medical and surgical ward nurses' job descriptions as developed by the Ministry of Health (MOH) is that the nurse provides nursing care and services. Further details in subsequent sections of the job descriptions identify some specific tasks: assessment, monitoring, documentation, patient outcome evaluations, patient teaching, and provision of nursing care according to nursing standards and guidelines. Apart from documentation, all these activities are done in the presence of the patient. Mongolian nurses were observed doing all these activities, however the extent to which they were being done varied. For example, assessment was always documented, but nurses sometimes did assessment by looking and interacting with patients rather than measuring vital signs or conducting physical assessments.

It is interesting to note that there were some roles nurses were observed doing but which were not reflected in the job description. These included the roles of accountant, cleaner, courier, medications coordinator, porter, and specimen collector (See Table 32, pp. 236-237). Although they might be included under the broad statement of 'nursing care and services', each of these activities could also be undertaken by

someone who is not a nurse. It is possible that the MOH purposely omitted these roles because of a desire to shift these responsibilities to other workers. However, the discrepancy existing between the job descriptions and actual work creates a situation where people who only look at the job descriptions will not understand the extent of work being done by nurses in the hospital setting and the tasks that take time away from other nursing responsibilities.

The accounting done by nurses was to calculate individual patients' expenses of medications and supplies prior to their discharge. These totals were sent to the accounting department for inclusion in the patient's invoice. The cleaning activities that RNs were consistently observed doing included cleaning of medication carts and tidying of the nursing post. Although cleaning of medication carts was a routine task carried out by Mongolian nurses, there was no mention of this as a nursing task in the integrative review articles.

Cleaning of items such as used basins or other equipment by nurses was usually limited to a rinsing of the items. While there was a cleaning staff member in each of the settings observed, they were usually given specific responsibility for keeping floors clean, cleaning patient rooms on discharge, and sometimes for removing rubbish. When present, ANs cleaned patient beds, side tables, and other areas of patient rooms. Nurses were expected to participate in the designated intensive ward cleaning days and the civic environmental clean-up days.

Despite lack of mention in the job descriptions, Mongolian nurses often served as couriers, transporting supplies, medication, lab specimens, and equipment between various parts of the ward, hospital, or even outside the hospital. In addition, nurses frequently helped to transport patients from one place to another for reasons such as consultations, diagnostics, the mortuary, and to and from the operating room. Phlebotomies and collection of other lab specimens was another task not mentioned in the job description, but which was observed as being done by nurses.

The role of medications coordinator and its related courier activities was the job that seemed to be the most time consuming even though it was not specified in the job description. One nurse was often assigned to do this task, although other nurses assisted when needed. In this role, nurses followed up with doctors to ensure that they had submitted all the patient prescriptions by a designated time. They then compiled a list of medications and the supplies needed for their administration. They sent the order to pharmacy on the computer system. When the pharmacy filled the order, the nurse had to go to the pharmacy to verify each item, bring it to the ward, recount the items, and distribute the supplies and medications to the patient pharmacy baskets and the ward's stock cabinet. As computerized systems advance, it is possible that this process will be linked to electronic charts and therefore free the nurse of responsibilities for following up with doctors and placing medication orders to the pharmacy. However, at the time of this research, the role of medications coordinator was central to the work of nurses, even though it was not evident in the job description template.

In the job description, there seemed to be an emphasis on health promotion and patient teaching. This may have come from discussions with advisory bodies such as WHO, who together with the MOH, are trying to reorientate the Mongolian health system to focus more on health promotion and disease prevention than on curative services (WHO 2013). Likewise, emphasis on public health in the job description may be reflective of the government's plans for increasing primary healthcare services with emphasis on the management and control of communicable and non-communicable diseases. Although acute care wards are not considered primary healthcare services, the illnesses on the observed wards were primarily non-communicable diseases and therefore provided an opportunity for health promotion activities.

A similarity between the ethnographic findings and job descriptions is that nurses have responsibility for health education and health promotion. However, there may be differences in understanding the extent to which nurses provide health teaching. Field

observation notes revealed that nurses tended to do only cursory teaching, if any, with some nurses saying that teaching was the primary responsibility of the doctor. The minimal teaching done by nurses might also be reflective of the historical practice of hospital nursing in Mongolia: nurses' primary function was to carry out doctors' orders, most often in administering prescribed treatments. It may also be reflective of the ratio of doctors to nurses whereby higher numbers of doctors translates into more time for doctors to engage in teaching patients.

The expectation that nurses have good legal knowledge was mentioned twice in the job description: once as a key responsibility and once in the job requirement section. This is consistent with nursing ethics in other countries, whereby nurses are expected to practice legally. However, good legal knowledge might also be included in the Mongolian job description as a motivating factor for change. One key informant who had responsibilities in her hospital for nursing training and maintenance of nursing standards commented that there was a description of an activity in the ethnographic findings where the nurse had carried out a nursing procedure in a way that violated Mongolian law. She informed me that the law had been issued to address this problem and to ensure that correct practice was carried out in the future.

The fourth section of the job description focused on collaborative relationships. The ward nurse is expected to collaborate with the ward manager, the head of the nursing department, and senior nurses on issues related to quality improvement of nursing services and social well-being. They are also expected to collaborate with ward doctors and other medical professionals on issues pertaining to patients, as well as research initiatives. In addition, nurses are supposed to collaborate with medical doctors from different facilities. However, according to findings from field observations and interviews, collaboration was often problematic and seldom observed. During nursing team meetings on the ward, issues were sometimes raised, but I didn't observe much engagement by ward nurses with senior nurses. An interviewee and a key informant both

indicated reluctance to raise issues related to team functioning. However, collaboration on social activities was observed, with nurses working together to organize and carry out plans for social functions.

Collaboration with medical doctors was often challenging and interactions were perceived as mostly hierarchical, with doctors having more power. Nurses frequently felt that when there was difference in opinion, it seemed the first reaction by doctors was to distrust the nurse. Medication administration was one area of communication breakdown and tension. When doctors made medication changes in the charts, but neglected to also update the medication administration documents, nurses would be chastised by doctors for not following the changes in the charts. One interviewee said the tendency to blame nurses without first attempting to understand the situation led to poor working relationships with doctors.

Poor collaboration was also noted by doctors who felt that nurses were not providing them with the information they needed to know such as the most current set of vital signs. As field observations revealed that nurses did not usually take full sets of vital signs, the lack of data was more likely the reason for poor collaboration than an actual unwillingness to collaborate. The fact that the job description specifically identifies collaboration as a nursing activity suggests that the government is aware this is an area needing improvement.

Job Descriptions and Integrative Review Findings

There was a higher frequency of data items in the job description that related to professional activities (e.g., teaching, research, supervision, continuing education, quality improvement activities, and knowledge-based practice) than was evident in the integrative review findings (Table 31, p. 231). A possible explanation for this may be that the job description seeks to identify broad areas of work whereas data from the literature review included lists of nursing activities that were more detailed, e.g., work observation studies (van den Oetelaar et al. 2018), nursing interventions as recorded in electronic

health records (Ranegger, Hackl, and Ammerwerth 2015), and data from surveys (Shuriquie, While and Fitzpatrick 2008). Thus, the differences noted in frequency of data are not statistically comparable.

Work activities identified in the integrative review but not specified in the Mongolian job description included various types of nursing care activities: assistance with ADLs, medication administration, treatments, use of medical devices and equipment, and wound care. Tasks that require the nurse to take something or someone from one place to another were also identified in the nursing literature but not in the Mongolian job description. It is possible that these types of activities are identified as nursing activities in local hospital ward settings rather than in the job description created by the Mongolian MOH. Activities such as taking blood or collecting urine samples was mentioned as nursing work in nine articles representing seven countries but was not specified in the MOH job description. As with the lack of identification of specific nursing care activities in the job description, the lack of lab tasks may be because this task is assumed to be part of nursing care in Mongolia. However, one of the challenges of nurses taking on lab responsibilities without being explicit in job descriptions is that these aspects of their work may not be accounted for by people in administration and policy making. Unaccounted nursing activities that add to workloads, whether it be lab or other responsibilities, may impact the ability to complete expected nursing activities (Jones 2015, Schubert et al. 2008, Kalisch 2006, Bae 2012). Unaccounted nursing activities may also contribute to overtime for the purpose of finishing work.

The expectation that nurses are to be followers was identified in the job description. In contrast, there were no specific activities or phrasing in the research articles that described nurses as followers except in one article which used the term ’comply’. In Jordan, nurses were expected to be aware of ethical guidelines, acknowledge practice limitations, and comply with hospital regulations and policies (Shuriquie, While and Fitzpatrick. 2008). It is hypothesized that these expectations would

be similar internationally as most countries have nursing codes of ethics, policies, standards, and protocols for nursing procedures that guide nursing practice. Reasons that 'following' was not reflected strongly in the integrative review articles may include a focus on nursing tasks rather than on principles or expectations, or because of a lack of research in this area. However, as nursing functions as an autonomous profession in most countries where the research originated, the absence of research literature on the role of the nurse as a follower may reflect an assumption of greater autonomy and self-regulation than occurs in Mongolia where nursing is officially a mid-level profession and regulated by the national government.

Professional expectations in the Mongolian job description for research and continuing educational activities are generally reflective of expectations of nurses in other countries. For example, knowledge-based practice, supervisory responsibilities, and collaborative work in quality improvement are nursing responsibilities in the UK, Canada, and the USA (NMC 2015, Canadian Nurses Association 2015, AACN 2019). Research in the hospital setting is a practical method for gathering evidence that can contribute to evidence-based decision making. Including research in the nursing job descriptions helps to ensure the participation and support of nurses in research endeavours. In Mongolia, this expectation is enforced through an annual order coming from the Ministry of Health that requires each hospital's nursing department to hold a research conference. Teaching is similarly a standard nursing activity in other countries. Teaching may be especially strategic for Mongolia as it helps to address a national priority to reduce the burden of chronic disease by promoting healthy lifestyle changes (WHO 2013). However, as previously noted, teaching done by Mongolian ward nurses was observed as minimal.

Descriptions of ward nurses having supervisory responsibilities was evident in several articles from the integrative review. In places such as Australia, Brazil, and Canada, there were often 3 levels of caregivers on nursing teams: RNs, technical (practical) nurses, and aides or assistants. In other countries such as France and Jordon,

some wards had two levels of nurses. Supervisory responsibilities usually took the form of RNs delegating work activities to technical nurses and aides. According to the job descriptions, Mongolian ward nurses also have supervisory responsibilities for overseeing ANs (when present on the wards) and helping to improve the ANs' knowledge.

Summary

There are both similarities and differences in medical-surgical ward nursing between the ethnographic field findings from Mongolia and the published literature as elicited from Mongolian job descriptions and the integrative review. In the following section, the Model of Acute Care Nursing Work first articulated in Chapter 6 will be expanded to include factors that have an impact on the work of nurses. Reasons for differences found in acute-care ward nursing between Mongolia and other countries will be proposed according to the impact factors listed in the model.

Conceptual Model of Acute Care Nursing Work

The work of Mongolian nurses can be viewed according to the Model of Acute Care Nursing Work that was introduced in Chapter 6 (Figure 19, p. 221). As the purpose of this research was to describe the work of Mongolian medical-surgical ward nurses and compare it to nurses from other countries, the model provides a way to compare the main functions of ward nurses as carried out through various work activities. In this model, the three main functions of nurses are patient care, ward functioning, and professionalism, all of which are carried out to facilitate the healing of patients.

The function of patient care includes those activities that are part of the nursing care plan or which contribute to treatment of individual patients. Most of these activities were nursing assessments and interventions done in the presence of the patient (e.g., assessment, monitoring, treatments, assistance with ADLs, and psycho-socio-spiritual

care). In addition, there were many activities undertaken as part of patient care, but which were not done in the physical presence of the patient. Examples of these activities included assembling and reviewing patient charts, communication with colleagues about patient care, preparation for medication administration – including the procurement of medications, implementing safety measures, and time spent in transit (e.g., transporting patients, running errands, and walking between task locations).

While contributing to patient care, some of these indirect activities also facilitated ward functioning which is the second core function. *Ward functioning activities facilitate patient care by ensuring that everything needed for carrying out care and treatment is available, the physical conditions of the ward meet the needs of the patients and staff, and communication with colleagues is effective*. Professionalism is the third core function. *Professionalism encompasses activities that further the knowledge and skills of nurses, promotes research, creates a culture of accountability and sound ethics, and facilitates teamwork.* Self-care, such as taking breaks which is important for maintaining optimal functioning of the nurse, was included as a professional activity. Some professional activities also contribute to ward functioning (e.g., teamwork) and to patient care (e.g., nursing care plans).

According to the frequency of nursing activity items categorized from the integrative review (Appendix 29), most nursing activities contributed to patient care, including the overlapping areas of ward functioning and professionalism (Table 33). It is important to note that these frequencies are calculated from the numbers of activities identified from the integrative review, and that the activity items come from a variety of research that used different data sets and methods for analyses. Thus, as a composite they do not provide a statistically valid or reliable measure of nursing activities. However, time studies on nursing activities (Farquharson et al. 2013, van den Oetelaar et al. 2018, Westbrook, Duffield and Creswick 2011) have yielded results that show a similar pattern

in acute care ward nursing whereby most nursing activities are directed towards patient care, followed by ward functioning, and finally by professional endeavours.

Table 33. Frequencies of Core Nursing Tasks Identified in the Integrative Review

Categories of Core Nursing Tasks	Patient Care[i]	Ward Functioning[i]	Professionalism[i]
[1] Patient Care	441	N/A	N/A
[2] Patient Care & Ward Functioning	243	243	N/A
[3] Ward Functioning	N/A	22	N/A
[4] Ward Functioning & Professionalism	N/A	30	30
[5] Professionalism	N/A	N/A	31
[6] Patient Care & Professionalism	67	N/A	67
[7] Patient care, Professionalism, & Ward Functioning	33	33	33
TOTALS	784	328	161

i: See Appendix 29 for details on how nursing work activities were allocated into core nursing task categories

A time study of nursing activities on six surgical units in the Netherlands revealed that nurses spent between 40.1-55.8% of their time on direct patient care and between 11.0-14.1% on tasks that were patient-related (e.g., errands, handovers) but not specific to an individual patient (van den Oetelaar et al. 2018). General administration, organization of work, meetings, guidance, and breaks were activities than comprised the second largest proportion of nurses' time (14.5-30.3%) and could be considered as fitting within the ward functioning component of the newly constructed model developed as part of this investigation, including the overlapping areas of patient care and professionalism. Professional activities, including self-care, required the least amount of time.

Westbrook, Duffield and Creswick (2011) found that Australian nurses spent approximately 52.4-61.8% of their time in direct care, indirect care, and medication tasks, with slightly more time in direct patient care (20.4-24.8%) than on medication tasks (19.0-20.9%). These activities fit into the model's description of patient care. A study from the UK found that nurses also spent the greatest proportion of their time in patient care activities, with a median of 37.5% of time spent in direct contact with patients,11.1% in indirect care and 11.1% in medication tasks (Farquharson et al. 2013). Ward functioning

tasks that were not specific to individual patients such as managing ward stocks and orders, meetings, and staff coordination was a lesser demand on their time, while professional activities were not specifically mentioned. Among these three studies, time spent in documentation ranged from 7% (Westbrook, Duffield and Creswick 2011) to 13% (van den Oetelaar et al. 2016).

According to findings from field observations and interviews, Mongolian nurses seem to spend more time than other countries in ward functioning activities (including the overlapping areas of patient care and professionalism). Mongolian nurses ordered, procured, counted, and distributed supplies and medication. Nurses ensured charts and documents were in order, placed orders for patient diets, and printed and affixed labels for lab specimens. Documentation took up a significant amount of time as nurses not only made entries in patient charts, but they also kept numerous handwritten logs and reports. Nurses cleaned and stocked medication carts at the start of each shift and emptied and cleaned carts at the end of their shift. An additional ward functioning activity was transporting patients or supplies. While most porter and courier activities occurred within the hospital, nurses occasionally had to leave the hospital to carry out their responsibilities. These observations are consistent with an unpublished report cited by Gaalan et al. (2019) that Mongolian acute care nurses spent most of their time on activities related to injections, documentation, and ward maintenance.

As almost all patients were independent with ADLs, nurses did not assist often in this area. Nurses usually relied on patients or family caregivers to notify them when something needed attention rather than routinely checking on patients. Observations of patient care activities revealed that Mongolian nurses seldom did more than cursory physical assessments. Blood pressure, pulse, or temperature readings were usually taken when patients said that they felt unwell (e.g., headache, fever) or as part of the protocol for post-surgical patients, blood transfusions, or more seriously ill patients. Stethoscopes were only used for blood pressure readings. If there was an automatic

blood pressure cuff available at the nursing post, patients took their own measurements and reported them to the nurse when asked. As Mongolian nurses spent little time in assessment and assistance in ADLs, and as they interacted with patients primarily during medication administration, the proportion of time spent in patient care seemed to be less than in their ward functioning activities. Professional activities such as research conferences, nursing meetings, regular testing of knowledge, reminders to ensure renewal of nursing license, and spot-checks as to the appropriateness of uniforms were also more evident from field observations in Mongolia than was found in international research.

Based on the ethnographic findings of Mongolian ward nursing and the findings from the integrative review, a visualisation of the relative proportion of time spent in each of the core nursing functions is illustrated in Figure 20. As noted earlier, because the data on which these proportions are based comes from a variety of methodologically different studies, the diagram is an impressionistic visualisation rather than a precise representation. The differences in the size of the circles reflect the findings from this research that suggest Mongolian nurses spend less time in patient care and more time in ward functioning and professional activities than nurses in other countries. Thus, while

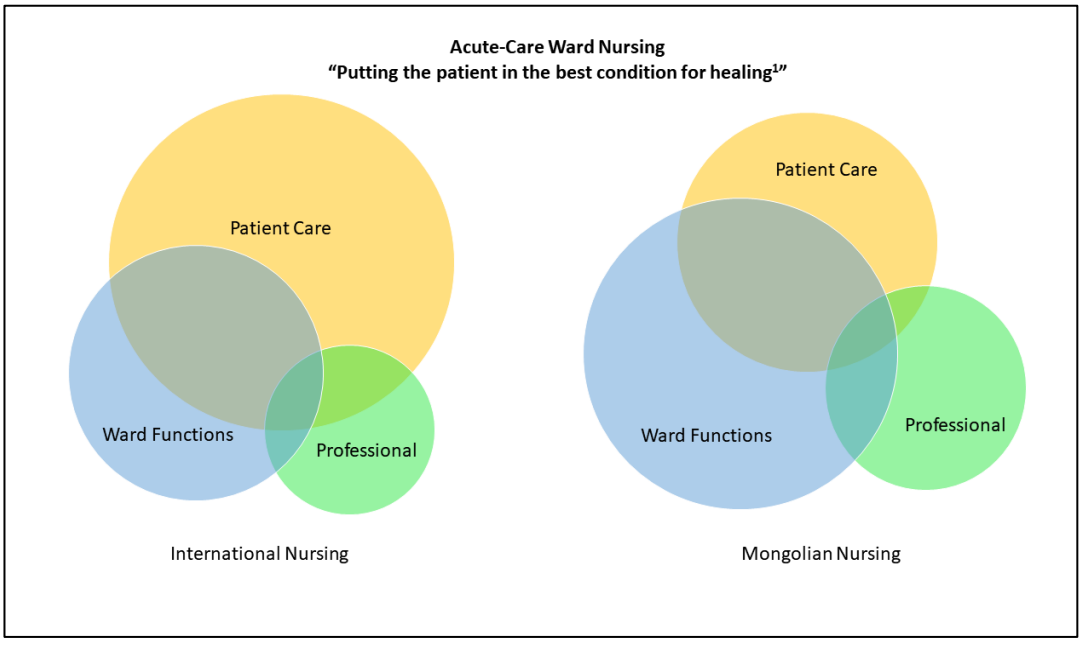


Figure 20. Comparison of International and Mongolian Core Nursing Functions

there are similarities, there are also differences between the work of Mongolian medical-surgical ward nurses and those of medical-surgical ward nurses in other countries.

Factors Impacting the Shape of Nursing Work

There is an abundance of research on nursing workloads, primarily from OECD countries, that has identified factors impacting the work of nurses (Myny et al. 2011, Morris et al. 2007, Mark 2002). Although this ethnographic research did not focus on workload, and the concepts of workload and work activities are different, factors impacting nursing workload were assumed to also influence the type and amount of work activities undertaken by nurses. Therefore, exploration of some of these factors and their influence on nursing work is important in seeking to understand why nurses do what they do in their workplace.

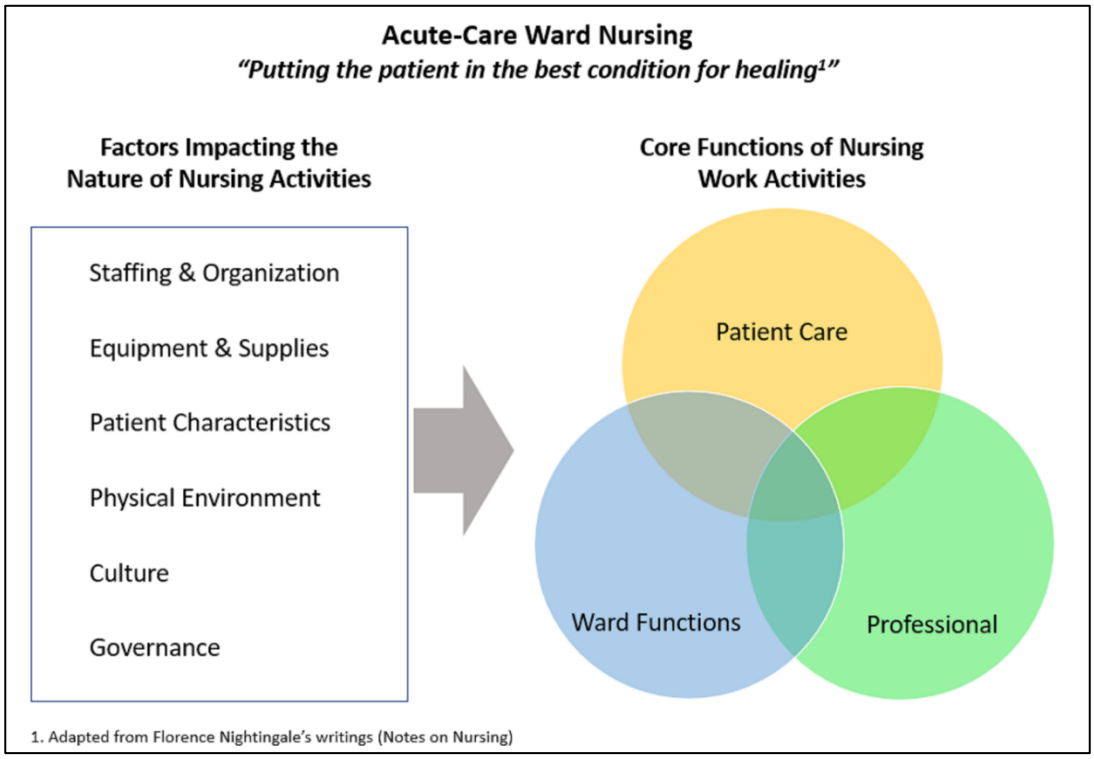


Figure 21. Model of Acute Care Nursing Work with Impact Factors

The selection of impact factors for inclusion in the Model of Acute Care Nursing Work (Figure 21) resulted from an intuitive process of reading literature on the topic of workload and work activities, and from the findings of this research. Four categories of

variables identified by Myny et al. (2011) as influencing workload were recategorized and two additional factors reflective of the findings from this research were added. A diagram showing how variables were recategorized is found in Appendix 31.

The shape of nursing work in Mongolia, as visualized by the three circles in the Model of Acute Care Nursing Work, was viewed as different from the findings of the integrative review on nursing work from an international perspective (Figure 20, p. 258). The following discussion proposes reasons for some of the differences found in acute care ward nursing between Mongolia and other countries. It is organized according to the impact factors that are identified in the Model of Acute Care Nursing Work (Figure 21, p.259).

Staffing & Organization

Nursing Team Members

The increasing diversity of skill-mix on nursing teams is often challenging for nurses in other countries who now delegate activities they had previously done themselves, or that they had anticipated doing as part of their nursing work (Kusi-Appiah et al. 2019, Schluter, Seaton and Chaboyer 2011). One of the main roles of the RN has become the leadership of nursing teams (Kusi-Appiah et al. 2019). Although the job descriptions in Mongolia give RNs responsibility for overseeing ANs, the number of ANs on a ward is either low or non-existent. Where ANs are present, there seems to be little overlap between RN and AN responsibilities. For example, ANs cleaned beds and furniture whereas RNs were not observed doing this task. ANs did many of the activities delegated to a family caregiver such as assistance with ADLs. Only RNs gave medication and documented in patient charts, although ANs removed finished IVs. ANs were often the first to respond to call bells and as they spent more time in patient rooms than at the nursing post, they interacted more with patients than did the RN. These differences in work activities and the low number of ANs may make supervisory responsibilities less confusing than in other countries where task-shifting between

different levels of care providers is noted as taking place (Jacob, McKenna and D'Amore 2014, Kusi-Appiah et al. 2019).

Nursing Workload

Nurses are better able to manage workloads when there is a lower patient: nurse ratio (Griffiths et al. 2018). Appropriate ratios are usually determined based on workload assessments. At the time of field observations, there was no regular assessment of nursing workload in Mongolian public hospitals for the purpose of determining appropriate staffing levels. In Mongolia, staffing patterns differ from many other countries as only full-time nursing positions are available in public hospitals, and schedules are created according to a standard complement of nurses rather than based on daily or weekly workload assessments. Head nurses will help with the work of ward nurses and have the authority to ask a nurse working in the ambulatory department to help in the ward. However, most of the time it is only the scheduled nurses who staff the ward and there are few options for increasing staffing levels when there are higher patient numbers or heavier workloads.

Nursing shortages are an increasing problem in most countries (Drennan and Ross 2019). Mongolia also has a nursing shortage (Gaalan et al. 2019). Wards were observed to be short-staffed because of nurses taking leave or holidays. To provide coverage, full-time nurses often took on extra shifts. There is concern that not enough new nurses are entering the nursing profession, and of those that do, many leave while they are still young. Low salaries and low respect were cited by interviewees in this research as two reasons nurses considered leaving the profession. An additional contributor to the nursing shortage is a law that requires Mongolian female nurses who are 55 years of age to retire from their work in public hospitals.

The impact of the nursing shortage in Mongolia has yet to be measured. Findings from this research showed that nurses usually had more work to do than they had time to complete during their shifts. Mongolian nurses have complained of heavy workloads

(Gaalan et al. 2019). When faced with more work than can be done during a shift, nurses must decide what is critical for them to complete and what can be left undone. Similar to nurses in other countries (Douglas et al. 2014), routine vital signs and physical assessments are examples of work activities in Mongolia that nurses often compromise in order to complete other work tasks.

A systematic review of research studies investigating the time nurses spent taking vital signs showed a range of 3-6 minutes per patient (Dall'Ora et al. 2020). Electronic monitoring was most common and took less time than manual assessments. In the observed medical-surgical wards in Mongolia, only the critical care rooms had monitors for patients. Therefore, either nurses had to take the ward's only sphygmomanometer and stethoscope and go to each patient, or patients had to go to the nursing post and take their own measurements. Assuming manual taking of vital signs takes approximately 6 minutes/patient without interruptions or transitioning between patients, this would translate to at least 1.5 hours for nurses with 15 patients and 6 hours for those with 60 patients. With all the other work for which nurses are responsible, spending this much time taking vital signs may not be feasible. When there was a lull in work intensity during which nurses could take vital signs, it was often in the middle of the night and, similar to nurses in the UK (Hope et al. 2018), Mongolian nurses chose to let patients sleep rather than take their vital signs.

While field observations and interviews showed that assessments were often left undone, Mongolian nurses charted as if the work had been completed. Charting in advance was also done by some RNs if there were lulls in the shift. By charting in these ways, nurses decreased the amount of unpaid overtime they worked at the end of a shift, and they avoided criticism for not being able to complete their workload. Although Mongolia has taken steps to improve quality of care in hospitals by creating disincentives for substandard work such as not completing all one's tasks, these measures might instead result in concealing instances where quality of care standards are not met (WHO

2013). False record keeping might also contribute to maintenance of current workload expectations because the documentation implies that all nursing tasks were completed.

An area of heavy workload was giving medications. Field notes recorded significant volumes of prescribed injectable medications per shift and frequent delays in the timing for administering those medications. The time required for administering medications often took longer than expected because nurses were frequently interrupted, they sometimes had to go to the nursing post to double check doctors' orders on patient charts or obtain supplies that were not at the patient bedside, and most of the IVs were single-use systems which required nurses to initiate IVs rather than just connect a new IV bag. While some Mongolian nurses felt that a nurse with good time management skills should be able to complete her work on time, the research literature suggests that not giving medication on time is more often the result of issues with nursing workload (Keers et al. 2013).

Interprofessional Staffing Mix

The number and variety of different types of hospital workers shape the work of nurses (Sharma et al. 2016). In Mongolia, nurses and doctors do most of the work that occurs on an inpatient ward. Because there were few non-nurse and non-physician support workers present on Mongolian wards (e.g., pharmacists, laboratory technicians, social workers, porters, couriers, clerks, and cleaners) nurses were observed to undertake ward function and patient care activities that are often done in other countries by support workers.

Pharmacists were occasionally seen on the wards in the tertiary-level hospital when they came to distribute oral medications to the patients, but they were not seen on the wards of the secondary-level hospital. Unlike other countries who employ pharmacists or pharmacy technicians to deliver medications to the wards (Briatte et al. 2019), Mongolian nurses were responsible for procuring medications and supplies from the pharmacy and distributing them on the wards. Apart from the research by Briatte et

al. (2019) exploring the impact of reorganization on nursing work that resulted in delegating several activities to support workers, there is little known about other countries where nurses carry responsibility for ordering, procuring, and distributing all medications. The role of Mongolian nurses in ordering and procuring medications may change in the future as electronic health records become mainstream. In other countries, electronic prescribing has been shown to facilitate the ordering of medications whereby prescriptions entered electronically go directly to the pharmacy to be filled (Ahmed et al. 2013).

In many countries, nurses are responsible for collecting lab specimens, however there are also hospitals where laboratory technicians come to the wards to collect specimens. In the USA, phlebotomists are specially trained support workers who come to the wards to collect blood (Bureau of Labor Statistics 2020). The employment of phlebotomists can relieve nurses of lab-related work and are a potential option for decreasing nursing workload in Mongolia, especially during the 6AM medication rounds when there was simultaneous collection of lab specimens.

Porters were found to decrease the amount of time that nurses spend transporting patients, and couriers are helpful for obtaining or delivering items such as laboratory specimens, sterilized equipment and various supplies that are needed on the wards (Briatte, et al. 2019). However, in Mongolia it is nurses and ANs who carry out these tasks. Other potential support staff able to facilitate ward functions include administrative clerks who can help with maintaining charts and reception duties, and cleaners who can assume some of the cleaning responsibilities such as medication cart cleaning, wiping down of beds, and removal of rubbish, dirty linens, and equipment that needs to be re-sterilized. Adding non-nursing workers has been shown to increase time spent by nurses in direct care nursing care (Briatte et al. 2019). However, while increasing staff-mix is one of the strategies to address nursing overload, it can also lead

to fragmentation of care and potential negative patient outcomes (Dubois and Singh 2009).

In many countries, there has been a trend towards task-shifting among different types of professionals. Task-shifting is normally understood as the delegation of tasks from more highly qualified people to those with less training (Mijovic, McKnight and English 2016). For example, some of the tasks that are being done in Europe by nurses were formerly done by doctors (Maier et al. 2018). In the same way, many nursing tasks that were once done by RNs have now been given to practical nurses and assistants (Kusi-Appiah et al. 2019, Jacob et al. 2014, MacKinnon, Butcher and Bruce 2018). While task-shifting is occurring in many countries, there has been less evidence of this occurring in Mongolia, potentially contributing to what one interviewee expressed as a lack of progress in expanding the scope of practice for Mongolian nurses.

In Mongolia's urban hospitals, the ratio of doctors to nurses is approximately equal (Center for Health Development 2018) and may have an impact on the work done by nurses. Although nurses did physical assessments, they were not comprehensive. Instead, nurses usually notified the doctor if they felt a patient needed to be further assessed. One senior doctor commented that he would chose to ask another doctor to conduct a patient assessment rather than a nurse because doctors were usually available and only doctors were able to add, alter, or remove treatments and diagnostics on patient charts. Other areas such as patient education that are often done by nurses in other countries were understood as being done by doctors in Mongolia. As nurses' workloads are heavy, often with more work to be done than is possible to complete during a shift, the high number of physicians in hospitals may contribute to the apparent lack of task-shifting and expansion of the scope of nursing practice.

Remuneration

Nurses are paid salaries the equivalent of half the average Mongolian salary. Many nurses struggle to live on this wage and often take out loans to help cover living

expenses. One doctor observed that getting nurses to work overtime was a challenge because nurses frequently used their days off to earn money selling items or finding other work. Some nurses also took holidays or leave to go to other countries for the purpose of earning extra income from non-nursing jobs. The low wage, together with other disincentives such as heavy workloads, may contribute to current and projected nursing shortages.

Equipment & Supplies

The availability of equipment and supplies partially determines the work of nurses. Only a very limited number of excess supplies were kept on the wards and nurses often had to go to the lab, pharmacy, sterilization, housekeeping, and ambulatory departments to obtain or return supplies and equipment. Except for the post-op recovery room on the surgical ward and the medical ward's room for the more acutely ill, patient rooms did not have equipment for monitoring patients. Usually there was one stethoscope, sphygmomanometer, thermometer, and glucometer per ward. When nurses needed to check vital signs, they had to first find the equipment either at the nursing post or by searching for other nurses or doctors who might be using these items. The scarcity of this equipment may contribute to the relative infrequency of taking vital signs and assessments requiring auscultation.

According to key informants, an additional factor influencing the number of pieces of equipment available on the wards is the demand for it outside of the hospital, including the potential value of re-sale. During field observations, I was also told that hand sanitizing liquid often disappeared from patient rooms. Disappearance of items may be the reason why nurses are required to do detailed counts of furniture and equipment at the nursing post, as well as the double and triple counts of medication and supplies brought onto the ward.

Some equipment being used by nurses in other countries such as bladder scanners were not available, thus Mongolian nurses did not undertake these

assessments. Nurses were observed to take ECGs after first retrieving the machine from another part of the hospital. Patient rooms did not have piped-in oxygen or suction, and except for admission and post-op assessments, oxygen saturation levels were not routinely taken. Although seldom observed as being needed, when oxygen was prescribed, nurses had to first locate the equipment and then bring it to the patient room. Some disposable supplies such as kits for urinary catheterisation and wound care were not available on the wards. This meant that nurses had more work to do in assembling equipment and in cleaning up post-procedure than in countries where disposable kits were readily available.

IV infusions were almost all single-use systems intended for delivery of medication using only 100 mL bags. This meant that nurses had to do IV initiations each time a patient was to receive an IV. While most venepunctures were quick, there were times when it took more effort to find an insertion site, and thus demanded more nursing time. There were almost no IV pumps which meant that nurses had to regulate gravity-fed IVs and rely on patients and CAs to report problems with the IV lines. Blood transfusions were also gravity-fed and required frequent monitoring by nurses to safely regulate the rate of infusion. It was not clear if reliance on patients and CAs decreased the time that nurses spent monitoring IVs and responding to alarms, or if the gravity-fed IVs resulted in increased monitoring and regulation by the nurses.

Patient Characteristics

Patient characteristics including age, diagnosis, presence of co-morbidities, and acuity have an impact on nursing workload (van Oostveen et al. 2014). In Mongolia, the average age of the population is significantly younger than in Europe or North America. Mongolia only has a small percentage of its population (4.1%) over age 65 (World Bank 2019). This is quite different from the USA (16.2%), Canada (17.6%), the UK (18.5%) and Germany (21.5%) (World Bank 2019). As aging is associated with increased co-morbidities, the increasing elderly population adds to demands on nursing services

(Heider et al. 2014). In contrast, Mongolian patients frequently only had one official diagnosis, were younger, and were either independent or they had a family member present who helped with personal care.

In countries where there is a trend towards having more acutely ill patients on general wards, conducting more comprehensive physical assessments is considered important for early detection of changes in patient status (Douglas et al. 2014, Osborne et al. 2015, Zambas, Smythe and Kozio-McLain 2016). Although patient acuity is not assessed as part of workload management in Mongolian public hospitals, the high-level of patient independence observed is suggestive of a lower patient acuity level than is common in other countries. When patients are independent and clinically stable, fewer patient care activities such as assessments and assistance with ADLs are required. The lower patient acuity may have impacted Mongolian nurses' decisions to forgo vital sign assessments for each patient, only do visual or targeted assessments, and focus instead on other tasks such as documentation and medication administration, including blood transfusions. In the future, if more acutely ill patients are admitted to the ward, the work of Mongolian nurses will need to change to meet the increased needs for nursing care.

Physical Environment

Layouts of nursing wards have an impact on time and effort required for carrying out work activities. Improving access to supplies, decreasing distances between areas, creating spaces that minimize the occurrence of interruptions, and decreasing noise have been shown to improve the efficiency of nurses (Zadeh et al. 2012). One of the observations from this research is that Mongolian nurses faced challenges in each of these areas, which may have resulted in more time spent in transit and a greater number of interruptions than in wards designed for greater efficiency.

The layout of Mongolian wards were single, long hallways with rooms on either side. This meant that there was significant distance between the central nursing post and the rooms at the far ends of the corridors. This increases time required for walking. There

were no toilets and bathing facilities in patient rooms, thus if patients needed assistance from the nurse, it required more time than if facilities were available in each patient room. While most patients were independent in ADLs at the time of this research, if patient acuity levels increase in the coming years, the importance of accessible, centralized toilet and bathing facilities on the work of nurses will need to be considered.

Ward stocks were usually located at or near the nursing post, but stocks were limited, with most medications and supplies located at the patient bedside. These were stocked by nurses who obtained the medications and supplies by going off the ward to retrieve them. When items were missing from the patient bedside, the nurse had to go and look for them on another medication cart or at the nursing post.

Nurses did their documentation at the nursing post. The nursing post was an open area with desks and computers. It was also the location of the public water dispenser, and on some wards, a weigh scale and automatic blood pressure machine that patients could independently access. The nursing post was often noisy with patients, visitors, and other professionals wanting to talk with nurses or simply stopping to have conversations with people who were also at the nursing post. Field notes recorded frequent interruptions that occurred when nurses were trying to work at the nursing post. Noise and interruptions were also common on medication rounds as most rooms had between 3-6 inpatients and patients or their caregivers would frequently talk with the nurse giving medications, even if they were not the ones receiving medication.

Culture

The Mongolian health system was created during the communist era of socialized healthcare. Mongolians admitted to hospital were usually entitled to a 7-10 day stay. While the average length of stay has decreased in recent years, it is still longer than in western countries (WHO 2013). A longer length of stay may decrease the workload of nurses as (i) there is less turnover of patients, which means less work on admissions and

discharges and (ii) patients are normally less acutely ill towards the end of a long stay than patients who are discharged home after shorter hospital stays.

The Mongolian health system has been described as curative, with a focus on in-patient hospital care (WHO 2013). There is no public homecare service and referrals made are primarily to the ambulatory clinic associated with the hospital from which they are discharged. This impacts the work of ward nurses as there are fewer tasks associated with discharging patients as compared with countries in Europe and North America.

Preference by Mongolians for injections has resulted in one of the world's highest injection rates/patient (WHO 2013). A recent report showed similar findings about the popularity of injections. It found that Mongolia was an outlier in prescribing high numbers of antibiotics, and unlike most countries where 90% of antibiotics were oral prescriptions, Mongolia only reported 66% as oral prescriptions (WHO 2018). Field observations also revealed that many doctors prescribe IV medications such as Vitamin C and Cavinton that would not be prescribed in many other countries. The high number of prescribed injections has an impact on nurses' work as high patient ratios (field observations reported a range of 10-60 patients per ward nurse) mean that nurses must administer injectable medications to large numbers of patients. For example, the number of injectable medications on one 16-hour night shift with a patient census of 70 staffed by two nurses was: 64 IM, 28 IV push, 20 IV, and 22 subcutaneous injections. On a different ward with 40 patients, 226 IMs, 60 IV push, 71 IV, and 3 ID injections were recorded over 24 hours.

Nursing culture, which has been described as the values, beliefs, and norms among nurses, shapes the work of nurses (Adams 2007). Language is a powerful conveyer of culture and an understanding of the linguistic meaning of the Mongolian terms for 'nurse' provides insight into how the nursing role is perceived by many and why ADL assistance isn't a significant component of RN nursing work. In Mongolian, there are

three terms that convey the concept of ‘nurse’. The term for a professional nurse is ‘*сувилагч’*. A dictionary definition translates this as ‘nurse’, however the root has the connotation of ‘healing’ and has come to be understood and used in Mongolia as a person who delivers treatment for healing. A person who provides personal care at the level of an assistant is called an ‘*асрагч’* with the verb ‘*асрал’* meaning ‘care’. Although this term was not used in the hospitals at the time of my research, nursing assistants or family caregivers often fulfilled this role. The term used for family caregivers in the hospital setting is ‘*сахиур’* and it carries the notion of safeguarding. In Mongolian hospitals, the ‘*сахиур’* is the person who volunteers to stay with a hospitalized patient, attending to their needs and safety. This division of nursing care into three distinct areas means that nursing assistants and family caregivers in Mongolia are the ones who usually attend to patients’ personal care needs and safety, leaving the professional nurse to focus more specifically on treatment related tasks.

Other aspects of nursing culture are the work ethic and authoritarian hierarchy. In other countries nurses often attribute challenges in time management to personal failure rather than a problem with the system (Adams 2007). This might also be true for Mongolia. Mongolian nurses frequently worked unpaid overtime by coming in early and only leaving after all their work had been completed. When asked about workload issues, one nurse manager attributed the inability of nurses to complete all their tasks as personal failure in time management.

A key informant however, said that work overload is an acknowledged problem. Steps to address this have been discussed, but as there is insufficient funding for proposed changes, the status quo remains, and nurses frequently have more work to do than is possible within a shift. Mongolians tend not to overtly counter those in higher positions of authority and ward nurses appear to have developed their own ways of coping. An example of this was when nurses prioritised tasks, leaving out some or delaying care, yet still charting as if everything was done on time. Another example was

when nurses at a ward meeting responded to a doctor's complaint about delayed medications by saying 'ok' rather than explaining the situation or advocating for changes.

The dominant religious worldview of the population impacts what people do and why they do it, despite a government policy whereby religious activity is not officially permitted in work settings. In Mongolia, the dominant religious worldview comes from Mongolian Buddhism. Many Buddhists believe that that the rightness or wrongness of something is discerned by what is beneficial or non-beneficial rather than determined by a strict moral code (Snelling, 1987). Unlike western countries where a practice such as charting something that has not been done would be considered wrong, it would not necessarily be considered wrong by some in Mongolia if the benefits were perceived to outweigh the negative consequences.

Another worldview is one that was cultivated during the era of Soviet influence. Central planning was the norm in Soviet communism and until the late 1980's, dissention was discouraged (Footman et al. 2013, Abramov 2016) . Thus, speaking out about perceived problems was often a risky endeavour. There was pressure to succeed, and penalties were often imposed when work targets were not met. Successes were highlighted, and failures often hidden. It is possible that this way of thinking continues to some extent today, despite the adoption of a democratic government and greater freedoms. The potential conflict between cultures of Mongolian Buddhism, Soviet communism, and the scientific culture is a challenge for ward nurses as sometimes these worldviews conflict. An example of this could be decision making based on what is perceived to result in the greatest benefit rather than a decision based on science or policy.

Governance

Mongolia's healthcare system is primarily controlled by the central government although there have been changes made in recent years to decentralize and increase the autonomy of hospitals (WHO 2013a). Changes within hospitals that have had an

impact on nurses includes the establishment of nursing departments. Rather than being under the authority of a doctor, each hospital now has a Director of Nursing who oversees the work of nurses in a hospital. Unlike many countries however, Mongolian nurses do not have their own professional regulatory body (WHO 2020d). Politicians, bureaucrats, and physicians at various levels of government, including the Ministry of Health, issue directives that shape the work of nurses. Many of these have been progressive, for example establishing independent nursing departments within hospitals, creating job description templates, developing nursing standards, and requiring nurses to engage in research. However, because nurses don't have an independent professional regulatory body, nurses in senior positions appear to function as advocates, consultants, and managers rather than decision-makers in regard to regulation of nurses and their work. For example, although nursing workload in Mongolia has been recognized as heavy, there have not been changes implemented to effectively addresses this problem. In addition, the focus on professional activities in the workplace is driven primarily by the government rather than nursing leaders. This conflicts with the traditional understanding of professions being self-regulating.

Student intake quotas for medical, nursing, and other health professions are decided by different government branches. The Ministry of Health identifies what they assess is needed. The Ministry of Education sets quotas for degree programmes. The Ministry of Labour sets quotas for diploma and certificate programmes. As educational programmes are often revenue generating because of student fees, some Mongolians feel that student quotas are based on projected revenues rather than on assessed needs. This may partially explain why there are more medical students than nursing students in baccalaureate programmes. To increase the number of nurses, the government offered free tuition in 2020 to nursing students who enrolled in the state medical university's nursing school and private universities offered scholarships to nursing students. The outcome of this is yet to be evaluated. As funding appears to be a

motivating factor for enrolling in nursing education programmes, it is expected to also be a factor in job retention. Salary levels for health professionals working in public hospitals are set by the government. Low salaries may contribute to higher attrition and nursing shortages, as well as influencing students to choose professions that have higher earning potential.

Summary

Definitions of nurses' work highlight major functions which are common to all nurses. Ward nurses in Mongolia, similar to nurses in other countries, carry out roles identified by the ICN in providing care for the ill, promoting health, and preventing illness (International Council of Nurses 2002). They also have responsibilities for research, education, advocacy, and promotion of safe environments as described in the ICN definition of nursing. However, it is only in exploring the details of what nurses do that differences in nursing practices can be seen among different countries. As Allen (2001) noted, local factors shape the work of nurses – both what is done and how it is done. The conceptual Model of Acute Care Ward Nursing identifies six major categories of factors that impact the work of nurses in three core functions: patient care, ward functioning, and professionalism. An exploration of these factors furthers understanding as to what nurses do and why they do what they do.

Health systems, within which nursing is situated, need to be responsive to health needs while also adopting processes that are acceptable to their citizens (Franken and Koolman 2013). Thus, there is a combination of practical (e.g., financial investment & expenditures) and cultural considerations (health beliefs and values, social organization, history) in how a health system is designed and functions. These considerations are included in the impact factors of the model. Understanding these factors is important as different countries have different health needs, resources, history, and culture which shape nursing work.

Comparing the work of nurses among different countries is feasible, as has been shown in this research. However, interpretation of the differences and similarities must be cautiously undertaken and done with an understanding of the context in which they occur. Nursing is highly cultural. It is influenced by history, worldviews, language, and politics. What is considered as nursing work and what is considered as non-nursing work can vary among countries (Ball 2016). The Model of Acute Care Nursing Work is useful for visualizing the proportion of work that nurses spend in patient care, ward functioning, and professional activities. By situating each of these functions in the context of putting the patient in the best condition for healing, it gives validity to the work nurses do that may be different from what nurses do in other countries.

One way that nurses in Mongolia provide care for patients is by ensuring that medications are ordered and distributed on the ward. In other countries, this work might be considered as 'non-nursing'. However, when Mongolian nurses order and procure medications and supplies, they are doing it so that these items will be available for nurses to carry out treatments, thereby facilitating patients' healing. Doing these types of tasks means that Mongolian nurses spend more time in activities that contribute to ward functioning (e.g., ensuring medications and supplies are available on the ward) than they spend in patient care, and it is one of the differences found between nursing work in Mongolia and other countries.

There is no perfect health system. Rather than assuming the shape and nature of nursing work is better in one country than another, the goal in looking at nursing work should be to assess if the work of nurses is appropriate in that context. When something is identified as needing to be changed, consideration of impact factors must also be included. For example, ensuring that every patient has daily vital signs taken will be facilitated by having more nursing staff per shift, more equipment, and a documentation system in which nurses are able to record at the time measurements are obtained. Alternatively, finding ways to cope with high workloads and few pieces of equipment may

require a change from routine vital signs to a system of best practices according to patient diagnosis and acuity. This could include the option for nurses to use clinical judgement for not taking vital signs. Expanding the scope of nursing practice in Mongolia may be more relevant in the future when there are higher patient acuity levels that simultaneously require a higher nurse: patient ratio. Another potential change is a lower doctor: nurse ratio, including policies and procedures allowing nurses to receive and process verbal orders for medication changes or specimen collections. Expanding nurses' scope of practice may also require employment of non-nurses to handle some of the tasks currently done by nurses that don't require knowledge and skills unique to the nursing profession.

Understanding nursing work and the context in which it occurs is a vital step for leaders in planning and implementing changes that help re-orient nursing work for more effective utilization of nursing knowledge and skills (Swiger, Vance and Patrician 2016). The Model of Acute Care Nursing Work provides a visual way to understand nursing work – what is done and the contexts that shape that work.

Chapter 8: Conclusions, Limitations, and Recommendations

Introduction

This ethnographic study on the roles and work of nurses working in medical-surgical acute care wards in Mongolian public hospitals has resulted in rich descriptions of nurses' work and a comparison of this work with descriptions of acute care ward nursing from other countries. Based on the findings of this research, the Model of Acute Care Nursing Work was developed. This chapter offers concluding remarks on the research process and findings. There are five sections in this chapter. The first section is a summary of how the research objectives were met. The second section highlights some key implications of the findings. Limitations of the research and recommendations for further research are discussed in the third and fourth sections. The chapter concludes with overall impressions on the work of medical-surgical ward nurses in Mongolia.

Overview of Research Question and Objectives

The question guiding this research was "What are the roles and work activities of Mongolian ward nurses working in acute-care public hospitals and the reasons they engage in these roles and activities?" To answer this question, three research objectives were identified:

1. Describe the roles and work-related activities of nurses working in medical-surgical wards in Mongolian public hospitals.
2. Compare the findings from Mongolia to research from other countries where the roles and work of nurses has been documented.
3. Propose reasons for differences found in acute-care ward nursing between Mongolia and other countries.

To answer the first objective, I collected data from 208 hours of field observations on medical-surgical wards, 25 hours of meetings, conferences, and social events, and from formal interviews with 6 nurses and 3 doctors working on medical and surgical wards. The data were analysed using content analysis methods for extracting and categorizing data. The result is a rich description of the work environment and activities of medical-surgical nurses as presented in Chapters 4 and 5. I then used constant

comparison analysis methods to explore the purposes for which the activities were undertaken. This resulted in identification of 16 different roles descriptive of the scope of nursing practice on three medical-surgical wards in two Mongolian public hospitals. The final step undertaken to answer the first research objective was a deductive analysis of the 16 roles according to three core nursing functions of patient care, ward functioning, and professionalism. The result was confirmation that these 3 core functions are reflective of the work of Mongolian nurses.

The second research objective was also answered in three stages. An integrative review was conducted on the work of acute-care hospital nurses as elicited from international peer-reviewed research articles. Content analysis methods were used to analyse the data. This resulted in identification of 20 categories of work activities. Constant comparison methods were then used to explore commonalities as to the purpose for which work activities were undertaken. The result was identification of three core functions that nurses attended to: patient care, ward functioning, and professionalism. The third stage of analysis was a comparison of these 20 work activities and three core nursing functions with the 16 roles of ward nurses as identified through fieldwork. While there were many similarities, there were also notable differences with Mongolian nurses engaging in a wider variety of ward functioning and professional activities than nurses in other countries. The degree to which nurses conducted similar activities such as nursing assessments were also noted as differing between Mongolian nurses and those from other countries.

The final research objective was met by synthesizing knowledge from the fieldwork with international research on nursing work and literature on Mongolian history, worldviews, and their health system. This resulted in a refinement of the Model of Acute Care Nursing Work to include impact factors. Staffing and

organization, equipment and supplies, patient characteristics, physical environment, culture, and governance were the six broad categories of impact factors. These were discussed as to how they shape the work of nurses in Mongolian public hospitals' medical-surgical wards.

Implications of the Research Findings

The work of Mongolian medical-surgical ward nurses retains much of what has been their work in the past when primarily two types of professionals provided patient care on the wards: the nurse and the doctor. The doctors assess and prescribe treatments. The nurses do what needs to be done to ensure prescribed treatments are given. When there are only two main healthcare providers on the wards, work that keeps the ward functioning such as procuring supplies and equipment, record keeping of treatment-related items brought onto and removed from the ward, and ensuring the cleanliness of the ward environs become part of nursing work. The resultant workload of ward functioning tasks may be a limiting factor in expanding nursing's scope of practice.

However, there is evidence of changes that are helping to advance the work of nurses in Mongolia. There is also growing recognition that nursing has a unique body of knowledge and practice. Mongolian nurses have standardized job descriptions that reflect core professional components of practice, research, and education. In addition, the hierarchical tradition of the doctor-nurse relationship is changing with nurses officially referred to in job descriptions as collaborators with doctors and administrators.

Professional nursing practices are increasingly being implemented. Nursing care plans are now required for each patient. Changes based on established best practices are being implemented, e.g., labelling medications added to IV fluids. Hospitals now have nursing departments responsible for overseeing nurses. Continuing education on a regular basis is a requirement for maintaining a license to practice as a hospital nurse. Nursing education programmes are gradually replacing medical doctors with nurses as

faculty members. Degree and graduate nursing programmes are preparing nurses for practice, leadership, and research. To encourage recruitment of well qualified nurses, further advancement in this direction could be facilitated by removing the classification of nursing as a ‘mid-level’ profession and by increasing remuneration.

A major challenge identified for Mongolian nursing is that of work overload. The findings and analysis of this research show that if nurses fully carried out all their work, on most days it would be impossible to complete the work within the time-period allotted. Additional staff will need to be employed and more material resources such as sphygmomanometers, stethoscopes, and thermometers will need to be provided if nurses are to carry out all their work as it currently exists. The need for more staff and equipment has significant financial implications for public hospitals and the government of Mongolia.

In the Model of Acute Care Nursing Work, several factors were identified that influence the work of the nurse. If Mongolia wants a nursing practice similar to that described in other countries, it will require changes at multiple levels. Additional finances will need to be found to support the changes. A process that ensures staffing matches workload will need to be introduced. This implies that legislative changes would be needed to allow the hiring of casual and part-time nurses who can be added as needed to help with workload.

A transition to nursing practice that has a greater time allotment to patient care than ward functioning will require the introduction of non-nurses who can assume some of the ward functioning work that nurses currently undertake. To help decrease inconsistencies between doctors’ verbal and written orders, new procedures need to be implemented to allow nurses to process treatment changes given as physicians’ verbal orders. If the ratio of doctors to nurses decreases as it has in other countries, doctors may shift some of their responsibilities to nurses requiring that more thorough assessments and health teaching become the standard practice of nurses.

To increase the numbers of nurses working in the Mongolian health system, effective strategies for the recruitment and retention of nurses need to be prioritised. Well-educated and motivated people are unlikely to initially choose or remain in a profession that earns half the average national wage. Career options and public respect are also limited for a profession ranked as mid-level, even with the enticement of the nursing career advancement path outlined by the government (WHO 2013) and the development of a doctoral nursing degree programme. Changing both public perceptions and the structures that support these perceptions is usually a complex, multifaceted challenge and often requires strategic, long-term approaches (Rogers 2003).

If Mongolia follows the trends seen in other countries where the acuity level of inpatients is rising, nursing time spent in assessment, monitoring, and assistance with ADLs will need to increase. Higher levels of patient acuity could also become the norm if Mongolia changes admission criteria so that only the acutely ill are admitted to public hospitals. Tighter criteria for who is eligible for admission may decrease the number of patients per nurse, potentially relieving nursing workload. However, data from other countries shows that earlier discharges often result in higher turnovers of patients, thus increasing nursing workloads. Therefore, improvements in Mongolian life expectancy and changes to admission and discharge practices should be considered as to their potential impact on the need for nursing services.

To decrease nursing time spent in administering medications, changes in beliefs about medical treatment are also important. If the perception that injectable medications are essential for treatment is changed, it may result in doctors prescribing more oral medications than injectables. This would not only decrease nursing time in medication-related activities, but it would also decrease expenses by using fewer supplies and making it feasible for patients to be discharged earlier. This is one example of how changes that would align nursing practice in Mongolian public hospitals with those described in the international literature will require involvement beyond what the nursing

profession can implement on its own (e.g., changes in cultural beliefs, medical practices, hospital policies, community healthcare services).

This thesis presents descriptions and analysis of nursing practice in Mongolia, including how various factors impact the work of acute care medical-surgical ward nurses. The discussion gives a glimpse into the complexity of the interwoven systems of culture, social structures, demographics, finances, resources, and governance that shape the work of nurses. It is my hope that this analysis can help inform the discourse in Mongolia as to what Mongolians want nursing to look like and, after clarifying what is wanted, to consider what is needed to bring that into alignment.

Wider implications for the nursing profession from this research stem from the Model of Acute Care Nursing Work, specifically from the identification of nursing work that keeps the ward functioning. While the actual tasks within ward functioning may vary among countries, recognizing all the work nurses do is important for estimating workloads and for writing job descriptions reflective of actual nursing practice. Secondly, recognition of nurses' work in ward functioning is important for decreasing theory-practice gaps in nursing. Knowledge and skills required for undertaking ward functioning activities can be incorporated into nursing curricula and the socialization process so that new nurses are better prepared for their practice roles. Thirdly, the flexibility of the model regarding the shape of nursing work (i.e., the proportion of work done in each of the three core functions) is helpful for facilitating a respectful understanding of differences in nursing among countries and the factors that impact their nursing work, while affirming the overarching goal of facilitating the health of patients.

Limitations

The purpose of this ethnographic study is to provide a rich description of the roles and work of medical-surgical ward nurses working in two Mongolian public hospitals at a specific point in time. Therefore, some of the findings of this research may have changed

from the time of fieldwork to the time this thesis was written. As the Mongolian health system evolves, it is expected that the future roles and scope of practice of nurses will also change, including the beliefs and processes that shape them.

Conducting a background literature review on Mongolian nursing was challenging due to the paucity of peer-reviewed published research on Mongolian nursing, including historical research. There was no standardized online referencing system in Mongolia at the time of this study and access to university libraries was limited due to the practice of institutional collections being limited to their own employees or students. In addition, translation of documents in the Mongolian language was selective because of the researcher's financial and time limitations.

The findings of this research may not be representative of all nursing wards in Mongolia. It was not possible to fully engage in participant-observation due to the researcher not having a nursing license valid for working in Mongolian hospitals. Therefore, there was increased reliance on observations and interviews. Key informants felt that having a foreign researcher on the wards would result in staff putting their best efforts forward and therefore not give a fully realistic picture of nursing work in Mongolia. Although the researcher's fluency in Mongolian facilitated communication, it was not sufficient to capture all nuances in conversations. These realities may have resulted in a stronger etic than emic view as presented in the thesis.

Cross-cultural research and translation can present challenges in understanding the meaning of concepts expressed by research participants (Suh, Kagan and Strumpf 2009). Key informants were therefore vital to assist with understanding observations. To assess validity of the findings presented in this thesis, Mongolian nurse reviewers with a high degree of fluency in English were required. As there were no ward nurses known who met this criterion, the nurses who agreed to review included a nursing instructor from a Mongolian private university, a nursing instructor from a Mongolian public

university, and one nurse who worked in teaching and administration at a private hospital in Ulaanbaatar.

Efforts to understand the work of nurses in other countries have resulted in numerous research studies and grey literature. Due to time and resource limitations, only a sub-set of research articles were selected for the integrative review. While resulting in articles that explored the topic from different angles and used a variety of research methods, it was limited in that many articles which contained relevant material and could provide further insights did not meet the inclusion criteria. Comparisons of ethnographic data with research literature provided a preliminary window into similarities and differences but was not statistically verifiable due to differences in the type of data and purposes for which the data were collected. Selection of impact factors used in the Model of Acute Care Nursing Work were based on synthesis of fieldwork, background literature, and previous research. However, it remains theoretical as these factors were not tested in this research.

Recommendations

It is hoped that the descriptive and analytical findings from this research will provide policymakers, researchers, and nursing leaders data and ideas for discussion and planning that will advance nursing practice in ways that will result in better patient outcomes and strengthen health and educational systems.

Nursing Policy and Practice

Differences were found in some of the types and extent of work activities between the ethnographic observations from this research and the Mongolian job descriptions and findings from international research publications. In addition, nurses were usually tasked with more responsibilities than it was possible to complete during working hours. As noted in the discussion chapter (Chapter 7) and in the implications section of this chapter (pp. 280-283), multiple strategies can be undertaken to address issues related to work

overload and the quality and scope of nursing practice. However, because potential strategies involve financial investment, staffing changes and reorganization, and changes in nursing and medical work activities, multiple stakeholders need to be involved in ensuring that the work nurses are expected to provide is achievable. Therefore, consultations among stakeholders, including nurses, are recommended that will:

1. Re-assess and determine the desired scope of practice and expectations for nurses working on acute care wards,
2. Adopt a multi-pronged approach to ensure provision of adequate human and material resources, and the establishment of organizational structures and practices that make it feasible for nurses to work according to the agreed-upon expectations and scope of nursing practice, and
3. Conduct educational and training sessions to facilitate role changes for nursing, medical, and other staff impacted by the above decisions.

Nursing Education

To facilitate the successful transition of nursing students into professional practice it is important to prepare nurses for reality of nursing practice. Faculty and students can use the Model of Acute-Care Nursing Work, findings from this research, and nurse testimonials to identify similarities and differences between what is taught and what is practiced in Mongolian nursing.

Research

Observations and questions arising from this research have resulted in identification of three broad areas for further research: (1) nursing and Mongolia's healthcare context, (2) nursing work from an international perspective, and (3) the impact of culture and governance on nursing work.

To improve the understanding of medical-surgical ward nursing in Mongolian acute care hospitals, further research is needed in many areas including patient acuity levels, workload intensity, missed care, workplace dynamics, and time and motion studies. As there is usually more work to do than is possible during a shift, research on rationing of care (Schubert et al. 2008) may be beneficial. Research on care from the patient perspective can provide insight both into nursing care received and the expectations of patients. This in turn, can help inform nursing policies and practices.

As nurses and doctors are the primary care providers on the wards, studies of acute-care ward doctors may provide valuable insight into nurse-doctor relationships and the actual work done by doctors, including medical residents. Understanding the work of doctors can also give insight into decision-making practices that have a direct impact on nursing work such as patient admission and discharge criteria, as well as treatment patterns, including prescribed medications.

The second area for further research is on the work of nurses from an international perspective. There is a growing body of knowledge about nursing work being more than ‘care’ (Allen 2015). This is supported by the findings from this research. However, nursing theory in this area still needs further development, especially with incorporating the realities of nursing work in countries under-represented in the nursing literature.

Assessment of the Model of Acute Care Nursing Work as to its fit in other hospital settings and countries may contribute to building this knowledge base. In addition, it is possible that the model may be relevant to other nursing practice areas such as non-acute facilities and community nursing. When assessed for fit in non-hospital settings, the model’s core function of ‘ward functioning’ will need to be replaced with ‘workplace functioning’ or another phrase that captures the breadth of activities that occur within this function.

A third area for further research is on the impact of culture and governance on nursing work. Reasons for why Mongolian nurses do what they do appears to be partly influenced by culture and governance. However, in nursing publications of research, theory, and practice, underlying assumptions of culture (including worldview) and governance are seldom identified. Making these explicit can further our understanding of their impact on nursing work and is especially important in an era of globalisation and respect for cultures that have not been well represented in the nursing literature.

Concluding Remarks

This research is significant and unique because it is the first research study that provides rich detail as to the work of nurses in Mongolian public hospitals' medical-surgical wards. This data is important not only as an historical record and resource for future research, but because it provides insight that is important for policymakers, nursing educators, and hospital administration.

This research is also significant because it introduces a new model for how to conceptualize acute-care nursing work. Rather than describing nursing work by using the dichotomies of direct care and indirect care, or nursing and non-nursing tasks, the outcomes of this research suggest that nursing work can be described according to three main purposes: patient care, ward functioning, and professionalism. In turn, these three functions contribute to the goal of creating the best conditions through which patients can be restored to health. Seen through this lens, the context in different countries as to demographics, resources, health and education systems, governance structures, and worldviews are important factors in shaping the work of acute-care ward nurses. These broad factors may also help explain differences in nursing practice among and within countries.

The Model of Acute Care Nursing Work highlights the complexity of nursing work. There is much that the nursing profession can do to develop the capacity of nurses to

provide high quality nursing services resulting in good patient outcomes. However, the nursing profession alone does not carry all the responsibility for ensuring good nursing practice. The scope of practice, working conditions, and expectations of nurses are impacted by broader system factors of culture, governance, finance, resources, environment, and demographics. Any significant changes to the work of nurses requires corresponding changes in these system factors. Without these changes, nurses will continue to be tasked with making judgements in inadequately resourced situations, thereby compromising what and how work is done.

Mongolian nurses working in public hospital medical and surgical wards are worthy of great respect. As the primary frontline workers who carry out the treatments that facilitate restoration of health, nurses are essential both for patient care and for the functioning of the inpatient wards in Mongolian public hospitals. Nurses work in difficult situations with limited resources. To deal with work overload, nurses must use critical thinking to determine what work is essential and what can be compromised. Nurses frequently work unpaid overtime by coming to work early, leaving late, and skipping or shortening work breaks. Because of their low salaries, many nurses can only afford to live on the outskirts of the city, thus adding long commute times to their working days. Yet most of the nurses I have met through this research and through my years in Mongolia retain the vision of nursing as a caring profession and do what they can to provide the best care possible. They were the inspiration for the title of this research "Doing what needs to be done", which is perhaps best captured in the quote of a nurse with many years of experience:

> "In addition to our nursing tasks, we do everything!
> In our ward nothing happens without nurses' involvement."

References

AACN (2019) *AACN fact sheet – nursing*. Available at: https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Fact-Sheet (Accessed: 29 September 2020).

ABRAMOV, R. (2016) 'Understanding professionalism in the Soviet Union and post-Soviet Russia: an analytical review', *The American Sociologist,* 47(1), pp. 81-101.

ACADEMY OF SCIENCES (1990) *Information Mongolia. The comprehensive reference source of the People's Republic of Mongolia (MPR).* Oxford, England: Pergamon Press.

ADAMS, V. (2007) 'Laughing it off: uncovering the everyday work experience of nurses', *International Journal of Qualitative Methods,* 6(1), pp. 1-26.

ADB (2020) *Mongolia: fifth health sector development project.* Available at: www.adb.org (Accessed: 12 January 2020).

ADB (2018) *Development of the health sector master plan technical assistance project (TA 9386-MON).* Available at: www.mohs.mn (Accessed: 13 January 2021).

AHMED, Z., MCLEOD, M.C., BARBER, N., JACKLIN, A. & FRANKLIN, B. (2013) 'The use and functionality of electronic prescribing systems in English acute NHS trusts: a cross-sectional survey', *PloS One,* 8(11), pp. e80378. doi: 10.1371/journal.pone.0080378.

AL-KANDARI, F. & THOMAS, D. (2009) 'Factors contributing to nursing task incompletion as perceived by nurses working in Kuwait general hospitals', *Journal of Clinical Nursing,* 18(24), pp. 3430-3440. doi: 10.1111/j.1365-2702.2009.02795.x.

ALLEN, D. (2015) 'Nursing and the future of 'care' in health care systems', *Journal of Health Services Research & Policy,* 20(3), pp. 129-130. doi: 10.1177/1355819615577806.

ALLEN, D. (2004) 'Re-reading nursing and re-writing practice: towards an empirically based reformulation of the nursing mandate', *Nursing Inquiry,* 11(4), pp. 271-283. doi: 10.1111/j.1440-1800.2004.00234.x.

ALLEN, D. (2001) *The changing shape of nursing practice.* London: Routledge, Taylor & Francis e-Library.

ARBER, A. (2006) 'Reflexivity. A challenge for the researcher as practitioner', *Journal of Research in Nursing,* 11(2), pp. 147-157. doi: 10.1177/1744987106056956.

ASMIRAJANTI, M., HAMID, A. & HARIYATI, R. (2019) 'Nursing care activities based on documentation', *BMC Nursing,* 18(Suppl 1):32. doi: 10.1186/s12912-019-0352-0.

BAE, S. (2012) 'Nursing overtime: why, how much, and under what working conditions?', *Nursing Economic$,* 30(2), pp. 60-72.

BAGAAJAV, A., MYAGMARJAV, S., NANJID, K. & CHAE, Y. (2011) 'Burnout and job stress among Mongolian doctors and nurses', *Industrial Health,* 49(5), pp. 582-588. doi: 10.2486/indhealth.MS1256.

BALL, J., GRIFFITHS, P., RAFFERTY, A., LINDQVIST, R., ET AL. (2016) 'A cross-sectional study of 'care left undone' on nursing shifts in hospitals', *Journal of Advanced Nursing,* 72(9), pp. 2086-2097. doi: 10.1111/jan.12976.

BATCH, M. & WINDSOR, C. (2015) 'Nursing casualization and communication: a critical ethnography', *Journal of Advanced Nursing,* 71(4), pp. 870-880. doi: 10.1111/jan.12557.

BEAUCHAMP, T.L. (2003) 'Methods and principles in biomedical ethics', *Journal of Medical Ethics,* 29, pp. 269-274

BECK, C. T. (2016) 'Introduction to qualitative nursing research', In: Beck, C.T. (ed.) *Routledge international handbook of qualitative nursing research.* Abingdon, Oxon, UK: Routledge, pp. 1-10.

BECKER, J. (1992) *The lost country. Mongolia revealed.* Seven Oaks: Hodder and Stoughton Ltd.

BEKKER, M., COETZEE, S., KLOPPER, H. & ELLIS, S. (2015) 'Non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals', *Journal of Nursing Management,* 23(8), pp. 1115-1125. doi: 10.1111/jonm.12261.

BLACK, S., GARDNER, D., PIERCE, J., & STEERS, R. (2019) *Organizational behavior.* OpenStax. Available at: https://openstax.org/books/organizational-behavior/pages/1-introduction (Last update: 14 December 2020. Accessed: 30 March 2021).

BOADU, N.Y. & HIGGINBOTTOM, G.M. (2015) 'Using malaria rapid diagnostic tests in Ghana: A focused ethnography', in De Chesnay, M. (ed.) *Nursing research using ethnography.* New York: Springer.

BREDA, K.L. (2016) 'Critical ethnography', in Beck, C. (ed.) *Routledge international handbook of qualitative nursing research.* Abingdon, Oxon, UK: Routledge, pp. 230-241.

BRIATTE, I., ALLIX-BÉGUEC, C., GARNIER, G. & MICHEL, M. (2019) 'Revision of hospital work organization using nurse and healthcare assistant workload indicators as decision aid tools'. *BMC Health Services Research,* 19(1), pp. 554. doi: 10.1186/s12913-019-4376-7.

BRINK, P.J. (2016) 'Traditional ethnography', in Beck, C. (ed.) *Routledge international handbook of qualitative nursing research.* Abingdon, Oxon, UK: Routledge, pp. 203-212.

BUDDEN, J.S., ZHONG, E.H., MOULTON, P. & CIMIOTTI, J.P. (2013) 'Highlights of the national workforce survey of Registered Nurses', *Journal of Nursing Regulation,* 4(2), pp. 5-14.

BUREAU OF LABOR STATISTICS (2020) *Phlebotomists: occupational outlook handbook.* Available at: https://www.bls.gov/ooh/healthcare/phlebotomists. (Accessed: 12 October 2020).

BUTLER, M., TREACY, M., SCOTT, A., HYDE, A., ET AL. (2006) 'Towards a nursing minimum data set for Ireland: making Irish nursing visible'. *Journal of Advanced Nursing,* 55(3), pp. 364. doi: 10.1111/j.1365-2648.2006.03909.x.

BUUMA, N.D. (2001) 'The twentieth century. From domination to democracy', in Sabloff, P.L.W. (ed.) *Modern Mongolia: reclaiming Ghengis Khan.* Philadelphia, PA: University of Pennsylvania, Museum of Archeology.

CANADIAN INSTITUTE FOR HEALTH INFORMATION (2020) *Physicians*. Available at: https://www.cihi.ca/en/physicians (Accessed: 8 January 2020).

CANADIAN NURSES ASSOCIATION (2015) *Framework for the practice of Registered Nurses in Canada.* 2nd edn. Ottawa: Canadian Nurses Association.

CENTER FOR HEALTH DEVELOPMENT (2018) *Health indicators 2017.* Ulaanbaatar, Mongolia: Ministry of Health.

CHANG, A.M., LAM, L. & LAM, L.W. (1998) 'Nursing activities following the introduction of health care assistants', *Journal of Nursing Management,* 6(3), pp. 155-163. doi: 10.1046/j.1365-2834.1998.00063.x.

COENEN, A. (2003) 'The International Classification for Nursing Practice (ICNP®) programme: advancing a unifying framework for nursing', *Online Journal of Issues in Nursing,* 8(2).

DALL'ORA, C., GRIFFITHS, P., HOPE, J., BARKER, H. & SMITH, G.B. (2020) 'What is the nursing time and workload involved in taking and recording patients' vital signs? A systematic review', *Journal of Clinical Nursing,* 29(13-14), pp. 2053-2068. doi: 10.1111/jocn.15202.

DAMIRAN, D. (2014) *Head nurses' authentic leadership and job satisfaction among nurses in general hospitals: the central region, Mongolia*. Masters thesis. Chiang Mai University, Thailand.

DASHNYAM, S. (2012) *Өрийн нөхцөлд үзүүлж буй сувилахуйн тусламийг боловсронгуй болгох асуудалд [The situation of nursing and nursing education]*. PhD thesis. Mongolian National University of Medical Sciences, Ulaanbaatar.

DAVIES, G. (2020) *The NHS working force.* Available at: www.nao.org.uk (Accessed: 8 August 2020)

DE CHESNAY, M. (2015) 'Overview of ethnography', in De Chesnay, M. (ed.) *Nursing research using ethnography.* New York: Springer Publishing, pp. 1-14.

DOCHTERMAN, J., TITLER, M., WANG, J., REED, D., ET AL. (2005) 'Describing use of nursing interventions for three groups of patients', *Journal of Nursing Scholarship,* 37(1), pp. 57-66. doi: 10.1111/j.1547-5069.2005.00003.x.

DOUGLAS, C., OSBORNE, S., REID, C., BATCH, M., ET AL. (2014) 'What factors influence nurses' assessment practices? Development of the barriers to nurses' use of physical assessment scale', *Journal of Advanced Nursing,* 70(11), pp. 2683-2694. doi: 10.1111/jan.12408.

DRENNAN, V.M. & ROSS, F. (2019) ‘Global nurse shortages—the facts, the impact and action for change’, *British Medical Bulletin,* 130(1), pp. 25-37. doi: 10.1093/bmb/ldz014.

DUBOIS, C. & SINGH, D. (2009) ‘From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management’, *Human Resources for Health,* 7(1), pp. 87. doi: 10.1186/1478-4491-7-87.

DUCHSCHER, J.B. & MYRICK, F. (2008) ‘The prevailing winds of oppression: understanding the new graduate experience in acute care’, *Nursing Forum,* 43(4), pp. 191-206. doi: 10.1111/j.1744-6198.2008.00113.x.

EAGAR, S.C., COWIN, L.S., GREGORY, L. & FIRTKO, A. (2010) ‘Scope of practice conflict in nursing: a new war or just the same battle?’, *Contemporary Nurse: A Journal for the Australian Nursing Profession,* 36(1/2), pp. 86-95.

ELO, S. & KYNGÄS, H. (2008) ‘The qualitative content analysis process’, *Journal of Advanced Nursing,* 62(1), pp. 107-115. doi: 10.1111/j.1365-2648.2007.04569.x.

EMERSON, R.M., FRETZ, R.I. & SHAW, L.L. (2011) *Writing ethnographic fieldnotes.* 2nd edn. Chicago: Univ. of Chicago Press.

FARQUHARSON, B., BELL, C., JOHNSTON, D., JONES, M., ET AL. (2013) ‘Frequency of nursing tasks in medical and surgical wards’, *Journal of Nursing Management,* 21(6), pp. 860-866. doi: 10.1111/jonm.12110.

FEALY, G.M. (2004) ‘‘The good nurse’: visions and values in images of the nurse’, *Journal of Advanced Nursing,* 46(6), pp. 649-656. doi: 10.1111/j.1365-2648.2004.03056.x.

FOOTMAN, K., ROBERTS, B., MILLS, A., RICHARDSON, E. & MCKEE, M. (2013) ‘Public satisfaction as a measure of health system performance: a study of nine countries in the former Soviet Union’, *Health Policy,* 112(1), pp. 62-69. doi: 10.1016/j.healthpol.2013.03.004.

FRANKEN, M. & KOOLMAN, X. (2013) ‘Health system goals: a discrete choice experiment to obtain societal valuations’, *Health Policy,* 112(1), pp. 28-34. doi: 10.1016/j.healthpol.2012.12.013.

FRY, M. (2012) ‘An ethnography: understanding emergency nursing practice belief systems’, *International Emergency Nursing,* 20(3), pp. 120. doi: 10.1016/j.ienj.2011.09.002.

GAALAN, K., KUNAVIKTIKUL, W., AKKADECHANUNT, T., WICHAIKHUM, O., & TURALE, S. (2019) ‘Factors predicting quality of nursing care among nurses in tertiary care hospitals in Mongolia’, *International Nursing Review,* 66(2), pp. 176-182. doi: 10.1111/inr.12502.

GOOSSEN, W., EPPING, P., FEUTH, T., VAN DEN HEUVEL, W., HASMAN, A., & DASSEN, T. ET AL. (2001). ‘Using the nursing minimum data set for the Netherlands (NMDSN) to illustrate differences in patient populations and variations in nursing activities’, *International Journal of Nursing Studies,* 38(3), pp. 243-257. doi: 10.1016/S0020-7489(00)00075-4.

GOOSSEN, W., EPPING, P., VAN DEN HEUVEL, W., FEUTH, T., ET AL. (2000) 'Development of the nursing minimum data set for the Netherlands (NMDSN): identification of categories and items', *Journal of Advanced Nursing,* 31(3), pp. 536-547. doi: 10.1046/j.1365-2648.2000.01308.x.

GRANT, M.J. & BOOTH, A. (2009) 'A typology of reviews: an analysis of 14 review types and associated methodologies', *Health Information & Libraries Journal,* 26(2), pp. 91-108. doi: 10.1111/j.1471-1842.2009.00848.x.

GRIFFITHS, P. (2011) 'A community of practice: the nurses' role on a medical assessment unit', *Journal of Clinical Nursing,* 20(1/2), pp. 247; 247. doi: 10.1111/j.1365-2702.2009.03135.x.

GRIFFITHS, P., RECIO-SAUCEDO, A., DALL'ORA, C., BRIGGS, J., MARUOTTI, A., ET AL. (2018) 'The association between nurse staffing and omissions in nursing care: a systematic review', *Journal of Advanced Nursing,* 74(7), pp. 1474-1487. doi: 10.1111/jan.13564.

GRIFFITHS, P., SAVILLE, C., BALL, J., JONES, J., ET AL. (2020) 'Nursing workload, nurse staffing methodologies and tools: a systematic scoping review and discussion', *International Journal of Nursing Studies,* 103: 103487. doi: 10.1016/j.ijnurstu.2019.103487.

GRINSPUN, D. (2010) *The social construct of caring in nursing*. PhD thesis. York University, Canada.

GROSSO, S., TONET, S., BERNARD, I., CORSO, J., ET AL. (2019) 'Non-nursing tasks as experienced by nurses: a descriptive qualitative study', *International Nursing Review,* 66(2), pp. 259-268. doi: 10.1111/inr.12496.

HAMMERSLEY, M. & ATKINSON, P. (2007) *Ethnography. Principles in practice.* 3rd edn. London: Routledge.

HEIDER, D., MATSCHINGER, H., MÜLLER, H., SAUM, K., ET AL. (2014) 'Health care costs in the elderly in Germany: an analysis applying Andersen's behavioral model of health care utilization', *BMC Health Services Research,* 14:71. doi: 10.1186/1472-6963-14-71.

HIGGINBOTTOM, G.M., PILLAY, J.J. & BOADU, N.Y. (2013) 'Guidance on performing focused ethnographies with an emphasis on healthcare research', *The Qualitative Report,* 18, pp. 1-16.

HOPE, J., RECIO-SAUCEDO, A., FOGG, C., GRIFFITHS, P., ET AL. (2018) 'A fundamental conflict of care: nurses' accounts of balancing patients' sleep with taking vital sign observations at night', *Journal of Clinical Nursing,* 27(9-10), pp. 1860-1871. doi: 10.1111/jocn.14234.

HÜBSCH, C., MÜLLER, M., SPIRIG, R. and KLEINKNECHT-DOLF, M. (2020) 'Performed and missed nursing care in Swiss acute care hospitals: conceptual considerations and psychometric evaluation of the German MISSCARE questionnaire', *Journal of Nursing Management,* 28(8), pp. 2048-2060. doi: 10.1111/jonm.13026.

HUMPHREY, C. (1995) 'Chiefly and shamanistic landscapes in Mongolia', in Hirsch, E. & O'Hanlon, M. (eds.) *The anthropology of landscapes.* Oxford, U.K.: Oxford University Press, pp. 135-162.

HURLOCK-CHOROSTECKI, C., FORCHUK, C., ORCHARD, C., SOEREN, M. & REEVES, S. (2014) 'Hospital-based nurse practitioner roles and interprofessional practice: a scoping review', *Nursing and Health Sciences,* 16(3), pp. 403-410. doi: 10.1111/nhs.12107.

INTERNATIONAL COUNCIL OF NURSES (2021) *Who we are. Members list.* Available at: https://www.icn.ch/who-we-are/membership (Accessed: 12 March 2021).

INTERNATIONAL COUNCIL OF NURSES (2002) *Nursing definitions.* Available at: https://www.icn.ch/nursing-policy/nursing-definitions (Accessed: 22 September 2020).

JACKSON, K., WHITE, D., BESNER, J. & NORRIS, J. (2014) 'Optimizing enactment of nursing roles: redesigning care processes and structures', *Journal of Healthcare Leadership,* 6, pp. 1-14. doi: 10.2147/JHL.S53603.

JACOB, E., MCKENNA, L. & D'AMORE, A. (2014) 'Senior nurse role expectations of graduate registered and enrolled nurses on commencement to practice', *Australian Health Review,* 38(4), pp. 432-9. doi: 10.1071/AH13216.

JERRYSON, M. (2007) *Mongolian Buddhism. The rise and fall of the Sangha.* Chiangmai: Silkworm Books.

JOHN HOPKINS MEDICINE (2020) *Health: prevention and wellness: Ayurveda*. Available at: https://www.hopkinsmedicine.org/health/wellness-and-prevention/ayurveda (Accessed: 30 December 2020).

JOHNSON, M. & LONG, T. (2010). 'Research ethics', in Gerrish, K. & Lacey, A. (eds.) *The research process in nursing, 6th edn,* Chichester: Wiley-Blackwell, pp. 27-35.

JONES, T.L. (2015) 'A descriptive analysis of implicit rationing of nursing care: frequency and patterns in Texas', *Nursing Economic$,* 33(3), pp. 144-154.

KALISCH, B.J. (2006) 'Missed nursing care: a qualitative study', *Journal of Nursing Care Quality,* 21(4), pp. 306-315. doi: 10.1097/00001786-200610000-00006.

KALISCH, B.J., LANDSTROM, G.L. & HINSHAW, A.S. (2009) 'Missed nursing care: a concept analysis', *Journal of Advanced Nursing,* 65(7), pp. 1509-1517. doi: 10.1111/j.1365-2648.2009.05027.x.

KEEN, D. & DE CHESNAY, M. (2015) 'State of the art in nursing research using ethnography', in De Chesnay, M. (ed.) *Nursing research using ethnography.* New York: Springer Publishing, pp. 15-36.

KEERS, R., WILLIAMS, S., COOKE, J. & ASHCROFT, D. (2013) 'Causes of medication administration errors in hospitals: a systematic review of quantitative and qualitative evidence', *Drug Safety,* 36(11), pp. 1045-1067. doi: 10.1007/s40264-013-0090-2.

KEMP, H. (2000) *Steppe by Step.* London: Monarch Books.

KIM, H.S. (2015) *The essence of nursing practice: philosophy and perspective.* New York: Springer.

KNOBLAUCH, H. (2005) 'Focused ethnography', *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research,* 6(3), pp. Art. 44. doi: 10.17169/fqs-6.3.20.

KUSI-APPIAH, E., DAHLKE, S., STAHLKE, S. & HUNTER, K. (2019) 'Acute care nursing team members' perceptions of roles: their own and each other's', *Journal of Nursing Management,* 27(8), pp. 1784-1790. doi: 10.1111/jonm.12877.

LEE, E. & LEE, M. (2006) 'Comparison of nursing interventions performed by medical-surgical nurses in Korea and the United States', *International Journal of Nursing Terminologies and Classifications,* 17(2), pp. 108-17. doi: 10.1111/j.1744-618X.2006.00025.x.

LEE, S. & YU, S. (2018) 'Changes in nursing professions' scope of practice: a pilot study using electronic nursing records', *Health Policy and Technology,* 7(1), pp. 15-22. doi: 10.1016/j.hlpt.2017.12.003.

LIMA, J.C., SILVA, A., & CALIRI, M. (2020) 'Omission of nursing care in hospitalization units', *Revista Latino-Americana de Enfermagem,* 28, pp. e3233. doi: 10.1590/1518-8345.3138.3233.

LUVSANTSEND, B. (2016). *Сувилахуйн тусламж үйлчилгээний талаарх эмчлүүлэгчийн ойлголтыг судлах нь [A study on patients' understanding of nursing services]*. Masters thesis. Etugen University, Ulaanbaatar.

LUVSANZUNDUI, T. (2016). *Захын хураагуур судсанд уян зүү тавьж буй сувилагчийн мэдлэг чадварыг үнэлэх нь. [Assessment of the knowledge and skills of nurses conducting venepuncture.]*. Masters thesis. Mongolian National University of Medical Sciences.

MACKINNON, K., BUTCHER, D. & BRUCE, A. (2018) 'Working to full scope: the reorganization of nursing work in two Canadian community hospitals', *Global Qualitative Nursing Research,* 5, pp. 1-14. doi: 10.1177/2333393617753905.

MAIER, C., KÖPPEN, J., BUSSE, R., ELLIOT, R., ET AL. (2018) 'Task shifting between physicians and nurses in acute care hospitals: cross-sectional study in nine countries', *Human Resources for Health,* 16(1), pp. 24.

MANNAY, D. & MORGAN, M. (2015) 'Doing ethnography or applying a qualitative technique? Reflections from the 'waiting field'', *Qualitative Research,* 15(2), pp. 166-182. doi: 10.1177/1468794113517391.

MANTOVAN, F., MUZZANA, C., SCHUBERT, M. & AUSSERHOFER, D. (2020) '"It's about how we do it, not if we do it". Nurses' experiences with implicit rationing of nursing care in acute care hospitals: a descriptive qualitative study', *International Journal of Nursing Studies,* 109, pp. 103688. doi: 10.1016/j.ijnurstu.2020.103688.

MARK, B. (2002) 'What explains nurses' perceptions of staffing adequacy?', *Journal of Nursing Administration,* 32(5), pp. 234-242.

MCFARLAND, D.M. (2016) 'How to do ethnography', in De Chesnay, M. (ed.) *Nursing research using ethnography.* New York: Springer Publishing, pp. 95-102.

MIJOVIC, H., MCKNIGHT, J. & ENGLISH, M. (2016) ‘What does the literature tell us about health workers' experiences of task-shifting projects in sub-Saharan Africa? A systematic, qualitative review’, *Journal of Clinical Nursing,* 25(15-16), pp. 2083-2100. doi: 10.1111/jocn.13349.

MILES, M. & HUBERMAN, A. (1994) *Qualitative analysis: an expanded sourcebook.* 2nd edn. Thousand Oaks, CA: Sage Publications.

MNUMS (no date) *School of nursing*. Available at: https://mnums.edu.mn/school (Accessed: 5 January 2021).

MNUMS (2016) *Мэргэжилтний цогц чадамж [Professional holistic skills].* 1st edn. Ulaanbaatar: Mongolian National University of Medical Sciences.

MNUMS (2014) *85 жил түүхт явдал [85 year history of events].* Ulaanbaatar: Mongolian National University of Medical Sciences.

MOHER, D., LIBERATI, A., TETZLAFF, J., & ALTMAN, D.G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ,* 339: b2535. doi: 10.1136/bmj.b2535

MONGOLIAN ACADEMY OF SCIENCES (no date) *Mongolia journals online*. Available at: https://www.mongoliajol.info/index.php/index (Accessed: 7 January 2021).

MONGOLIAN NURSING ASSOCIATION (2016) *Монголын сувилагчдын нийгэмлэг түүхэн замнал - 20 жил [Twenty-year history of the Mongolian Nursing Association].* Ulaanbaatar, Mongolia: ZDM Publishing Company.

MONTAGU, I. (1956) *Land of blue sky. A portrait of modern Mongolia.* London: Dobson Books.

MOORE, J., PRENTICE, D., CRAWFORD, J., LANKSHEAR, S., ET AL. (2019) ‘Collaboration among registered nurses and practical nurses in acute care hospitals: a scoping review’, *Nursing Forum,* 54(3), pp. 376-385. doi: 10.1111/nuf.12339.

MORRIS, R., MACNEELA, P., SCOTT, A., TREACY, P. & HYDE, A. (2007) ’Reconsidering the conceptualization of nursing workload: literature review’, *Journal of Advanced Nursing,* 57(5), pp. 463-471. doi: 10.1111/j.1365-2648.2006.04134.x.

MORRIS, R., MATTHEWS, A. & SCOTT, A. (2014) ‘Validity, reliability and utility of the Irish nursing minimum data set for general nursing in investigating the effectiveness of nursing interventions in a general nursing setting: a repeated measures design’, *International Journal of Nursing Studies,* 51(4), pp. 562-571. doi: 10.1016/j.ijnurstu.2013.07.011.

MORSE, J.M. (2016a) ‘The development of qualitative nursing research’, in Beck, C. (ed.) *Routledge international handbook of qualitative nursing research.* Abingdon, Oxon, UK: Routledge, pp. 13-31.

MORSE, J.M. (2016b) ‘Underlying ethnography’, *Qualitative Health Research,* 26(7), pp. 875-876. doi: 10.1177/1049732316645320.

MORSE, J.M. (2012) *Qualitative health research: creating a new discipline.* Kindle (2016) ed. Routledge.

MORSE, J.M. & FIELD, P.A. (1995) *Qualitative research methods for health professionals.* 2nd edn. Thousand Oaks, CA: SAGE Publications.

MUNHALL, P.L. (2007) *Nursing research. A qualitative perspective.* 4th edn. Sudbury, MA, USA: Jones and Bartlett.

MURRAY, E. (2004) 'Russian nurses: from the Tsarist Sister of Mercy to the Soviet comrade nurse: a case study of absence of migration of nursing knowledge and skills', *Nursing Inquiry,* 11(3), pp. 130-137. doi: 10.1111/j.1440-1800.2004.00223.x.

MYNY, D., VAN GOUBERGEN, D., GOBERT, M., VANDERWEE, K., ET AL. (2011) 'Non-direct patient care factors influencing nursing workload: a review of the literature', *Journal of Advanced Nursing,* 67(10), pp. 2109-2129. doi: 10.1111/j.1365-2648.2011.05689.x.

NEMEKHEE, O. (2014) 'Эмнэлгийн тусламж үйлчилгээний чанарыг сайжруулахад сувилачидын оролцоо ба хэтийн төлөвлөлт [Improvement and future path of nursing care]', *85th anniversary of the nursing school and the 3rd international nursing conference.* Mongolian National University of Medical Sciences, 9-10 October. Ulaanbaatar.

NESBITT, R. (2003) *The geography of thought. How Asians and Westerners think differently… and why.* New York: Free Press.

NIGHTINGALE, F. (2017) *Notes on nursing. What it is, and what it is not.* Kindle Edition: Enhanced Media Published.

NMC (2015) *The code. Professional standards of practice and behaviour for nurses, midwives and nursing associates.* Nursing and Midwifery Council, UK.

NORRIC (2005) *The system of education in Russia.* The Danish Centre for Assessment of Foreign Qualifications (DK-ENIC/NARIC) edn. Nordic Recognition Network (NORRIC).

NOWELL, L.S., NORRIS, J.M., WHITE, D.E., & MOULES, N.J. (2017) 'Thematic analysis: striving to meet the trustworthiness criteria', *International Journal of Qualitative Methods,* 1, pp.1-13. doi: 10.1177/1609406917733847

NSO (2021) *Public health of population.* Available at: http://www.1212.mn/ (Accessed: 9 January 2021).

NSO (2018) *Monthly average monetary income and expenditure per household, by 4th quarter of 2017*. Available at: https://www.en.nso.mn/content/249 (Accessed: 6 January 2020).

NUFFIELD TRUST (2019) *Number of people per GP, nurse, and medical or dental staff since 1949.* Available at: https://www.nuffieldtrust.org.uk/chart/number-of-people-per-gp-nurse-and-medical-or-dental-staff-since-1949 (Accessed: 8 January 2020).

O'BRIEN-PALLAS, L., IRVINE, D., PEEREBOOM, E. & MURRAY, M. (1997) 'Measuring nursing workload: understanding the variability', *Nursing Economic$,* 15(4), pp. 171-182.

OECD (2017) *Health at a glance 2017*. Available at: https://doi.org/10.1787/health_glance-2017-en (Accessed: 9 January 2020).

ONON, U. (2001) *The secret history of the Mongols. The life and times of Chinggis Khan.* Abingdon: Routledge Curzon Press.

OSBORNE, S., DOUGLAS, C., REID, C., JONES, L. & GARDNER, G. (2015) 'The primacy of vital signs – acute care nurses' and midwives' use of physical assessment skills: a cross sectional study', *International Journal of Nursing Studies,* 52(5), pp. 951-962. doi: 10.1016/j.ijnurstu.2015.01.014.

PARK, H. & LEE, E. (2015) 'Incorporating standardized nursing languages into an electronic nursing documentation system in Korea: a pilot study', *International Journal of Nursing Knowledge,* 26(1), pp. 35-42. doi: 10.1111/2047-3095.12038.

PARK, I.S., SUH, Y.O., PARK, H.S., AHN, S.Y., ET AL. (2016) 'The job analysis of Korean nurses as a strategy to improve the Korean nursing licensing examination', *Journal of Educational Evaluation for Health Professions,* 13, pp. 24. doi: 10.3352/jeehp.2016.13.24.

PEW RESEARCH CENTER (2016) *Religions in Mongolia.* Available at: http://www.globalreligiousfutures.org/countries/mongolia/religious_demography (Accessed: 9 January 2020).

RANEGGER, R., HACKL, W. & AMMENWERTH, E. (2014) 'A proposal for an Austrian nursing minimum data set (NMDS): a Delphi study', *Applied Clinical Informatics,* 5(2), pp. 538-547. doi: 10.1186/s12911-015-0198-7.

RANEGGER, R., HACKL, W. & AMMENWERTH, E. (2015) 'Implementation of the Austrian nursing minimum data set (NMDS-AT): a feasibility study', *BMC Medical Informatics and Decision Making,* 15. doi: 10.4338/ACI-2014-04-RA-0027.

RAYMOND, A., LEE, S.F. & BLOOMER, M.J. (2017) 'Understanding the bereavement care roles of nurses within acute care: a systematic review', *Journal of Clinical Nursing,* 26(13-14), pp. 1787-1800. doi: 10.1111/jocn.13503.

RCN (2016) *Preserving people's dignity.* Available at: https://rcni.com/hosted-content/rcn/first-steps/preserving-peoples-dignity (Accessed: 19 October 2020).

RICHARDS, L. (2009) *Handling qualitative data. A practical guide.* 2nd ed. London: Sage Publications.

RICHARDS, L. & MORSE, J.M. (2007) *Readme first for a user's guide to qualitative methods.* 2nd edn. Thousand Oaks, California: Sage Publications.

ROCHE, M.A., DUFFIELD, C., FRIEDMAN, S., DIMITRELIS, S. & ROWBOTHAM, S. (2016) 'Regulated and unregulated nurses in the acute hospital setting: tasks performed, delayed or not completed', *Journal of Clinical Nursing,* 25(1-2), pp. 153-162. doi: 10.1111/jocn.13118.

ROGERS, E.M. (2003). *Diffusion of innovations.* 5th edn. New York: Free Press.

ROPER, J.M. & SHAPIRA, J. (2000) *Ethnography in nursing research.* Thousand Oaks, California: Sage Publications.

ROSSABI, M. (2005) *Modern Mongolia: from khans to commissars to capitalists.* Berkeley and Los Angeles: University of California Press.

SCHILLER, C.J. (2015). 'Critical realism in nursing: an emerging approach', *Nursing Philosophy,* 17, pp. 88-102. doi: 10.1111/nup.12107.

SCHLUTER, J., SEATON, P. & CHABOYER, W. (2011). 'Understanding nursing scope of practice: a qualitative study', *International Journal of Nursing Studies,* 48(10), pp. 1211-1222. doi: 10.1016/j.ijnurstu.2011.03.004.

SCHUBERT, M., GLASS, T.R., CLARKE, S.P., AIKEN, L.H., ET AL. (2008) 'Rationing of nursing care and its relationship to patient outcomes: the Swiss extension of the International Hospital Outcomes Study', *International Journal for Quality in Health Care* 20(4), pp. 227-237. doi: 10.1093/intqhc/mzn017.

SCIENCE AND TECHNOLOGY FOUNDATION (no date) *Electronic database. Dissertations.* Available at: http://data.stf.mn/Publication (Accessed: 7 January 2021).

SHARAV, B. (2012) *Brief history and development of Mongolian traditional medicine.* Available at: https://www.wipo.int/edocs/mdocs/tk/en/wipo_iptk_bkk_09/wipo_iptk_bkk_09_topic6_1.pdf (Accessed: 4 August 2019).

SHARMA, K., HASTINGS, S.E., SUTER, E. & BLOOM, J. (2016) 'Variability of staffing and staff mix across acute care units in Alberta, Canada', *Human Resources for Health,* 14:74 doi: 10.1186/s12960-016-0172-1.

SHURIQUIE, M., WHILE, A. & FITZPATRICK, J. (2008) 'Nursing work in Jordan: an example of nursing work in the Middle East'. *Journal of Clinical Nursing,* 17(8), pp. 999-1010. doi: 10.1111/j.1365-2702.2007.01973.x

SIMBORG, D.W. (1976) 'Rational staffing of hospital nursing services by functional activity budgeting', *Public Health Reports,* 91(2), pp. 118-121.

SMILEY, R.A., LAUER, P., BIENEMY, C., BERG, J.G., ET AL. (2018) 'The 2017 national nursing workforce survey', *Journal of Nursing Regulation,* 3(3), pp. S1-S88. doi: 10.1016/S2155-8256(18)30131-5.

SNELLING, J. (1987) *The Buddhist handbook. A complete guide to Buddhist teaching and practice.* London: Rider

SQUIRES, A. (2004) 'Dimensional analysis of role enactment of acute care nurses', *Journal of Nursing Scholarship,* 36(3), pp. 272-278. doi: 10.1111/j.1547-5069.2004.04049.x.

STREUBERT, H.J. & CARPENTER, D.R. (2011) *Qualitative research in nursing. Advancing the humanistic imperative.* 5th edn. Philadelphia, PA: Wolters Kluwers Health, Lippincott & Wilkins.

SUH, E., KAGAN, S. & STRUMPF, N. (2009) 'Cultural competence in qualitative interview methods with Asian immigrants', *Journal of Transcultural Nursing,* 20(2), pp. 194-201. doi: 10.1177/1043659608330059.

SWIGER, P.A., VANCE, D.E. & PATRICIAN, P.A. (2016) 'Nursing workload in the acute-care setting: a concept analysis of nursing workload'. *Nursing Outlook,* 64(3), pp. 244-254. doi: 10.1016/j.outlook.2016.01.003

TAEJUN LEE MEMORIAL PARK (2001) Dr. Lee Tae-Joon Memorial Park Plaque, Ulaanbaatar, 19 August 2017.

TIEDEMAN, R.G. (2016) *Reference guide to Christian missionary societies in China: from the sixteenth to the twentieth century.* New York: Routledge.

TOURANGEAU, A.E., CUMMINGS, G., CRANLEY, L.A., FERRON, E.M. & HARVEY, S., (2010) 'Determinants of hospital nurse intention to remain employed: broadening our understanding', *Journal of Advanced Nursing,* 66(1), pp. 22-32. doi: 10.1111/j.1365-2648.2009.05190.x.

TURTIAINEN, A., KINNUNEN, J., SERMEUS, W. & NYBERG, T. (2000) 'The cross-cultural adaptation of the Belgium nursing minimum data set to Finnish nursing', *Journal of Nursing Management,* 8(5), pp. 281-290. doi: 10.1046/j.1365-2834.2000.00194.x.

VAN BELLE, E., GIESEN, J., CONROY, T., VAN MIERLO, M., ET AL. (2020) 'Exploring person-centred fundamental nursing care in hospital wards: a multi-site ethnography', *Journal of Clinical Nursing,* 29(11-12), pp. 1933-1944. doi: 10.1111/jocn.15024.

VAN DEN OETELAAR, W., VAN STEL, H., VAN RHENEN, W., STELLATO, R. & GROLMAN, W. (2018) 'Mapping nurses' activities in surgical hospital wards: a time study', *PLoS One,* 13(4) e0191807. doi: 10.1371/journal.pone.0191807.

VAN LEEUWEN, R., TIESINGA, L.J., POST, D. & JOCHEMSEN, H. (2006) 'Spiritual care: implications for nurses' professional responsibility', *Journal of Clinical Nursing,* 15(7), pp. 875-884. doi: 10.1111/j.1365-2702.2006.01615.x.

VAN OOSTVEEN, C., UBBINK, D., HUIS IN HET VELD, J., BAKKER, P. & VERMEULEN, H. (2014) 'Factors and models associated with the amount of hospital care services as demanded by hospitalized patients: a systematic review', *PLoS One,* 9(5), pp. e98102. doi: 10.1371/journal.pone.0098102.

WESTBROOK, J. & AMPT, A. (2009) 'Design, application and testing of the work observation method by activity timing (WOMBAT) to measure clinicians' patterns of work and communication', *International Journal of Medical Informatics,* 78, pp. S25-S33. doi: 10.1016/j.ijmedinf.2008.09.003.

WESTBROOK, J., DUFFIELD, C., LI, L. & CRESWICK, N. (2011) 'How much time do nurses have for patients? A longitudinal study quantifying hospital nurses' patterns of task time distribution and interactions with health professionals', *BMC Health Services Research,* 11, pp. 319. doi: 10.1186/1472-6963-11-319.

WHITTEMORE, R. & KNAFL, K. (2005) 'The integrative review: updated methodology', *Journal of Advanced Nursing,* 52(5), pp. 546-553. doi: 10.1111/j.1365-2648.2005.03621.x.

WHO (2020a) *About WHO.* Available at: https://www.who.int/about/what-we-do (Accessed: 27 December 2020).

WHO (2020b) *Core competencies for infection prevention and control professionals.* Available at: https://www.who.int/publications/i/item/9789240011656 (Accessed: 11 March 2021).

WHO (2020c) *State of the world's nursing.* Available at: https://www.who.int/publications/i/item/9789240003279 (Accessed: 25 November 2020).

WHO (2020d) *State of the world's nursing. Mongolia*. Available at: https://apps.who.int/nhwaportal (Accessed: 25 November 2020).

WHO (2018) *WHO report on surveillance of antibiotic consumption: 2016-2018 early implementation.* Available at: https://www.who.int/publications/i/item/who-report-on-surveillance-of-antibiotic-consumption (Accessed: 16 March 2021).

WHO (2013a) 'Mongolia health system review'. *Health System in Transition,* 3(2) Available at: http://iris.wpro.who.int/handle/10665.1/5563 (Accessed: 16 March 2021).

WHO (2013b) 'Rocky road from the Semashko to a new health model', *Bulletin of the World Health Organization,* 91, pp.320-321 doi: 10.2471/BLT.13.030513.

WHO (2012) *Health service delivery profile: Mongolia.* Ulaanbaatar: WHO and Ministry of Health.

WHO (2009) *WHO guidelines on hand hygiene in health care.* Available at: https://www.who.int/infection-prevention/publications/hand-hygiene-2009/en (Accessed: 16 March 2021).

WHO REGIONAL OFFICE FOR EUROPE (2019) *'% of nurses working in hospitals',* Available at: https://gateway.euro.who.int/en/indicators/hfa_519-5330-of-nurses-working-in-hospitals (Accessed: 8 August 2020).

WILLIAMS, I., RYCROFT-MALONE, J., & BURTON, C.R. (2017). 'Bringing critical realism to nursing practice: Roy Bhaskar's contribution', *Nursing Philosophy*, 18(2), e12130. doi: 10.1111/nup.12130

WOLF, A. (2017) 'The role of the interpreter/translator in the research process', in Robinson-Pant, A. & Wolf, A. (eds.) *Researching across languages and cultures. A guide to doing research interculturally.* Abington, OX, U.K.: Routledge, pp. 63-87.

WOLF, Z.R. (2007) 'Ethnography: the method', in Munhall, P.L. (ed.) *Nursing research. A qualitative perspective.* 4th edn. Sudbury, MA: Jones and Bartlett, pp. 293-330.

WORLD BANK (2021) *Country classification: World Bank country and lending groups.* Available at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups (Accessed: March 24 2021).

WORLD BANK (2020) *Databank: world development indicators.* Available at: https://databank.worldbank.org/reports (Accessed: 30 December 2020).

WORLD BANK (2019) *Population ages 65 and above.* Available at: https://data.worldbank.org/indicator/ (Accessed: 13 October 2020).

WORLD BANK (2007) *The Mongolian health system at a crossroads: an incomplete transition to a post-Semashko Model (English).* Mongolia Paper Series No. 2007-1. Available at: http://documents.worldbank.org/curated/en/965081468757844419/The-Mongolian-health-system-at-a-crossroads-an-incomplete-transition-to-a-post-Semashkom-Model (Accessed: 16 March 2021)

WUEST, J. (2007) 'Grounded theory: the method', in Munhall, P.L. (ed.) *Nursing research. A qualitative perspective.* 4th edn. Sudbury, MA, USA: Jones and Bartlett, pp. 239-271.

ZADEH, R., SHEPLEY, M., & WAGGENER, L. (2012) 'Rethinking efficiency in acute care nursing units: analyzing nursing unit layouts for improved spatial flow', *Health Environments Research & Design Journal,* 6(1), pp. 39-65.

ZAMBAS, S.I., SMYTHE, E.A. & KOZIOL-MCLAIN, J. (2016) 'The consequences of using advanced physical assessment skills in medical and surgical nursing: a hermeneutic pragmatic study', *International Journal of Qualitative Studies on Health and Well-being,* 11, pp. 32090. doi: 10.3402/qhw.v11.32090.

Appendices

Appendix 1. Nursing Salaries

Nursing Salary Comparison Calculations[1] (rounded to the nearest decimal)

Country	Average Annual Wage	Minimum Annual Wage	Nursing Annual Wage	Nursing Wage: national average wage [proportion]	Nursing Wage: national minimum wage [proportion]
Mongolia	₮950,000/month[2] £3742/year	₮240,000/month[3] £945/year	₮480,000/month[4] £1,890/year	0.5[5]	2.0
U.K.	£34,409[6]	£14,976[7]	£30,764[8]	0.9	2.1
Canada	Cdn $63,953[9] £34,409	Cdn $22,880[10] £13,812	Cdn $69,084[11] £41,704	1.2	3.0

GDP-PPP comparisons (Calculated in USD)[12]

Country	**Rank[12]**	**PPP[12]**	**World Bank (2017)[13]**
Canada	12	$52,205	$48,634
U.K.	38	$43,111	$45,910
Mongolia	99	$13,700	$11,312

[1] All conversions into British Pounds were calculated from https://www1.oanda.com/currency/converter/ for the date of Dec. 30, 2016. This date was chosen because the average nursing salary data for Canada and the UK was obtained for 2016, while the salary information for Mongolia was obtained in 2017.

[2] Mongolia reports average household income rather than individual income. https://www.en.nso.mn/content/249. Data is from the 4th Quarter of 2017. The number of earners per household were not specified. Household size estimated to be 3.6 people /household https://www.unicef.org/mongolia/reports/social-indicator-sample-survey-2018-full-report-mn. Accessed 17 January 2021.

[3] AKIpress News Agency (January 3, 2017) 'Mongolia raises minimum wage by 25%' https://akipress.com/news:587219/ Accessed: 20 December 2020.

[4] 2017 reported salary by nurses at a tertiary care hospital in Ulaanbaatar, Mongolia (Biro, A. unpublished thesis)

[5] This was calculated from the data of the average household earning (see Note #2 above). Some nurses live in households with more than one income earner; some nurses are the sole income earners for their families.

[6] OECD.stat https://stats.oecd.org/Index.aspx?DataSetCode=AV_AN_WAGE Accessed: 20 Dec 2021.

[7] OECD.stat https://stats.oecd.org/Index.aspx?DataSetCode=MW_CURP Accessed: 20 Dec 2021.

[8] Gavin G, Rhodes B, & Lapiste C. (2019) What is the financial incentive to immigrate? An analysis of salary disparities between health workers working in the Caribbean and popular destination countries. *BMC Health Services Research, 19*, *DOI: 10.1186/s12913-019-3896-5.* Data in the article is from 2016.

[9] OECD.stat https://stats.oecd.org/Index.aspx?DataSetCode=AV_AN_WAGE Accessed: 20 Dec 2021.

[10] OECD.stat https://stats.oecd.org/Index.aspx?DataSetCode=MW_CURP Accessed: 20 Dec 2021.

[11] Data from Gavin et al. (2019) see above citation

[12] CIA https://www.cia.gov/LIBRARY/publications/the-world-factbook/fields/211rank.html Accessed: 30 Dec 2021.

[13] The World Bank. DataBank-World Development Indicators https://databank.worldbank.org/ Accessed: 30 Dec 2021.

Appendix 2. Consent Forms, Questionnaires, and Translator Agreements

Field Observations: Information, Consent, & Request to Withdraw (English / Mongolian)

Nursing Research Information Form: Nursing Unit

Research Title: The Role and Scope of Practice of Nurses in Mongolia

Name and Contact Information of the Researcher:

Name: B. Anne / **Phone**: 95737215 / **Email**: suvilagchnar@gmail.com

Information about the Research

The purpose of this research is to understand the role and scope of practice of nurses in Mongolia. Anne, who is a doctoral nursing student, wants to learn about the role of nurses, the work nurses do, and the things that influence the nursing profession in Mongolia. In order to get a good understanding of these things, Anne will be spending time on the nursing ward to observe and learn what happens.

During Anne's time on the nursing unit, she may ask people questions about what she has seen or heard so that she can better understand what happens. Some nurses will be asked to let Anne follow them around during their shifts so that she gets experience for what it is like to be a nurse in Mongolia.

You will be asked to provide some information about yourself. This is voluntary. Any information you provide will be combined with information from other nurses so that only a general description of the nurses will be available.

Any personal information will be kept strictly confidential. You name will never appear in the study. Only a code number will appear on any documents. Consent forms, questionnaires, and notes will be kept in a secure file in a secure location.

Participation:

Although Anne will be spending time on the nursing ward, if you do not want to be in this study, tell Anne so that she will not directly observe or learn from you. You can also ask that she not be assigned to follow you. You do not have to answer her questions. If you don't want her to hear your conversation, you may ask her to leave until you have finished talking. If you change your mind and would like to fully participate, you may let her know at any time.

If you want to withdraw from the study you need to notify Anne within 1 month of the time that she has finished working on the nursing unit.

Results from the study may be used to help other nurses, hospital directors, and nursing teachers understand what it is like to be a nurse and what is important to nurses in their work. It might also be helpful for understanding what changes could be helpful for the future of nursing. There are no financial or job benefits from taking part in this study.

There are no known risks from participating or not participating in this study.

The information learned from this research may be published, presented at conferences, or used for teaching purposes, but your name and any descriptions that might identify you or the nursing ward will not be used.

If you have any questions about the study, you may contact Anne @ 976-95737215 or by email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies: Telephone: (976) 7711-0486 Email: info@mongoliacenter.org

The Role and Scope of Nursing Practice in Mongolia

Consent Form for Unit Nurses

	Initials
The purpose of the research has been explained to me	
Any questions I had have been answered	
I know that I may contact the researchers listed on the information form	
I understand the possible benefits and risks from joining this study	
I have been assured that data from this study will be kept confidential	
I understand that findings from this research may be presented in conferences, publications, and/or be used for teaching purposes.	
I have been assured that I will remain anonymous	
I understand that I can withdraw from the study but that (a) I must notify Anne and (b) I need to notify Anne either before she leaves the ward or within 1 month after she finishes working on the ward	
I have been given a copy of the information and consent form	

Signature of participant: _____ Date: _____

Signature of researcher: _____ Date: _____

If you have any questions about the study, you may contact Anne @ 976-95737215 or by email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies: Telephone: (976) 7711-0486 Email: info@mongoliacenter.org

Agreement to withdraw from the research study on

The Role and Scope of Nursing Practice in Mongolia

Unit Nurses

	Initials
I have notified Anne according to the information and instructions in the research information form	
I have a copy of the research information form	
Any questions I had have been answered	
I know that I may contact the researchers listed on the information form	
I have been given a copy of this 'Agreement to Withdraw from Research' form	

Printed Name of participant: _____

Signature of participant:_____ Date: _____

Printed Name of researcher: _____

Signature of researcher: _____ Date: _____

If you have any questions about the study, you may contact Anne @ 976-95737215 or by email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies: **Telephone:** (976) 7711-0486 **Email:** info@mongoliacenter.org

Сувилахуйн Судалгааны Мэдээллийн Маягт: Сувилахуйн алба

Судалгааны ажил: Монгол Сувилагчийн ажлын үүрэг болон цар хүрээ

Судлаачын Нэр ба Холбогдох Хаяг:

Нэр: Б. Анн / **Утас**: 95737215 / **Email**: suvilagchnar@gmail.com

Судалгааны талаарх Мэдээлэл

Энэхүү судалгааны зорилго нь Монгол дахь сувилагч нарын үүрэг болон ажлын цар хүрээг таньж мэдэх юм. Сувилахуйн ухааны докторын зэрэг хамгаалахаар суралцаж буй Анн нь Монгол дахь сувилахуйн мэргэжилд нөлөөлдөг зүйлс болон сувилагч нарын үүрэг хариуцлага, өдөр тутмын ажил ба ажлын цар хүрээ зэргийг олж мэдэхийг зорьж байна. Энэ талаар сайн ойлголттой болохын тулд Анн хэсэг хугацааг сувилагчын тасагт өнгөрүүлэн тэнд болдог зүйлсийг ажиглан, суралцах болно.

Анн тасагт байх хугацаандаа сонссон эсвэл харсан зүйлийнхээ талаар бусдаас лавлан асууж болох ба ингэснээр тухайн үйл явдлын талаар сайн ойлголтыг авах болно. Монголд сувилагч нарын нөхцөл байдал ямар байдгийг зарим сувилагчын ээлжинд хамт гарч дагаснаар бодитоор мэдэж авна.

Та болон таны ажлын талаар зарим мэдээллийг танаас асуух болно. Та хүсвэл мэдээллээ өгч болно. Таны өгсөн мэдээллийг бусад сувилагч нарын мэдээлэлтэй нэгтгэн нэгдсэн ерөнхий тодорхойлолтыг гаргах болно.

Хувийн чанартай бүх мэдээллийг чандлан нууцлана. Судалгаан дээр таны нэр огт гарахгүй. Баримт бичигт зөвхөн кодлосон дугаарууд байх болно. Зөвшөөрлийн маягт, асуумж, тэмдэглэлүүд найдвартай газар хадгалагдах болно.

Оролцоо:

Хэдийгээр Анн тасагт хэсэг хугацаанд ажиллах боловч, та судалгаанд үргэлжлүүлэн оролцохыг хүсэхгүй байгаа бол Анн-д шууд хэлснээр тэр цаашид таныг дагаж, таныг ажиглахгүй. Таны ээлжинд хамт гарч дагахгүй байхыг та хүсч болно. Та түүний асуултанд хариулахгүй байж болно. Таны яриаг сонсохыг хүсэхгүй байвал ярьж дуусталаа түүнийг холдон явахыг түүнээс хүсч болно. Хэрэв та бодлоо өөрчлөөд судалгаанд бүрэн оролцохоор болвол хүссэн үедээ Анн-д хэлж болно.

Судалгаанаас хасагдахыг хүсвэл Анныг сувилагчын тасагт ажиллаж дууссанаас хойш 1 сарын дотор Анн-д мэдэгдэх хэрэгтэй.

Энэхүү судалгааны үр дүн бусад сувилагч нарт, эмнэлгийн дарга нарт, сувилахуйн багш нарт, сувилагч нартай ажилдаг хүмүүст сувилагчийн нөхцөл байдал мөн сувилагчын ажилд юу чухал байдаг талаар ойлгоход тус болох болно. Цаашдаа ирээдүйн сувилахуйд ямар өөрчлөлт оруулвал үр ашигтай байх талаар ойлголт өгөхөд тустай байж болох юм. Тус судалгаанд оролцоноор санхүүгийн болон ажлын байрны ашиг тус үгүй.

Энэ судалгаанд оролцоноор эсвэл эс оролцоноор учирч болох мэдэгдсэн эрсдэл байхгүй.

Энэхүү судалгаан дээр үндэслэсэн мэдээллийг хэвлэх, конференц дээр танилцуулах, заах зорилгоор ашиглах магадлалтай бөгөөд эдгээрт таны нэр болон таны ажилладаг тасгийн талаар хувийн чанартай ямарч мэдээлэл орохгүй ба эдгээрийг нууцлах болно.

Хэрэв танд энэхүү судалгааны талаар асуулт, сонирхсон зүйл байвал судлаачтай шууд холбогдоно уу:

Анн: Утас: 976-95737215 / Email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв.
Утас: (976) 7711-0486 / Email: info@mongoliacenter.org

Монгол дахь Сувилахуйн Үүрэг ба Цар Хүрээ

Тасгийн Сувилагчдын Зөвшөөрлийн Маягт

	Гарын үзэг
Судалгааны зорилгыг надад тайлбарлаж өгсөн	
Миний асуусан бүх асуултанд хариулт өгсөн	
Би мэдээллийн маягт дээрх судлаачидтай холбогдож болно гэдгээ мэднэ	
Судалгаанд оролцсоноор гарч болох үр ашиг, эрсдэлийн талаар би ойлгосон	
Судалгааны талаарх мэдээллийн нууцыг чандлан хадгалана гэдгээ надад баталсан	
Судалгааны дүгнэлтийг конференц дээр танилцуулах, хэвлэх, заах зорилгоор ашиглаж болохыг би ойлгож байна	
Миний нэрийг нууцлана гэж надад баталсан	
Хэрэв би хүсвэл судалгааны ажлаас хасагдаж болно гэхдээ (а) Анн-д заавал мэдэгдэх хэрэгтэй (б) Анныг тасагт байх үед эсвэл сувилагчын тасагт ажиллаж дуусаад явснаас хойш 1 сарын дотор мэдэгдэх ёстойг ойлгож байна	
Надад мэдээлэл болон зөвшөөрлийн маягтын хуулбарыг өгсөн	

Оролцогчын гарын үсэг: _____ Огноо: _____

Судлаачын гарын үсэг: _____ Огноо: _____

Холбогдох хаяг:

Судлаач: Анн, Утас: 976-95737215 / email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв: Утас: (976) 7711-0486 Email: info@mongoliacenter.org

Монгол дахь Сувилахуйн Үүрэг ба Цар Хүрээ

Судалгааны ажлаас хасагдах хүсэлт

Сувилагчын тасаг

	Гарын үзэг
Би судалгааны мэдээллийн маягт дээрх мэдээлэл, зааврын дагуу Анн-д мэдэгдсэн	
Надад судалгааны мэдээллийн маягтын хуулбар бий	
Миний асуусан бүх асуултанд хариулт өгсөн	
Би мэдээллийн маягт дээрх судлаачидтай холбогдож болно гэдгээ мэднэ	
Надад 'Судалгаанаас хасагдах хүсэлт'-ийн маягтыг өгсөн	

Оролцогчын хэвлэмэл нэр: _____

Оролцогчын гарын үсэг:_____ Огноо: _____

Судлаачын хэвлэмэл нэр: _____

Судлаачын гарын үсэг: _____ Огноо: _____

Хэрэв танд энэхүү судалгааны талаар асуулт, сонирхсон зүйл байвал Аннтай холбогдоно уу:

Анн: Утас: 976-95737215 / Email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв.
Утас: (976) 7711-0486 / Email: info@mongoliacenter.org

Interviews: Information, Consent, Request to withdraw (English / Mongolian)

Nursing Research Information Form: Interviews

Research Title: The Role and Scope of Practice of Nurses in Mongolia

Name and Contact Information of the Researcher:

Name: B. Anne / **Phone**: 976-95737215 / **Email**: suvilagchnar@gmail.com

Information about the Research

The purpose of this research is to understand the role and scope of practice of nurses in Mongolia. Anne, who is a doctoral nursing student, wants to learn about the role of nurses, the work nurses do, and the things that influence the nursing profession in Mongolia. In order to get a good understanding of these things, Anne is asking for volunteers to give an interview about their thoughts and experiences on the research topic.

Interviews will take approximately 60 minutes. As Anne is not fluent in Mongolian, a translator will be present to help during the interview. An audio-recording will be made of the interview and typed onto a computer.

You will be asked to provide some information about yourself at the end of the interview. This information will be anonymously combined with information from others who give interviews so that the researcher can describe the common characteristics of those who gave interviews.

Any personal information will be kept confidential. You name will never appear in the study. Only a code number will appear on documents. Consent forms, questionnaires, and notes will be kept in a secure file in a secure location.

Participation:

Your participation is voluntary. You do not have to be in this study if you don't want to. Even if you decide to be in the study, you may leave the study at any time during the interview by telling the researcher. You do not have to answer all the questions or discuss all the topics that the interviewer may ask you. If you decide after giving the interview that you would like to withdraw, you must tell the researcher no later than 2 months following the signing of this consent form.

There is no direct benefit from taking part in this study. Results from the study may be used to help other nurses, hospital directors, nursing teachers, and people working with nurses to understand what it is like to be a nurse and what is important to nurses in their work. It might also be helpful for understanding what changes could be beneficial for the future of nursing.

There are no known risks from participating or not participating in this study. For some people, it is possible that talking about your experiences may trigger anxiety or emotional distress. If the topic of discussion is upsetting to you, you can stop at any time. If you would like to discuss these feelings with a professional there are a couple of counseling services available in Ulaanbaatar: (1) National Psychology Center, Phone: 7732 4233 <psychology.mn> & (2) New Beginnings Psychology and Human Development Center: <Khongorzul (Director): Mobile: 86111155 >

Your responses given during the interview will remain anonymous. The information learned from this research may be published or presented at conferences and may be used for teaching purposes, but your name and any descriptions that might identify you or your workplace will not be used.

If you have questions or concerns about this study, you can contact the researcher directly:

Anne: Phone: 976-95737215 / Email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies.
Telephone: (976) 7711-0486 / Email: info@mongoliacenter.org

The Role and Scope of Nursing Practice in Mongolia

Consent Form for Unit Nurses

	Initials
The purpose of the research has been explained to me	
Any questions I had have been answered	
I know that I may contact the researchers listed on the information form	
I understand the possible benefits and risks from joining this study	
I have been assured that data from this study will be kept confidential	
I understand that findings from this research may be presented in conferences, publications, and/or be used for teaching purposes.	
I have been assured that I will remain anonymous	
I understand that I can withdraw from the study but that (a) I must notify Anne and (b) I need to notify Anne either before she leaves the ward or within 1 month after she finishes working on the ward	
I have been given a copy of the information and consent form	

Signature of participant: _____ Date: _____

Signature of researcher: _____ Date: _____

If you have any questions about the study, you may contact Anne @ 976-95737215 or by email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies: Telephone: (976) 7711-0486 Email: info@mongoliacenter.org

Agreement to withdraw from the research study on

The Role and Scope of Nursing Practice in Mongolia

Interview Participant

	Initials
I have notified Anne according to the instructions in the original consent form	
Any questions I had have been answered	
I know that I may contact the researchers listed on the information form	
I have been given a copy of this 'Agreement to Withdraw from Research' form	

Printed Name of participant: _____

Signature of participant:_____ Date: _____

Printed Name of researcher: _____

Signature of researcher: _____ Date: _____

If you have any questions about the study, you may contact Anne @ 976-95737215 or by email: suvilagchnar@gmail.com

If you prefer to talk to someone else, you can contact the sponsoring organization for this research. Tell them you want to talk to them about Anne's research.
American Center of Mongolian Studies: **Telephone:** (976) 7711-0486 **Email:** info@mongoliacenter.org

Сувилахуйн Судалгааны Мэдээллийн Маягт: Ярилцлага

Судалгааны ажил: Монгол дахь Сувилахуйн Үүрэг ба Цар Хүрээ

Судлаачын Нэр ба Холбогдох Хаяг:

Нэр: Б. Анн / **Утас**: 976-95737215 / **Email**: suvilagchnar@gmail.com

Судалгааны талаарх Мэдээлэл

Энэхүү судалгааны зорилго нь Монгол дахь сувилагч нарын үүрэг болон практикийн цар хүрээг таньж мэдэх юм. Сувилахуйн ухааны докторын зэрэг хамгаалхаар суралцаж буй Анн нь Монгол дахь сувилагч нарын үүрэг, хийдэг ажил, мөн сувилагчын мэргэжилд нөлөөлдөг зүйлсийг олж мэдэх хүсэлтэй. Энэ талаар сайн ойлголттой болохын тулд Анн сайн дурынхантай судалгааны ажлын сэдвийн дагуу тэдний бодол санаа, туршлагын талаар ярилцахыг урьж байна.

Ярилцлага ойролцоогоор 60 минут үргэлжилнэ. Анн Монгол хэлээр чөлөөтэй ярьдаггүй тул ярилцлагын үеэр орчүүлагч туслана. Ярилцлагыг аудио хэлбэрээр бичиж аваад дараа нь комьпютерт шивж оруулна.

Ярилцлагын төгсгөлд танаас таны тухай зарим мэдээллийг авна. Энэ мэдээллийг бусад ярилцлага өгсөн хүмүүсийн мэдээлэлтэй нэгтгэн, оролцогчдын нийтлэг шинж чанарыг нэр дурьдалгүйгээр судлаач тодорхойлох юм.

Хувийн чанартай бүх мэдээллийг чандлан нууцлана. Судалгаан дээр таны нэр огт гарахгүй. Баримт бичигт зөвхөн кодлосон дугаарууд байх болно. Зөвшөөрлийн маягт, асуумж, тэмдэглэлүүд найдвартай газар хадгалагдах болно.

Оролцоо:

Таны оролцоо сайн дурынх байх болно. Хэрэв хүсэхгүй байвал оролцохгүй байж болно. Оролцохоор шийдсэн ч үргэлжүүлэхийг хүсэхгүй байгаа бол ярилцлагын явцад хүссэн үедээ судлаачид хэлээд хасагдаж болно. Ярилцлагын үед асуусан бүх асуултанд хариулахгүй байж болно мөн сэдвүүдийн талаар ярилцахгүй байж болно. Ярилцлаганд орсны дараа судалгаанаас хасагдахыг хүсвэл зөвшөөрлийн маягт дээр гарын үсэг зурснаас хойш 2 сарын дотор судлаачид хасагдах талаараа мэдэгдэх шаардлагатай.

Судалгаанд оролцсоноор шүүд хүртэх ашиг байхгүй. Судалгааны үр дүн бусад сувилагч нарт, эмнэлгийн дарга нарт, сувилахуйн багш нарт, сувилагч нартай ажилдаг хүмүүст сувилагч байх ямар байдаг мөн сувилагчын ажилд юу чухал байдаг талаар ойлгоход тустай байх болно. Ирээдүйн сувилахуйд ямар өөрчлөлт оруулвал үр ашигтай байх талаар ойлголт өгхөд тустай байж болох юм.

Энэ судалгаанд оролцсоноор эсвэл эс оролцсоноор үчирч болох мэдэгдсэн эрсдэл байхгүй. *Зарим хүмүүсийн хувьд урьд нь тохиолдсон зүйлсээ ярих үед санаа зовинол, сэтгэл хөдлөлийн стресст орох боломжтой. Ярилцаж буй сэдэв танд эвгүй байвал та хүссэн үедээ ярилцлагыг зогсоох боломжтой. Хэрэв та өөрт буй дээрх мэдрэмжийн талаар мэргэжлийн зөвлөгчтэй ярилцахыг хүсвэл Улаанбаатарт хоёр зөвлөгөө өгөх үйлчилгээ бий: (1) Сэтгэл судлалын үндэсний төв, Утас: 77324233 <psychology.mn>, "Шинэ эхлэл" сэтгэл зүй хүний хөгжлийн төв: <Т. Хонгорзул (захирал), Утас:86111155>*

Ярилцлагын үеэр таны өгсөн хариултууд нэргүй байх болно. Энэ судалгаанаас үндэслэсэн мэдээллийг хэвлэх, конференц дээр танилцуулах, заах зорилгоор ашиглах магадлалтай бөгөөд таны нэр болон таны ажлын газрыг илчлэх ямарч мэдээлэл орохгүй болно.

Хэрэв танд энэхүү судалгааны талаар асуулт, сонирхсон зүйл байвал судлаачтай шүүд холбогдоно уу:

Анн: Утас: 976-95737215 / Email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв.
Утас: (976) 7711-0486 /Email: info@mongoliacenter.org

Монгол дахь Сувилахуйн Үүрэг ба Цар Хүрээ

Ярилцлагын Зөвшөөрлийн Маягт

	Гарын үзэг
Судалгааны зорилгыг надад тайлбарлаж өгсөн	
Миний асууусан бүх асуултанд хариулт өгсөн	
Би мэдээллийн маягт дээрх судлаачидтай холбогдож болно гэдгээ мэднэ	
Судалгаанд оролцоноор гарч болох үр ашиг, эрсдэлийн талаар би ойлгосон	
Судалгааны талаарх мэдээллийн нууцыг чандлан хадгалахыг надад баталсан	
Судалгааны дүгнэлтийг конференц дээр танилцуулах, хэвлэх, заах зорилгоор ашиглах магадлалтайг би ойлгож байна	
Миний нэрийг нууцлана гэж надад баталсан	
Ярилцлагын явцад хүссэн үедээ судалгаанаас хасагдах боломжтойг би ойлгож байна	
Хэрэв маягтыг бөглөснөөс хойш 2 сарын дотор судлаачид мэдэгдвэл ярилцлаганд орсон байсан ч судалгаанаас хасагдах боломжтойг би мэднэ	
Хэрэв намайг зөвшөөрвөл судлаач судалгааны ажлын талаар нэмэлт асуулт асуухыг би зөвшөөрч байна	
Надад мэдээлэл болон зөвшөөрлийн маягтын хуулбарыг өгсөн	

Оролцогчын гарын үсэг: _____ Огноо: _____

Судлаачын гарын үсэг: _____ Огноо: _____

Холбогдох хаяг:

Судлаач: Анн, Утас: 976-95737215 / email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв: Утас: (976) 7711-0486 Email: info@mongoliacenter.org

Монгол дахь Сувилахуйн Үүрэг ба Цар Хүрээ

Судалгааны ажлаас хасагдах хүсэлт

Ярилцлаганд Оролцогч

	Гарын үзэг
Би анхны зөвшөөрлийн маягт дээрх зааврын дагуу Анн-д мэдэгдсэн	
Миний асуусан бүх асуултанд хариулт өгсөн	
Би мэдээллийн маягт дээрх судлаачидтай холбогдож болно гэдгээ мэднэ	
Надад энэхүү 'Судалгаанаас хасагдах хүсэлт'-ийн маягтыг өгсөн	

Оролцогчын хэвлэмэл нэр: _____

Оролцогчын гарын үсэг:_____ Огноо: _____

Судлаачын хэвлэмэл нэр: _____

Судлаачын гарын үсэг: _____ Огноо: _____

Хэрэв танд энэхүү судалгааны талаар асуулт, сонирхсон зүйл байвал Аннтай холбогдоно уу:

Анн: Утас: 976-95737215 / Email: suvilagchnar@gmail.com

Хэрэв та өөр хүнтэй холбогдохыг хүсвэл судалгааг санхүүжүүлэгч байгууллагатай холбогдон Аннын судалгааны ажлын талаар ярих хүсэлтэй байгаагаа хэлнэ үү.
Америкийн Монгол Судлалын Төв.
Утас: (976) 7711-0486 / Email: info@mongoliacenter.org

Demographic Questionnaire (English / Mongolian)

Demographic Questionnaire

- **Gender**: ☐ Female / ☐ Male
- **Age**: _____
- **Occupation**: ☐ nurse ☐ other_____
  - **Job title for current work**: _____
- **Length of time employed in current position**: _____
- **Total length of time employed in your profession**: _____
- **Have you worked in a different profession than your current profession**? ☐ Yes / ☐ No
  - **If yes, please describe**: _____
- **Monthly income**:

☐ Less than Tg 500,000/month
☐ Between Tg 500,000 – 750,000/month
☐ Between Tg 750,000 – Tg 1,000,000/month
☐ Between Tg 1,000,000 – Tg 1,500,000/month
☐ Between Tg 1,500,000 – 2,000,000/month
☐ Over Tg 2,000,000/month

- **Family**: ☐ Single / ☐ Married or Living with a spouse / ☐ Divorced
- **Dependents who live with you**: ☐ None / ☐ Children _____ (number) /
  ☐ Parents or other relatives _____ (number)
- **Average length of time it takes to travel from home to work**: _____
- **Religious affiliation**: ☐ Buddhist / ☐ Shamanist / ☐ Christian / ☐ Muslim
  ☐ Atheist / ☐ no religion / ☐ other (please describe) _____
- **Education**: ☐ college diploma / ☐ university baccalaureate / ☐ Masters degree / ☐ PhD
  - If you have done specialization courses, please list all the specialty certifications you have completed.

Name of course	Length of Course	Date of Completion

Хүн Ам Зүйн Асуумж

- **Хүйс:** ☐ Эм / ☐ Эр
- **Нас:** _____
- **Мэргэжил:** ☐ сувилагч ☐ бусад_____
    - **Одоогийн албан тушаал:** _____
- **Энэхүү албан тушаалд ажилласан хугацаа:** _____
- **Сувилагч мэргэжлийнхээ дагуу ажилласан нийт хугацаа:** _____
- **Одоогийн мэргэжлээсээ өөр мэргэжилээр ажиллаж байсан уу?** ☐ Тийм / ☐ Үгүй
    - **Хэрэв тийм бол ямар ажил:** _____
- **Сарын цалин:**

☐ Сард 500,000төг-с доош ☐ Сард 1,000,000 –1,500,000төг

☐ Сард 500,000 – 750,000төг ☐ Сард 1,500,000 – 2,000,000төг

☐ Сард 750,000 – 1,000,000төг ☐ Сард 2,000,000төг-с дээш

- **Гэр бүл:** ☐ Ганц бие / ☐ Гэрлэсэн эсвэл хамтран амьдрагчтай / ☐ Салсан
- **Гэртээ хэдүүлээ амьдардаг вэ?:** ☐ Ганцаараа

☐ Нөхөр/ эхнэр

☐ Хүүхдүүд _____ (хэдэн хүүхэд)

☐ Эцэг эх эсвэл хамаатан _____ (хэдэн хүн)

Танай гэр бүлээс хэдэн хүн ажил хийдэг вэ? _____

- **Гэрээс ажил хүрэхэд зарцуулдаг хугацаа:**_____
- **Шашин шүтлэг :** ☐ Буддын шашин / ☐ Бөө мөргөл / ☐ Христ итгэл / ☐ Ислам

☐ Бурхангүй үзэл / ☐ Шашингүй / ☐ Бусад(бичнэ үү) _____

- **Боловсрол:** ☐ Коллежийн диплом / ☐ Их сургуулийн баклавр / ☐ Магистр / ☐ Доктор
- Хэрэв та сертификаттай мэргэжлийн сургалтанд хамрагдсан бол жагсаан бичнэ үү.

Сургалтын нэр	Сургалтын хугацаа	Дууссан огноо

Appendix 3. Translator & Transcriptionist Confidentiality Agreement

Translator / Transcriptionist Confidentiality Agreement

Research Title: The Role and Scope of Nursing Practice in Mongolia

I, _____ [printed name of translator/transcriptionist], agree to maintain full confidentiality when serving as a translator &/or transcriptionist for this research project.

I will be performing the following translation services (check all that apply)

- ☐ Verbally translating information from English into Mongolian or vice versa
- ☐ Transcribing recordings or other raw data from Mongolian into English
- ☐ Transcribing recordings from English to English

	Initials
1. I agree to keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g., social media, computer files, audio recordings, flash drives, transcripts, paper, etc.) with anyone other than the researcher;	
2. I will not reveal the identification of any individual who gave a live oral interview.	
3. I will not reveal the identification of any individuals or locations mentioned in the interviews and as recorded on the transcripts.	
4. I will not make copies of any data in any form or format (e.g., computer files, audio files, transcripts), unless specifically requested to do so by the primary investigator;	
5. I will ensure the computer I use for translation / transcription has a good anti-virus program installed;	
6. I will keep all raw data with identifying information in any form or format (e.g., computer files, audio files, transcripts) secure while it is in my possession. This includes: • keeping all digitized raw data in computer password-protected files and transcripts in a locked file; • closing any computer programs and documents of the raw data when temporarily away from the computer; • ensuring no one can hear audio files when I am transcribing interviews; and • permanently deleting any e-mail communication containing the data	
7. I will give, all raw data in any form or format (e.g., computer files, audio files, transcripts) to the researcher when I have completed the translation and transcription tasks.	
8. I will destroy all research information in any form or format that is not returnable to the researcher (e.g., information stored on my computer hard drive or any backup device) upon completion of the translation and transcription tasks.	

Signature of translator/transcriptionist: _____

Date: _____ Phone & Email: _____

Signature of researcher: _____

Date: _____ Phone: 976-95737215 / email: suvilagchnar@gmail.com

Appendix 4. Professional Translation Service Certification

Otgo Alexander, BA, MA, MRes.
Alexander Solutions LLC
Songino-Khairkhan District, Khoroo 29,
Building 22b - 131
Phone: +976 99126177
Email: solutions.otgo@gmail.com

Anne
Cell: +976 95737215
abirophc@protonmail.com

25 July 2019

Re: providing certified translations

Dear Anne,

I have a BA in Translation and am legally registered as 'Alexander Solutions LLC' *(a legal entity no. 9011580070, registration number no. 6028969)* to provide technical translation services - please see attached Certificate.

My translation career started in 1999 when I worked for Eagle TV broadcasting company as a full-time translator. I also worked for German Technical Cooperation (GIZ) as a full time translator. Since 2003, I started providing oral and written translation services to local and international organizations and consultants such as The World Bank, SDC –Swiss Development Cooperation, COCONET NGO, Translate Media UK agency, Lionbridge International and Hulla & Co. Human Dynamics KG. My technical translation skills have been further enhanced through my diverse work experiences and postgraduate studies in the UK and Ireland.

I hope your research project would greatly benefit from our high quality translation service.

Kind regards,

Otgo Alexander, BA, MA, MRes.

УБ-2

Монгол Улсын Засгийн газрын
2004 оны 20 дугаар тогтоолоор батлагдсан

МОНГОЛ УЛС
УЛСЫН БҮРТГЭЛИЙН ГЭРЧИЛГЭЭ

0000112416

2015.12.15
/ Бүртгэсэн он,сар,өдөр /

9011580070
/ Улсын бүртгэлийн дугаар /

6028969
/ Регистрийн дугаар /

Александр шийдэл — Хязгаарлагдмал хариуцлагатай компани
/ Хуулийн этгээдийн нэр, хариуцлагын хэлбэр /

Дүрэм
/ Үүсгэн байгуулах баримт бичиг /

Шийдвэр — 01 — 2015.12.11
/ шийдвэрийн нэр / / дугаар / / он, сар, өдөр /

код	Үндсэн эрхлэх үйл ажиллагааны чиглэл
7110	Интерьер дизайн хийх
6312	Вэб сайт хийх
8299	Бизнесийн судлагаа хийх
8549	Орчуулгын үйлчилгээ

код	Туслах эрхлэх үйл ажиллагааны чиглэл

Хугацаагүй — 1 — 10.00
/ хугацаа / / гишүүдийн тоо / / өөрийн хөрөнгийн хэмжээ, мянган төгрөгөөр /

Улаанбаатар, Сонгинохайрхан, 29-р хороо, 1 хороолол, 22б, 131 тоот, Утас1: 99126177, Утас2: , Факс:
/ хуулийн этгээдийн албан ёсны хаяг /

Улсын бүртгэлийн ерөнхий
газрын Бүртгэлийн газар
/ бүртгэсэн байгууллагын нэр /

Appendix 5. Back-Translation Sample

Note: *Highlights in the back-translated forms show terms that were subsequently revised for the Mongolian version that was distributed to participants. This is the sample from the consent forms for Field Observations (Appendix 2)*

Nursing Research Information Form: Nursing Faculty

Research: Nursing commitment (duty) and scope in Mongolia

Researcher's Name and address

Name: Ann Biro /phone: 95737215 / **Email**: suvilagchnar@gmail.com

Information about Research

The aim of the study is to know about Mongolian nurse's duty and scope of practical. Ann who studying nursing PhD, She want to know about Mongolian nurse's duty, work list and influence of nursing. Ann will spend time in nursing ward with nurses and observe their daily activities and study for better understanding.

During the time Ann working in nursing ward she might be ask about her observed and heard things. So she will understand well about events. (incidents) Some nurses shift by following Ann realize how to become a nurse in Mongolia.

Researcher will ask you some information about you. If you want you can provide information. The information you provide will be combined with the information from other nurses and provides a general description.

All personal information will be strictly confidential. Your name does not exist in the survey. The document will only be coded numbers. Consent form, questionnaire, documents will be storage in reliable place.

Participation

Although Anne will be working in nursing ward, if you don't want to participate survey tell to Ann and she will not study from you and not observe you. You can ask not working your shift and follow you. You can don't answer her questions. If you don't want your speech heard about it, you may ask to her to go away until you finish. If you change your mind and want to participate fully in the study, you might tell Ann at any time.

If you want to be leave from the study, you must notify Ann within 1 month of completing the Nursing Ward.

The results of the survey are helpful for other nurses, hospital administrators, nursing teachers, nurses, and other people who working with nurses to understand what's important about being a nurse and what nurses are doing.

It may be helpful to know what difference need in the future nurses.

There is no financial and workplace benefit from this survey.

There is no notified (known) risk to participated or not participated this study.

Print this information based on this research, it will be used for presentation and teaching purposes and will not include any information you disclose your name and your working area.

If you have any question about research and interests contact the researcher:

Ann: Phone: 976-95737215 / Email: suvilagchnar@gmail.com

If you want to contact another person, contact the funding agency tell them you want to talk about Ann's research work: American Mongolian Centre: Phone**:** (976) 7711-0486 /
Email**:** info@mongoliacenter.org

Nursing commitment and scope in Mongolia

Nursing Ward Consent Form

	First letter of name
Explained me the purpose of the study	
Answered all my questions	
I know I can contact with researcher on the information form.	
I understand about benefit and risk to participation this survey.	
I confirmed to keep secret of information about survey.	
I understand conclusion will be introduced and published for teach at the conference.	
They confirmed my name will be secure.	
If I wish I can leave research work but I understand (a) I should tell to Ann (b) when Ann is working in nurse's ward or before 1 month after she finished work in hospital.	
She gave me copy of consent form and inform.	

Participant sign_____

date_____

Researcher sign _____
date_____

Address

Ann: Phone: 976-95737215 / Email: suvilagchnar@gmail.com

If you want to contact another person, contact the funding agency tell them you want to talk about Ann's research work.

American Mongolian **research** Centre

Phone**:** (976) 7711-0486 / Email**:** info@mongoliacenter.org

Appendix 6. Translation of Interview Transcripts

Accredited Translator Translation Sample #1

Notes:
1. Only interviewee responses were translated into English due to the cost of translation.
2. In this sample, I (the researcher), spoke in Mongolian as part of my initial greeting (Time: 00:19) “Thank you for giving me an interview today”. As this phrase was preliminary and not central to the discussion it was not translated.

Time	Speaker	Original Transcript	Transcript with Translation
00:02	Researcher	I just do two [recording devices] because sometimes we have failures - when one doesn’t work, the other works. So we have the two.	I just do two [recording devices] because sometimes we have failures - when one doesn’t work, the other works. So we have the two.
00:13	Translator	хоёр байгаа нь. Яагаад гэвэл нэг нь заримдаа хураагүй байвал нөгөөтөхийг нь ашиглахад амар байж магадгүй гээд ...	хоёр байгаа нь. Яагаад гэвэл нэг нь заримдаа хураагүй байвал нөгөөтөхийг нь ашиглахад амар байж магадгүй гээд ...
00:19	Researcher	За чи өнөөдөр надад ярилцлага өгсөнд маш их баярлалаа. I hope that it will give better understanding of nurses’ work and that will be a help to Mongolia.	За чи өнөөдөр надад ярилцлага өгсөнд маш их баярлалаа. I hope that it will give better understanding of nurses’ work and that will be a help to Mongolia.
00:36	Translator	Тэгээд миний найдаж байгаа зүйл юу вэ гэхээр энэ судалгаа маань илүү Монголын одоо сувилагч нарын тухай сайн судлаад тэгээд Монголд илүү сайн амжилтыг авчирнаа гэж итгээд хийж байгаа.	Тэгээд миний найдаж байгаа зүйл юу вэ гэхээр энэ судалгаа маань илүү Монголын одоо сувилагч нарын тухай сайн судлаад тэгээд Монголд илүү сайн амжилтыг авчирнаа гэж итгээд хийж байгаа.
00:50	Researcher	Can you tell me why you decided to become a nurse?	Can you tell me why you decided to become a nurse?
00:54	Translator	Яагаад сувилагч болохоор шийдсэн бэ? гэдэг талаараа хэлж өгөөчээ?	Яагаад сувилагч болохоор шийдсэн бэ? гэдэг талаараа хэлж өгөөчээ?
01:00	Interviewee	аа би 9-р ангидаа эхлээд анагаахаар явья гэсэн бодолтой, эхлээд энэ мэргэжлийг сонгосон байгаа. Тэгээд ерөнхийдөө бол сувилахуйг би ер нь бол сонирхоогүй үнэнийг хэлэхэд сонирхоогүй. Ер нь бол эмчийг илүү үзэж байсан байхгүй юу. Тэгээд яг энэ мэргэжлийг сонгоход нөлөө үзүүлсэн хүн маань гэвэл манай ах. (Pausing) Анхан. Тэгээд ерөнхийдөө бол юу (Phone ringing) Түлхүү нөгөө нөлөөлсөн нь	When I was in high school in the 9th grade, I started thinking to major in medicine and I chose this profession. I wasn’t initially interested in nursing to be honest - I was more interested in becoming a doctor. My brother influenced me to choose this profession. (Pausing) Well (Phone ringing) my brother was the key influence. When I was a freshman, my grandmother got ill and I realised that in real life, care & nursing is more important than being a doctor. I

		бол манай ах. Тэгээд нөгөө нэг энд 1-р курсдээ ороод сурч байх явцад маань нөгөө эмээ маань өвдсөн байхгүй юу. Тэгээд яг амьдрал дээр бол эмчээсээ илүү асаргаа сувилгаа нь илүү чухал юм байнаа гээд би хэрвээ ингээд цаашаа өсөж дэвжээд эмч болохын тулд энэ мэдлэгийг ч гэсэн ингээд нөгөө тухайн зүйлийг яаж хийх, одоо эмчээсээ илүү нөгөө сувилагч чинь хүнтэйгээ илүү харьцдаг. Тийм болохоор нөгөө нэг ээж аав маань ч гэсэн асаргаа сувилгаа илүү чухал юм байна, эмчээсээ илүү гэж бодоод би сувилагчаараа сурая гэж шийдсэн.	thought if I were to upgrade to be a doctor, I need to experience how to do nursing & care. Nurses communicate with patients more often than a doctor. My parents also told me nursing & care is more important than being a doctor. So I decided I should study nursing first.

Accredited Translator Translation Sample #2

Time	Speaker	Original Transcript	Transcript with Translation
12.11	Researcher	What nursing task is one of your favourites?	What nursing task is one of your favourites?
12.16	Translator	За ингээд сувилахуйн ингээд хийдэг ажлуудаас тэ яг чи алийг нь хийх дуртай вэ сувилагчийн хийдэг юмнуудаас?	За ингээд сувилахуйн ингээд хийдэг ажлуудаас тэ яг чи алийг нь хийх дуртай вэ сувилагчийн хийдэг юмнуудаас?
12.22	Interviewee	Сувилагч нарын хийдэг хамгийн дуртай ажил нь болуу, ерөнхийдөө бол тариагаа л хийх аймар дуртай шдээ яг хүнтэйгээ тулж харьцаал аан тухайн хүнтэйгээ тулж харьцаал тэгээл инээгээл тариагаа хийхийн бол судас хүртэл хурдан олдийшдээ.	The nurses' most favourite task? Well, I like doing injection the most – it gives individual interaction with the patient. When you do injection with a smile and in interaction with the patient, it becomes very easy to locate and find blood vessels.
12.40	Translator	Injecting. Because injection, because it is nice, because I can you know, relate to the person smiling. And if it is that kind of nice atmosphere, so it is easy to find the vessel.	Injecting. Because injection, because it is nice, because I can you know, relate to the person smiling. And if it is that kind of nice atmosphere, so it is easy to find the vessel.
13.00	Researcher	What's one of the most difficult things for you?	What's one of the most difficult things for you?
13.04	Translator	Одоо тэгээд яг чамд бол яг хамгийн хэцүү нь юу байдаг вэ сувилагч нарын ажил дундаас?	Одоо тэгээд яг чамд бол яг хамгийн хэцүү нь юу байдаг вэ сувилагч нарын ажил дундаас?
13.09	Interviewee	Аан надад бол хамгийн хэцүү нь гэвэл үү ерөнхийдөө болвол өвчтөн уурлаал ингээл аймар ийм ууртай дайраал ингээл ар гэрийнх нь уурлаал ингээл юу юуны түрүүндгүй юуг нь ч мэдээгүй байжийж орилоод тэгээл ингээл дайрчихна ингээл дайрахдаа бүр ингээд эмч одоо эмч ингээд одоо юм хэлчихсэн байхад сувилагч руу нь дайраад байх аймар хэцүү. [laughs] Тэгээд яагаад тэгж хэлж байна вэ гэхээр эмч нар болохоороо яг хүнтэйгээ ингээд тулж бол харьцахгүй аан сувилагч нар бол яг тухайн хүнтэйгээ тулж харьцдаг учраас аан тухайн эмчид уурласан ууpаа одоо бид нарт гаргадаг ч юмуу тийм тохиолдолд аймар хэцүү байдаг.	Well the most difficult thing is, when the patients get very angry and when the patients and their family members attack us with anger – they shout and attack immediately without finding out the reason – they attack the nurses even when the doctors explained the reason – very difficult. [laughs] The reason I emphasise on this is that, because the doctors do not have much interaction with the patients, but the nurses interact with the patients more - that is why they take their anger out on us the nurses – very hard in such situations.

Editing of Translated Transcripts: Four Samples

Original Transcript	Edited Transcript
6.19.44 INTERVIEWEE: At my workplace? Ok, at my workplace, relationship between the nurse and the doctor is so-so. They say that the doctor and nurse have to communicate with each other very well, right? But this is not the case in Mongolia – it is quite the opposite - the doctors don't talk with the nurses they just briefly command, do this and do that, to nurses, and this is because things are computerised – some doctors give a command without a written prescription – we have to perform treatments in accordance with the doctor's written presciption, right? – but sometimes, doctors give instruction without any written prescription – no input in the computer system – that is very difficult because the nurses end up doing the treatment as they were told and later, the nurse will be blamed and become a criminal for performing treatment that was not prescribed.	6.19.44 INTERVIEWEE: At my workplace? Ok, at my workplace, relationship between the nurse and the doctor is so-so. They say that the doctor and nurse have to communicate with each other very well, right? But this is not the case in Mongolia – it is quite the opposite - the doctors don't talk with the nurses, they just give orders, do this and do that, to nurses, and this is because things are computerised – some doctors give an order without a written prescription – we have to perform treatments in accordance with the doctor's written prescription, right? – but sometimes, doctors give instruction without any written prescription – no input in the computer system – that is very difficult because the nurses end up doing the treatment as they were told and later, the nurse will be blamed and become a criminal for performing treatment that was not prescribed.
9.19:08 INTERVIEWEE: Well, Form 1. In our ward, the doctors fill in Form 1 specifying a patient's name and a list of injections and medications prescribed. Nurses then write notes after each injection or medication and then input it into a computer. Also, we input updates on all other treatments such as whether IV cannula is done, abdominal drainage is cleaned or washing is done, etc. into a computer. In addition, we assess a patient's condition and input the assessment note into a computer. There is also a separate notebook for tubes and we write down if we did IV cannula and catheters. There is another notebook for injections and we write down all the injections we give each day. Those are the type of documentation.	9.19:08 INTERVIEWEE: Well, Form 1. In our ward, the doctors fill in Form 1 specifying a patient's name and a list of injections and medications prescribed. Nurses then write notes after each injection or medication and then input it into a computer. Also, we input updates on all other treatments such as whether IV cannulas are done, abdominal drainage [tubes] are cleaned or washing is done, etc. into a computer. In addition, we assess a patient's condition and input the assessment note into a computer. There is also a separate notebook for tubes and we write down if we did IV cannulas and catheters. There is another notebook for injections and we write down all the injections we give each day. Those are the types of documentation.
4.5.48 INTERVIEWEE: Ok, let me take an example. For example, as a nurse I work a lot with patients with liver cirrhosis and concerns myself with the issues of an alimentary canal. In 1990s, liver cirrhosis disease was widespread, yes many people suffered this disease. As compared with a	4.5.48 INTERVIEWEE: Ok, let me give an example. For example, as a nurse I work a lot with patients with liver cirrhosis and I concern myself with the issues of an alimentary canal. In 1990s, liver cirrhosis disease was widespread, yes many people suffered this disease. As compared with a

Original Transcript	Edited Transcript
healthy person, a patient who suffered this disease would lose his capability to work – it means the whole family would suffer economically due to a dad or breadwinner not being able to work and it would require a prolonged medical treatment – the nurse concerns herself about such things. The nurse is worried about many things and give a detailed instruction and advice on what kind of routine to be applied after being discharged from the hospital. There is a common Mongolian mentality at play – when a family member becomes sick, they tend to segregate the person because of their disease. So, as a nurse, I personally pay attention to issues such as how to integrate the person with the family members, how to ensure close relationship between the patient and family members – if the dad is sick, then I ensure that other family members stay close to their dad and ensure that their dad is still respected as a dad.	healthy person, a patient who suffered this disease would lose his capability to work – it means the whole family would suffer economically due to a dad or breadwinner not being able to work and it would require a prolonged medical treatment – the nurse concerns herself about such things. The nurse is worried about many things and gives detailed instructions and advice on what kind of routine should be applied after being discharged from the hospital. There is a common Mongolian mentality at play – when a family member becomes sick, they tend to segregate the person because of their disease. So, as a nurse, I personally pay attention to issues such as how to integrate the person with the family members, how to ensure close relationships between the patient and family members – if the dad is sick, then I ensure that other family members stay close to their dad and ensure that their dad is still respected as a dad.
2.4.11 INTERVIEWEE: In the past, surgical nurses took part in all types of surgeries. There used to be separate surgical nurses and specialty nurses. Today, this is even more disaggregated – today we have specialty surgical nurses who are totally different from the general surgical nurses. They differ a lot in terms of tools, equipment, disposable items that are used, and patient care & nursing.	2.4.11 INTERVIEWEE: In the past, surgical nurses took part in all types of surgeries. There used to be separate surgical nurses and specialty nurses. Today, this is even more separate – today we have specialty surgical nurses who are totally different from the general surgical nurses. They differ a lot in terms of tools, equipment, disposable items that are used, and patient care & nursing

Transcription and Translation Comparisons: Professional & Lay Translators

As a result of my (the researcher's) checking the lay translator's transcripts to the audio recording, I realized there was not a verbatim transcription. I also noted translations as being done more according to dynamic equivalence than literal translations. This led to my hiring an accredited, professional transcriptionist-translator.

Two examples of differences between the lay and professional transcriptionist-translators are shown below. This experience resulted in (1) confidence in the professional translation, also noting that although the lay translator's translation lacked details, it conveyed similar meanings, and (2) confidence in my own language ability for reviewing transcripts.

Lay Transcription	**Professional Transcription**
8. Би 9-р ангид байхдаа анагаахаар явья гэж бодож байлаа. Үнэнийг хэлэхэд сувилахуйг сонирхоогүй. Эмчийг илүүд үзэж байсан. Энэ мэргэжлийг сонгоход нөлөө үзүүлсэн хүн бол манай ах. Амьдрал дээр бол эмчээсээ илүү асаргаа сувилгаа нь илүү чухал юм байна гээд би хэрвээ цаашаа өсөж дэвжээд эмч блохын тулд энэ мэргэжлийг ч гэсэн одоо эмчээсээ илүү сувилагч хүнтэйгээ илүү харьцдаг болохоор ээж аав маань муудсан ч гэсэн асаргаа сувилгаа илүү чухал юм байнаа эмчээсээ илүү чухал гэж бодоод эхлээд сувилагчаараа сурья гэж шийдсэн.	8.01:00 Я.Ө: аа би 9-р ангидаа эхлээд анагаахаар явья гэсэн бодолтой, эхлээд энэ мэргэжлийг сонгосон байгаа. Тэгээд ерөнхийдөө бол сувилахуйг би ер нь бол сонирхоогүй үнэнийг хэлэхэд сонирхоогүй. Ер нь бол эмчийг илүү үзэж байсан байхгүй юу. Тэгээд яг энэ мэргэжлийг сонгоход нөлөө үзүүлсэн хүн маань гэвэл манай ах. (Pausing) Анхан. Тэгээд ерөнхийдөө бол юу (Phone ringing) Түлхүү нөгөө нөлөөлсөн нь бол манай ах. Тэгээд нөгөө нэг энд 1-р курсдээ ороод сурч байх явцад маань нөгөө эмээ маань өвдсөн байхгүй юу. Тэгээд яг амьдрал дээр бол эмчээсээ илүү асаргаа сувилгаа нь илүү чухал юм байнаа гээд би хэрвээ ингээд цаашаа өсөж дэвжээд эмч болохын тулд энэ мэдлэгийг ч гэсэн ингээд нөгөө тухайн зүйлийг яаж хийх, одоо эмчээсээ илүү нөгөө сувилагч чинь хүнтэйгээ илүү харьцдаг. Тийм болохоор нөгөө нэг ээж аав маань ч гэсэн асаргаа сувилгаа илүү чухал юм байна, эмчээсээ илүү гэж бодоод би сувилагчаараа сурая гэж шийдсэн.
Lay Translator	**Professional Translator**
5.Nursing is a nice profession, however, I thought I would become a doctor from the beginning. So, I studied to become a doctor but eventually I switched to nursing. In my family, my mother is a senior doctor. I thought I could carry out her profession as a doctor. But nursing attracted me more, so I chose to become a nurse. Right now, I am a master's student, I will be graduating from the school this coming June. I am interested to become a nursing teacher in future.	5.0.28 INTERVIEWEE: At first? Well, nursing is a very nice profession in terms of nursing and caring people - very nice profession in terms of nursing - that's why. At first, I wanted become a doctor and I studied to become a doctor then later, I switched to study to become a nurse and graduated as a nurse. In my family, my mother is a medical doctor and I used to think I would become a doctor like my mother. But then later, I liked nursing more and I chose to become a nurse. Now I am doing my Master's degree and I will graduate this March – no- early June. After completing my study, in future, I am more interested in becoming a teacher in nursing. That's why I chose this profession.

Appendix 7. Reflexive Writing Samples

Fieldnotes: Reflexive Excerpts

Notes:
1. Although reflections were interspersed in the text of fieldnotes and my research journal rather than a separate journal, only text specific to reflections on the impact of my presence or thinking are included as samples in this appendix.
2. Dates were removed for the purpose of keeping locations anonymous.

- There are a few personal challenges/conflicts in collecting data:
    1. The balance between following nurses and being in the way. I need to follow to get a sense of the rhythms and interactions that shape a nurse's day. Yet at times, I wonder how nurses (and subsequently patients) feel being followed and observed with everything.
    2. Conflict between learning by asking questions and not interrupting the nurses. Questions I ask are not part of the normal day of the nurse, yet asking questions helps me to understand better what is happening or how things are organized.
    3. English teaching and normal conversation. [I have been asked] to always speak in English [to help nurses improve their English]. Yet being a speaker of a foreign language, I know that if one is not fluent, it can take some effort to switch to the language one is not competent in. I found that most of the time [the nurses] wanted to talk to me in Mongolian. When I did say something in English, they would usually pause and say 'I don't understand'. I am happy to oblige with one-to-one conversation when there are breaks in the work routine, but I worry about the focus of the nurse when they seem to have so many tasks (e.g. when giving medications, when going from one task to the next, when typing in Mongolian on the computer, etc.) E.g. As Serratula has not understood me when I spoke with her in English about simple topics, I am reluctant to force English as I feel it will interrupt her day, making my observations less typical of what she would usually do and say, and also I'm feeling that forcing English conversation will be more of a nuisance to her in completing her nursing tasks. It is a dilemma for me given that [I have been asked] to speak in English [as much as possible] yet I'm finding that it would take a lot of added time in order to achieve understanding, which as a nurse I feel could adversely impact the responsibilities that nurses are already busy with, and in turn, it could adversely impact patient care. So, I will speak mostly in Mongolian but try to remember to switch to English when things aren't so busy.
- After staying to talk briefly with the patient and his wife I excused myself to find Statice. Statice is with the head nurse who is helping her with giving IVs. The HN tells me to have my lunch. It is true that Statice is behind in giving her 10AM medications. Some of it has likely been the back & forth issues related to Patient #1. But I wonder if my presence has been slowing down this new nurse… Has she been explaining things more to patients because I am with her? Has she been taking more time than usual to do things the right way? I return to the nursing post and look for Statice. She is still doing her 10AM medications and the HN is helping her with IVs. I ask if she has eaten yet and she tells me she hasn't. I decide to stop following her and I go to the nursing post.
- I had hoped to follow a younger nurse today so initially Caraway was 'told' by Penny that I would be shadowing her. Caraway consented and I spent from 08:45-09:45 with Caraway. But when I learned that Caraway only started her job 2 months ago, I became more sensitive that my presence might make her nervous. After telling me

she was on a personal errand and didn't need me to come with her, she returned and suggested that I follow Pansy. Pansy is one year younger than me and agreed that I could follow her. I wasn't surprised that Caraway preferred me not to follow her. Despite explaining in print and verbally that my role was simply to observe so I could find out about what nurses do, some people still thought I was checking on them or that I was an 'expert' and would assess their practice and report it.

- This shift was more of a challenge for me ethically. I was asked to shadow the new nurse and she was excited to have me shadow her. She also had one of the most pleasant attitudes I have seen when observing nurses interacting with patients. However, I felt I needed to report my concerns re poor aseptic technique to the head nurse. In some ways, this feels like a betrayal as the nurse had not specifically asked me to observe and provide feedback to her, but rather she understood my role as documenting what a nurse's responsibilities and working day was like. It helped me that the head nurse indicated she already knew about the problem and would work on it.
- I wasn't able to get some specific responses to some of my questions [during the interview] that I had hoped for. E.g. I asked her to give examples of how nurses assessed patients who were not newly admitted – the 60+ patients that one nurse had responsibility for on a night shift. The response given was that nurses use official nursing diagnoses which differ from medical diagnoses. I didn't push her on this because I didn't want to cause her frustration and as I had already asked a couple different ways and never got any specific responses, only theoretical responses. I wonder if she is giving me the answers she thinks I want or she thinks should be given.

Research Journal: Reflexive Excerpts

- Sometimes I think I have made observations because I am either seeing something that I think is incorrect (esp infection control related to IV insertion or to the physical layout and supplies) or because I haven't seen much of a certain activity (e.g. handwashing/sanitizing) and so I note it down when I see it. Whereas if I was documenting in Canada or the UK, I might not note every time I saw a nurse wash/sanitize her hands because it is standard practice. In the same way, I usually didn't note that Mongolian nurses used an alcohol wipe over the skin area that was to be punctured (IM/IV) as this was fairly consistent.
- Do nurses have a role in regards to maintaining patient privacy? What does that look like in Mongolia? How many times have I coded something under 'physical environment' that relates to my perception of meeting or not meeting privacy needs as seen through my western eyes? Perhaps this isn't important in Mongolia in the same ways that it is in western nations. Note: my reflections from living in Mongolia as a foreigner are that Mongolians often live together and are accustomed to keeping gazes averted (i.e. no room dividers in a traditional ger; open urination & defecation in the countryside).
- As I read my first set of reflections, it reminded me of my first impressions as seen with fresh eyes. I think that while I still hold many of the same impressions (including basic role descriptions), I see it a bit differently as I feel I have a better understanding [empathy] of why nurses do things the way they do. Perhaps this is the stage in ethnography where one starts to identify with the people they are observing, seeing life more and more their lens - but not at the stage of "going native'.

Appendix 8. Research Log Excerpts

Early Coding Stage

2018-01-15 12:26 Creation of a new node: Nursing Life. Deciding on how to code nursing breaks was what triggered me to create this node. Nursing breaks are important for hydration and nutrition. They impact the quality of life experienced by nurses. Yet 'breaks' seemed too narrow a coding topic, so I wanted something that would include things related to the experience of nurses that impacts their quality of life. Thus, there will be room for other topics that I anticipate from later shift transcripts.

2018-01-15 13:00 I created a new node: non-medical physical care. Interestingly, it is only on my second transcript that I realized I needed a node that covers tasks related to patient's personal care such as washing, grooming, bedmaking

2018-01-15 13:10 I created a new node: handovers. This is to capture the activities related to communication from one shift to another regarding patients. I will need to review coding from the first transcript and recode accordingly. I checked both 'roles of hospital staff' and 'tasks in nursing' nodes. The recoding is fairly straightforward, with right clicks to code and uncode for specific nodes

2018-01-15 13:34 modified the description on the 'roles node' so that it included PAs (personal attendants). Rationale: PAs often provide care that a nurse could provide, or that a nurse in another country might provide as part of their regular duty. Wording of the node changed to 'roles in the hospital setting' *[Note: PA was changed to CA in the thesis as I felt it better reflected the purpose of the role]*

2018-01-19 15:36 Creation of a new node 'Memos on fieldnotes'. These are memos that include: (1) impressions & thoughts following a unit of observation... A 'unit' being a specific time and place for a field observation, eg. a shift and (2) memos written directly into the field note transcripts - that come from (a) memos as recorded in my 'jottings' notebook &/or memos that occurred to me at the time I was writing up the field note transcripts. I felt it could be of value to have all my memos in one place. I don't know at this point what it will reveal... perhaps recurring thoughts/ideas, changes in thinking over time, questions that may be appropriate for interviews, reflections on what it has been like to do an ethnography over time, etc.

2018-01-22 17:49 During a review of the coding of the first 4 shifts, I have realized that some additional codes may be needed... (1) **patient teaching** - to be added as a nursing task sub-code, (2) **errands** - to capture the activities related to having to go off unit for 'non-nursing' services such as lab, pharmacy, and administration.

2018-01-22 20:47 A node called 'Assessment' has been added as a sub-node to nursing tasks

2018-01-22 21:34 I would like to recode 'housekeeping' and **add a node for 'infection control'** so as to better capture the purpose of tasks (rather than a role i.e. housekeeping).

2018-01-22 22:02 I have also added nodes for **admission & discharge,** and **laboratory**.

2018-01-26 16:06 I have noted 'accounting' on my recoding draft. However, I have decided to keep anything related to accounting under documentation. Rationale: (1) accounting is a type of documentation, (2) adding to my nodes will mean my list is long enough that not all nodes will be visible, (3)it will be interesting to compare all documentation and analyse it together at a later time

2018-01-26 16:39 I am 'uncoding' most of the excerpts in the general 'tasks in nursing' code, and instead, making sure that they are coded in a more specific category (using the coding stripes to check). My thoughts are (1) it will make it easier to analyse later as it will be more specific to a task that has emerged through review of the first four shifts, and (2) subsequent shift transcripts can be coded using the more detail coding as there seems to be sufficient data to warrant the more detailed codes.

Later-Early Coding Stage

2018-11-23 14:42 I have decided to review the code "Roles in the hospital staff". As this category is growing quite large, I plan to separate out roles specific to non-nurses so that I can look more easily through the window of each different type of care provider that I have observed. While going through this node, I hope to remain open to whatever other themes or commonalities or potential outliers might be present. For the time being, comments about RNs or that are general will remain in the parent node when the observation is not covered by other codes. **Decisions: creation of the following sub-nodes: PAs (Patient Assistants), MDs (medical doctors), NA (nursing assistant), Administrative RNs, Cleaners & Maintenance, Patients, & Specialty RNS.** Notes: I have uncoded a lot of the original codes in this category after reassigning them to another code. For many of the codes where there is a nursing task that I have not created a sub-node for (e.g. getting sleeping mats for the PAs, finding charts for MDs) I have coded them at the parent node "Tasks in Nursing".

2018-11-24 13:14 I have finished recoding 'Roles'

2018-12-19 10:53 *Today I am continuing to review categories in order to obtain detailed observations. This seems to be a natural step in the analysis process. Most items were initially coded broadly (e.g. "tasks in nursing"). I did this so as not to create narrow categories in the early stage before I had reviewed the data. This was to decrease the potential for missing observations that I had made, but not consciously thought about. For example, my impression after observing a few shifts was that nurses did almost no assessments. But then I discovered I had observed them doing assessments, just not in the same systematic way that I was accustomed to in Canada and as taught in the nursing schools & universities. Once I coded all the data from the nursing shifts, I reviewed categories again. For the assessment category, I am breaking it down further into specific types of assessments. This provides me with the details of what assessments look like as done by nurses. I then write a summary that includes the types of assessments as well as my analysis and reflections. Although I have not yet reviewed the literature to compare what I have observed in Mongolia with other countries and I have not done hospital nursing for about 25 years (so I am not up-to-date on everything), but because I have some nursing experience and knowledge, I can't help but make comparisons in the areas that I am knowledgeable about.*

2018-12-19 11:15 Based on a reading through of the category **"Assessment"**, the following **sub-nodes were created: Blood Sugars, Catheters, Charting, complaints, Ins & Outs, Meds & Transfusions**, **Physical Assessment, post-op & ICU, Vital Signs & 0 sats, weight, Wounds & skin integrity**.

2018-12-19 11:38 Of interest, double coding of patients receiving blood and having their BP checked is common. However, the way I set up the coding, *other checks such 'orientation' and 'warm or cool to touch' aren't specified.... Decision to code this under 'physical assessment' as I think there are insufficient examples to warrant a separate category*.

2018-12-22 18:04 recoding of the node **'tubes-wounds-dressings'.** New sub-nodes include: catheter surgical insertion, drainage systems, incisions-drsg changes, peripheral IV catheters, sanitation related to wound care, supplies related to wounds and tubes, and ulceration & dehiscement. A memo entitled Tubes wounds dressings was also created where I wrote a description/summary of my observations.

2019-01-04 20:18 On occasion, I have found an excerpt that I didn't think belonged in the category. To deal with it, I looked at how it was coded (check 'All coding') and then did one of two things (1) recoded it into another category and deleted it from the inappropriate category or (2) left it as it was but didn't include it in my summary.... This sometimes is helpful in order not to change the reference numbers I may have quoted elsewhere.

Transcription Checking

2019-11-25 09:20 In listening to the transcripts, I am confident that the transcription and translation capture what was said on the audio. The only aspect that wasn't included in the Mongolian language transcript is speech disfluency. Mongolian equivalents of filler words (um, ah, like, etc.) were not transcribed primarily because of the cost of transcription and translation which is based on word count. A secondary reason is that my analysis was not focusing on the meaning of the use of filler words - in part because I lack the fluency to know if the filler word is because of a reluctance to say something or if it is simply part of the character and speech pattern of the interviewee. However, in listening to the transcripts, the frequent occurrence of filler words in some interviews suggests to me the possibilities that this might be the first time people articulated what they were speaking about and/or that they were hesitant to speak about the topic and were trying to be cautious and judicious in their choice of words. My transcriptionist /translator told me that the use of fillers is very common in Mongolian speech, with the majority of people using them in everyday speech.

2019-11-27 10:56 I noticed that the term 'blame' comes up a lot in a couple of interviews. Once the interviews have all been coded, I think it would be helpful to do a query on the terms 'blame', 'rebuke', 'scold', and 'complain'.

2019-11-27 10:57 Translation terms: translation only gives an approximate term or phrase for what was expressed in another language. Terms & phrases carry layers of meanings, not just as to the lexical definition, but also in how they are used. It was interesting to note the use of two different terms by two different translators: one for the oral interview and one for translation of the transcribed interview. It is difficult to discern which term or phrasing best fits what the interviewee tried to convey. While the translator for the transcription had more qualifications as a translator, my impression is that the oral translators often captured the emotions and intent of the speaker. Therefore, one phrasing is not necessarily more accurate than another. If one looks at how other works have undergone translations, there is almost always a variety of terms used to capture the meaning and they can vary from literal translations to dynamic equivalence. In my view, the oral translator used more dynamic equivalence while the written translator used more literal phrasing. Also.... I will likely edit the translated dialogue some. In Mongolian, it would likely have a higher level of fluency English than in the transcript, so as the interviews were all in Mongolian, I prefer to reflect that fluency rather than translated Mongolian into English that doesn’t flow.

2019-11-27 12:55 Although I listened to the audio recording and checked the transcript of Interview 8, when it came to coding the transcript today, I realized that there were some things that weren't clear in the translation. Thus I went back to the audio recording to listen to it again and made a couple of changes. Another way of checking the meaning of the translation was to check the transcript of the oral translator. As a result, the transcript in NVivo is more correct now than the one the transcriptionist/translator has sent to me.

2020-02-22 15:00 Checking coding reliability: I recoded Interview 1 and found that my coding choices were almost always identical. The main differences came with additional codes that I added since doing this first interview. However, it was only a difference in adding to another category rather than deleting categories to which they were coded. I also did a scan through Interview 4 (as I noted I would do above). Most of what I reconsidered was the same as I had already coded. I did some additional coding on a few excerpts (related to nursing mgt, customer service, team), but not many and I didn't delete any codes.

Constructing Nursing Roles

2020-03-02 20:32 As I sit in the data, I keep asking myself 'What is the role of the nurse?' 'What does this excerpt say about the purpose or function of the nurse?' As a result of this internal discussion, I have re-examined the list of my nodes as originally listed under 'nurses roles'. A number of these categories were just topics rather than functions or roles. My thinking in putting the topics there was that at a later date, I would decide where they best fit.

Since being immersed in the data and continually asking myself about the role of the nurse, I started to rename some of my categories. This list is not according to time of change, but it includes changes made today.

1. I omitted one category called 'opportunities'. It contained references to nursing education, medical education, and opportunities nurses were accused of taking for their own self benefit (urine test, patient medications). I redistributed these to either 'Learner' (formal or informal learning opportunities/programs) or 'Accountant' (I put the meds and lab tests nurses were accused of doing under this section because there are costs associated with it and nurses are expected to provide honest accounting of patient treatments and testing, for which patients are billed).

2. I collapsed all the nodes on communication (e.g. communication with nurses, doctors, NAs, pts, Sr RN) into one nursing role 'Communicator'.

3. I created a category called 'Learner'. I put references to continuing education, nursing education, orientation, and student-RN transition into this category as they all involved learning.

4. I changed the category 'Patient Care' into 'Caregiver'. I had already done a node summary that focused on direct care (care provider), including patient education. I felt that the title of 'Caregiver' carried with it the degree of intimacy that direct care would entail.

5. I created a category called 'Helper'. There are only 2 references in this category, but I think it is important. One reference I brought in from 'opportunities'. It was a commentary on why nurses and doctors should help without regard to whether or not the patient rewards them with a gift. The other reference illustrates the nurse interviewee's dedication to her work. I think that this role is very much part of what the nurse does. In addition, references to the nurse as a 'doctor's assistant' would fit in here well. NOTE: I have not used the term 'assistant' even though it has been used a lot in this research. A part of me might resist it simply because this has been the term that has been in use for many years and people are now wanting to move away from. Helper carries some of the same meanings but is broader and more altruistic which is why I chose 'helper'.

6. I changed the node role 'carry-out' to 'Technician-Clinician' as this reflects what are the sub-nodes: lab tests, medication admin, other orders nurses carry out. I also added the category of assessment. These sub-nodes are the responsibilities of the nurse in carrying out the function/role of technician/clinician.

7. I changed 'Nurse management' to 'Manager' and classified it as one of the roles of the nurse rather than being a separate category.

8. I changed the name of the node 'collaboration-team member' to 'Team Member'. I put it as a sub-node of 'Nursing Roles' rather than being a separate category. I changed the category 'organization' to 'Organizer' and added it to the sub-node 'Manager'

9. I moved the 'researcher' category to be a sub-category of 'learner'.

10. I think that 'Attitudes' can be moved under the nursing role of 'communicator' - but I did NOT move it because there are descriptions of attitudes between multiple professionals, and at this point, I'm not certain that it will all fit under 'communication'.

11. I created a nursing role called 'clerk', into which I put the former category of 'documenter'. I had looked up in an online thesaurus various synonyms of 'documenter' and felt that clerk best described the role that nurses had in documenting treatments, taping lab results into charts, etc.

12. I created a role called Follower. It might be important to have this as its own role as nurses are expected to follow doctor's orders, checklists, etc. They are not expected in these situations to be creative or innovative. (Reflexive thinking: part of me hesitates to put 'follower' because I don't want to see the nursing role as one of a 'follower'; somehow it seems less honourable as I often associate being a 'follower' with doing things just because that's how it has been done. The exception is for those situations where one has done careful thinking and consideration before deciding to follow.)

13. I moved references coded as 'problem-solving' into the nursing role of 'manager'

2020-03-03 10:43 Question: why is the node of technician-clinician separate from caregiver? At this point, I think that technician-clinician best describes the specific skills that require knowledge and practice, but that which anyone can learn, even if not a nurse. Caregiving implies a more holistic approach to patient care rather than being limited to a specific task.

2020-03-03 11:43 I have been comparing the categories of nursing roles between interviews and field notes. There is a high degree of consistency between the two, with the exception that there are more Field Note categories. I think this is appropriate given the significant more time spent in the field than in interviews. Also, interviews tend to flow according to a combination of interviewer questions and interviewee interests which are not comprehensive given the nature of the interview set-up.

Appendix 9. Approvals to Conduct Research

Early Stage Review: Approval Letter

Anne Biro

22nd September 2017

Dear Anne

Re: Early Stage Review

Thank you for your amendments to your portfolio following the feedback from your Early Stage Review interview on 11th September 2017. Your successful transfer from MPhil to PhD registration has now officially been approved

Please observe the minimum and maximum periods of registration as detailed in the research degree regulations for submission of your thesis.

On behalf of the Committee, I wish to take this opportunity to wish you continued success with your research project.

Yours sincerely

[redacted]

[redacted]

[redacted]
Faculty Research Degrees Administrator
School of Health & Social Care
T: [redacted]
[redacted]

[redacted]
Chair of Faculty Research Degrees Committee
Faculty of Health Sciences

Early Stage Review: Letter in Response to Feedback

September 22, 2017

Dear [redacted] and the ESR Committee,

Thank you for your suggestions and comments regarding my proposed research. I have addressed your Acomments in the updated version of the proposal I am attaching to this email. To facilitate your assessment of these changes, I have used red font for amendments and additions.

The areas that have been revised are as below:

Comments		Page	Notes
1	Formulate a clear research question and supplement this with objectives	7	Reworded
2	Provide a clear statement highlighting the original contribution	7	Added
Minor Suggestions			
	Consider the scale of the data collection process. The number of interviews could be reduced	*11*	*Decreased estimated interviews to 15*
	Consider removing focus groups as a data collection approach.	-	*Removed focus groups for data collection.*
	A small degree of supplementary material could enhance the discussion of the observation and interview process	*12 & 13*	*Added*
	A short statement on reflexivity would also be useful	*10*	*Added*

Thank you for your review of these changes. I look forward to hearing from you soon.

Sincerely,

Anne Biro

Early Stage Review: Initial Letter post Review

Anne Biro

21st September 2017

Dear Anne

Re: Early Stage Review

Thank you for attending your Early Stage Review interview on 11th September 2017. Your successful transfer from MPhil to PhD registration has officially been approved with the following conditions

- Formulate a clear research question and supplement this with objectives
- Provide a clear statement highlighting the original contribution

The panel also made the following notes and suggestions of minor corrections to assist you with your continued studies:

- Consider the scale of the data collection process. The number of interviews could be reduced. You can also consider removing the focus group as a data collection approach.
- A small degree of supplementary material could enhance the discussion of the observation and interview processes
- A short statement on reflexivity would also be useful.

Please submit your revised ESR with highlighted changes and a cover letter stating how the reviewer's points have been addressed to [redacted] by 21st October 2017

Please observe the minimum and maximum periods of registration as detailed in the research degree regulations for submission of your thesis.

On behalf of the Committee, I wish to take this opportunity to wish you continued success with your research project.

Yours sincerely

[redacted]

[redacted]

[redacted]
Faculty Research Degrees Administrator
School of Health & Social Care
T: [redacted]
[redacted]

[redacted]
Chair of Faculty Research Degrees Committee
Faculty of Health Sciences

Ethical Review and Approval for Research

Health

ETHICAL APPROVAL FEEDBACK

Researcher name:	Anne Biro
Title of Study:	The Role and Scope of Practice of Mongolian Nurses
Status of approval:	Approved

Thank you for addressing the committee's comments. Your research proposal has now been approved by the Ethics Panel and you may commence the implementation phase of your study. You should note that any divergence from the approved procedures and research method will invalidate any insurance and liability cover from the University. You should, therefore, notify the Panel of any significant divergence from this approved proposal.

You should arrange to meet with your supervisor for support during the process of completing your study and writing your dissertation.

When your study is complete, please send the ethics committee an end of study report. A template can be found on the ethics BlackBoard site.

[redacted]

Signed: Dr [redacted] **Date: 06.09.2017**

Chair of the Health Sciences Ethics Panel

Ethics Committee Approvals for Amendments

Ethics Committee Approval of Amendment: Translator Confidentiality Agreement

STAFFORDSHIRE UNIVERSITY

Health Sciences

ETHICAL APPROVAL FEEDBACK

Researcher name:	Anne Biro
Title of Study:	The Role and Scope of Practice of Mongolian Nurses
Award Pathway:	**PhD**
Status of approval:	**Amendment approved**

Thank you for your correspondence requesting approval of a minor amendment to your previously approved application that were highlighted in a letter to me dated 28.09.2017

Your amended application is approved. We wish you well with your research.

Action now needed:

Your amendment has now been approved by the Health Sciences Ethics Panel.

You should note that any divergence from the approved procedures and research method will invalidate any insurance and liability cover from the University. You should, therefore, notify the Panel in writing of any significant divergence from this approved proposal.

You should arrange to meet with your supervisor for support during the process of completing your study and writing your dissertation.

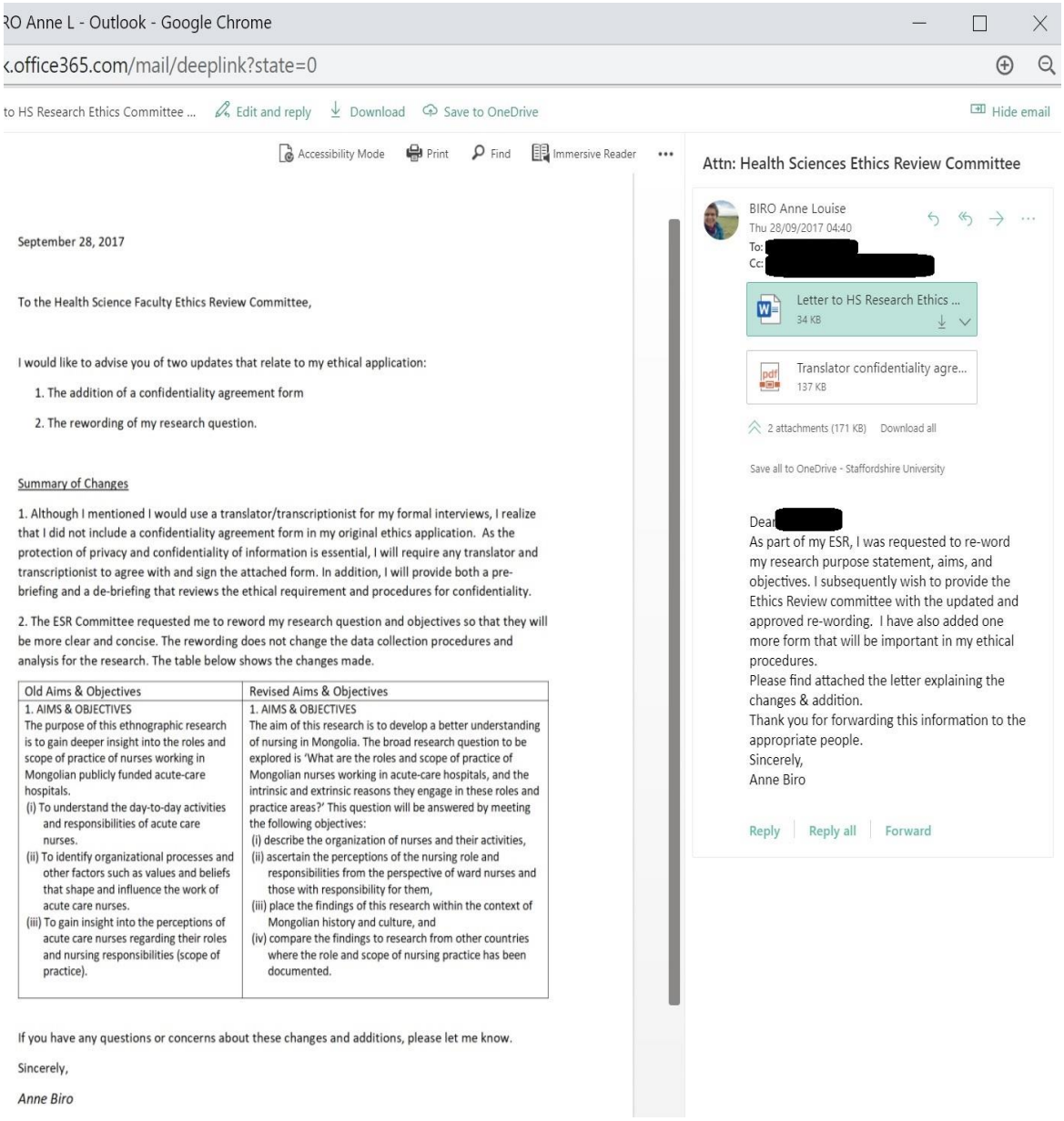
When your study is complete, please send the ethics committee an end of study report. A template can be found on the ethics BlackBoard site

[redacted]

Signed: Dr [redacted] **Date: 29.09.2017**

Chair of the Health Sciences Ethics Panel

Translator Confidentiality Agreement: Correspondence re Proposed Amendment



September 28, 2017

To the Health Science Faculty Ethics Review Committee,

I would like to advise you of two updates that relate to my ethical application:

1. The addition of a confidentiality agreement form
2. The rewording of my research question.

Summary of Changes

1. Although I mentioned I would use a translator/transcriptionist for my formal interviews, I realize that I did not include a confidentiality agreement form in my original ethics application. As the protection of privacy and confidentiality of information is essential, I will require any translator and transcriptionist to agree with and sign the attached form. In addition, I will provide both a pre-briefing and a de-briefing that reviews the ethical requirement and procedures for confidentiality.

2. The ESR Committee requested me to reword my research question and objectives so that they will be more clear and concise. The rewording does not change the data collection procedures and analysis for the research. The table below shows the changes made.

Old Aims & Objectives	Revised Aims & Objectives
1. AIMS & OBJECTIVES The purpose of this ethnographic research is to gain deeper insight into the roles and scope of practice of nurses working in Mongolian publicly funded acute-care hospitals. (i) To understand the day-to-day activities and responsibilities of acute care nurses. (ii) To identify organizational processes and other factors such as values and beliefs that shape and influence the work of acute care nurses. (iii) To gain insight into the perceptions of acute care nurses regarding their roles and nursing responsibilities (scope of practice).	1. AIMS & OBJECTIVES The aim of this research is to develop a better understanding of nursing in Mongolia. The broad research question to be explored is 'What are the roles and scope of practice of Mongolian nurses working in acute-care hospitals, and the intrinsic and extrinsic reasons they engage in these roles and practice areas?' This question will be answered by meeting the following objectives: (i) describe the organization of nurses and their activities, (ii) ascertain the perceptions of the nursing role and responsibilities from the perspective of ward nurses and those with responsibility for them, (iii) place the findings of this research within the context of Mongolian history and culture, and (iv) compare the findings to research from other countries where the role and scope of nursing practice has been documented.

If you have any questions or concerns about these changes and additions, please let me know.

Sincerely,

Anne Biro

Inclusion of Key Informants

Ethics Committee Approval of Amendment: Key Informants

ETHICAL APPROVAL FEEDBACK

Researcher name:	**Anne Biro**
Title of Study:	**Role and Scope of Nursing Practice**
Award Pathway:	**PhD**
Status of approval:	**Amendment approved**

Thank you for your correspondence requesting approval of a minor amendment to your research project, so that you may incorporate information from informal contacts with friends and colleagues into your field notes and so include them among the sources of data for your research.

A subgroup of the University Ethics Committee has met and considered the papers you attached. We have concluded that there is no barrier to you including this information on the conditions that:

1) Any information you use is anonymised
2) You do not include any direct quotations from your informal sources, but only summaries or personal reports of their contribution

As long as you work within these conditions, you are not required to seek more formal consent, and your amended application is approved. We wish you well with your research.

Action now needed:

Your amendment has now been approved by the University Ethics Panel.

You should note that any divergence from the approved procedures and research method will invalidate any insurance and liability cover from the University. You should, therefore, notify the Panel in writing of any significant divergence from this approved proposal.

You should arrange to meet with your supervisor for support during the process of completing your study and writing your dissertation.

When your study is complete, please send the ethics committee an end of study report. A template can be found on the ethics Blackboard site.

Signed: Professo[redacted] **Date: 14 December 2018**
Chair of the University Ethics Committee

Appendix 10. Hosting Organizations in Mongolia

Mongolian Host Institution

AMERICAN CENTER FOR MONGOLIAN STUDIES
АМЕРИКИЙН МОНГОЛ СУДЛАЛЫН ТӨВ

March 6, 2017

Re: Institutional Review Board Equivalent in Mongolia

To Whom It May Concern;

I am writing on behalf of Anne Biro (Staffordshire University, U.K.) who is proposing to conduct an ACMS Field Fellowship project entitled "Mongolian Perceptions of Nursing". Our office has been in contact with the Mongolian Ministry of Education, Culture, Science and Sport confirming that official ethical review boards equivalent to institutional review boards in the United States do not currently exist.

As advised by the Ministry, Ms. Biro will be working with a local host institution while conducting her research in order to abide by local laws and regulations, to ensure the research design conforms with social and cultural norms, and to prepare the necessary letters of introduction to local officials. Therefore our office has agreed to act as her host institution.

The American Center for Mongolian Studies is a US Department of Education funded American Overseas Research Center 9AORC) with a permanent office at University of Pennsylvania and a Mongolian office at the Natsagdorj Public Library in Ulaanbaatar. The center is a US registered 501(c) 3 not-for-profit academic organization and a Mongolian licensed not-for-profit, non- governmental organization. The center routinely provides logistical, administrative and informational support to U.S. scholars working in the region. More information is available at the center website at www.mongoliacenter.org .

If you have further questions regarding this issue, please do not hesitate to contact me at either [redacted] (+976) [redacted]

Respectfully,

[redacted]
Resident Managing Director
American Center for Mongolian Studies

P.O.Box 695, Central Post Office, Ulaanbaatar -13, Mongolia
Phone/ Fax: (976) 7711-0486, Mobile: 9979-9869
info@mongoliacenter.org
www.mongoliacenter.org

Letter of Support from Research Site Hospital "X"

[redacted]

Date 2017. 07. 17.
Ref. 5/845

To the Staffordshire University Ethics Review Committee,

I have read the Ethical Review Application that is being submitted by Anne Biroon the roles and scope of practice of Mongolian nurses. I am pleased to support her application. I am in agreement with the research methodology and processes outlined in the application.

Upon receiving ethical approval for this research from your institution, I will present the proposal to the director of [redacted] Hospital for the final approval. Based on the description of the proposed research, I anticipate that Anne will be able to move forward with her field research at our hospital this year.

This research is important for our hospital and country as we seek to better understand the formal and informal roles and work of nurses as well asfactors that influence their work. As one of the leading hospitals in Mongolia, we value research providing insights that can help us advance policies consistent with the ongoing development of the nursing profession for the benefit of the people of Mongolia.

I look forward to inviting Anne to conduct this research in our hospital.

Sincerely,

[redacted]

Research Director
[redacted]
Ulaanbaatar, Mongolia
Email: [redacted]
Phone: [redacted]

Appendix 11. Executive Summary of Research

The Role and Scope of Practice of Mongolian Nurses

Anne Biro, PhD Student

Staffordshire University, U.K.

Introduction: In 1987 the International Council of Nurses agreed on global definitions of 'nursing' and a 'nurse' (ICN, 2017). However, there continues to be variation as to the actual role and scope of practice of nurses in different countries around the world. Historical developments, culture, and socio-political views influence both the public's perception of nursing as well as nurses' own self-image (Fealy, 2004; Larrabee & Bolden, 2001; ten Hoeve, Jansen & Roodbol, 2014; Henderson, 2006). A review of internationally published nursing research suggests that the personal characteristics of nurses and the type and level of knowledge, skills and scope of practice often vary between different countries and cultures (Biro, 2012; Henderson, 2006).

Since Mongolia changed its government to a democratic republic in 1990, there have been many health care system reforms and policies to promote increased capacity of health workers and health system decentralization. Some of these policies are specific for advancing nursing education and practice. Mongolian nurses and other health professionals and policy makers are increasingly interested in research that helps develop an understanding of the current situation within the Mongolian health care system, including the work of nurses.

Purpose and objectives: The aim of this research is to develop a better understanding of acute care nursing in public hospitals in Mongolia. The broad research question to be explored is 'What are the roles and scope of practice of Mongolian nurses working in publicly funded acute-care hospitals, and the intrinsic and extrinsic reasons they engage in these roles and practice areas?' The specific objectives are to:

(i) describe the organization of nurses and their activities,
(ii) ascertain the perceptions of the nursing role and responsibilities from the perspective of ward nurses and those with responsibility for them,
(iii) place the findings of this research within the context of Mongolian history and culture, and
(iv) compare the findings to research from other countries where the role and scope of nursing practice has been documented.

Methodology: The methodology to be used for this research is ethnography. Ethnographic research is appropriate when the goal is to develop an understanding of the activities, values, and beliefs of a cultural group (Morse & Field, 1995). Ethnographic research is unique in that it is conducted over many hours in the actual setting where people work and live. Ethnographic research incorporates three main methods for collecting data: observation in the place where people work and/or live, interviews, and document analysis (Roper & Shapira, 2000).

A. Field observation will be carried out on medical-surgical inpatient units in a major acute-care centre in Ulaanbaatar, Mongolia. Medical-surgical nurses have been selected as most Mongolian nurses are employed in this area. I plan to conduct field observations from October 2017-April 2018, logging a minimum of 200 hours. I plan to shadow nurses during their work, including both day and night shifts. This will give me the opportunity to observe directly what nurses do throughout their shift. This will include things like listening to shift reports, following the nurse on medication rounds, observing wound care, attending meetings, and sharing meal times. The request for more than one volunteer on two nursing units during the period of field observation is to increase exposure to a variety of nurses and work routines, and to increase the degree of anonymity because of working with several volunteers on more than one nursing ward.

B. Semi-structured interviews will begin in 2018. Participants will be recruited from the hospital where I will be doing field observations. I may also recruit a few volunteers from other hospitals

in order to provide a broader perspective and to increase the degree of anonymity. Nurses from medical-surgical inpatient units, doctors and administrators who have influence on the work of nurses either through administrative responsibilities or supervision and delegation, and other relevant hospital staff will be invited to participate. Interviews will last approximately 60 minutes. Based on previous ethnographic studies similar in scope to this research, an estimate of 15 volunteers will be needed to obtain data saturation.

C. Documents that will be analysed in this research are those relevant to the research question such as job descriptions and policies, both of which are available publicly. Patient charts will not be included, although the purpose and structure of nursing charting and forms may be noted (what nurses are required to chart, forms to be completed, etc.).

Outcomes: The expected outcomes of this research include a detailed description of the role and scope of practice of acute-care nurses, as well as the values and beliefs that nurses and other health professionals have about nursing. This type of research data is not currently available in Mongolia as no ethnographic studies in hospitals or among nurses have been conducted to date. As most research conducted in Mongolia is quantitative, this qualitative, ethnographic study will provide a different type of data on nursing. The findings will therefore contribute to triangulation of research on the topic of nurses in Mongolia. Results from this study can be used to help other nurses, hospital directors, and nursing teachers understand what it is like to be a nurse and what is important to nurses in their work. It might also be helpful for understanding what changes could be helpful for the future of nursing.

As the Mongolian health system continues to transition to a more decentralized system, and as the government works to expand the roles of nurses (World Health Organization, 2013), developing an understanding of nursing practice in hospitals, as well as the intrinsic and extrinsic factors that influence it, will provide important insights that can inform policy, education, research, and administration.

References

BIRO, A.L., 2012. Creating conditions for good nursing by attending to the spiritual. *Journal of nursing management,* 20(8), pp. 1002-1011.

FEALY, G.M., 2004. 'The good nurse': visions and values in images of the nurse. *Journal of advanced nursing,* 46(6), pp. 649-656.

HENDERSON, V., 2006. The concept of nursing. *Journal of advanced nursing,* 53(1), pp. 21-34.

ten HOEVE, Y., JANSEN, G. and ROODBOL, P., 2014. The nursing profession: public image, self-concept and professional identity: a discussion paper. *Journal of advanced nursing,* 70(2), pp. 259-309.

LARRABEE, J.H. and BOLDEN, L.V., 2001. Defining patient-perceived quality of nursing care. *Journal of nursing care quality,* 16(1), pp. 34-60.

MORSE, J.M. and FIELD, P.A., 1995. *Qualitative research methods for health professionals.* 2nd edn. Thousand Oaks, CA: SAGE Publications.

ROPER, J.M. and SHAPIRA, J., 2000. *Ethnography in Nursing Research.* Thousand Oaks, California: Sage Publications.

WORLD HEALTH ORGANIZATION, 2013. *Mongolia Health System Review.* Geneva, WHO Press.

Монгол Сувилагчдын ажлын үүрэг болон цар хүрээ

Anne Biro, Докторын оюутан

Staffordshire University, Их Британи.

Танилцуулга: 1987 онд Олон Улсын Сувилагчдын зөвлөл ‘сувилахуй’ ба ‘сувилагч’ гэсэн дэлхий дахины тодорхойлолтыг хүлээн зөвшөөрсөн(ICN, 2017). Гэсэн хэдий ч дэлхий даяар янз бүрийн улс орнуудад сувилагч нарын гардан ажлын үүрэг, цар хүрээ өөр өөр хэвээр байна. Түүхийн хөгжил, соёл, нийгэм-улс төрийн үзэл бодол нь сувилагчийн өөрийн гэсэн дүр төрхийг олон нийтэд ойлгуулахад нөлөөлдөг (Fealy, 2004; Larrabee & Bolden, 2001; ten Hoeve, Jansen & Roodbol, 2014; Henderson, 2006). Олон улсын хэмжээнд хэвлэгдсэн сувилахуйн судалгааны тойм нь сувилагчдын хувийн онцлог шинж чанар, мэдлэгийн хэлбэр, түвшин, ур чадвар, гардан ажлын цар хүрээ, янз бүрийн улс орон, соёл хооронд ихэвчлэн ялгаатай байгааг харуулдаг (Biro, 2012; Henderson, 2006). 1990 онд Монгол улс ардчилсан улс болон өөрчлөгсдөнөөс хойш олон эрүүл мэндийн үйлчилгээний систмемд шинэчлэл хийж мөн эрүүл мэндийн ажилтнуудын чадавхийг дээшлүүлэх, эрүүл мэндийн системийн төвлөрлийг сааруулах талаар олон бодлогуудыг дэвшүүлсээр байна. Эдгээр бодлогуудын зарим нь сувилахуйн боловсрол болон гардан ажлыг дээшлүүлэхэд тодорхой чиглэгдсэн байна. Монголын сувилагч болон эрүүл мэндийн бусад мэргэжилтнүүд, бодлого боловсруулагчид Монголын эрүүл мэндийн тогтолцооны хүрээнд, түүний дотор сувилагчийн ажлыг оролцуулан өнөөгийн нөхцөл байдлын талаарх ойлголтыг дээшлүүлэхэд туслах судалгааны ажилд сонирхолтой байгаа юм.

Зорилго and Зорилтууд:

Энэхүү судалгааны зорилго нь Монгол улсын эмнэлгүүдэд цочмог өвчний сувилгааны талаар илүү сайн ойлголт өгөх зорилготой юм. Өргөн хүрээний судалгааны асуулт нь хүнд өвчтөний эмнэлэгүүдэд ажилладаг монголийн сувилагчдын гардан ажлын үүрэг болон цар хүрээ юу болох, мөн эдгээр үүргүүд ба гардан ажлын талбарт ажиллах болсон’дотоод болон гаднын шалтгаан юу вэ? Гэдгийг илрүүлэх явдал юм

Тодорхой зорилтууд:

(i) Сувилагчдын зохион байгуулалт ба тэдний үйл ажиллагааг дүрслэх
(ii) Сувилахуйн үүрэг, хариуцлагын талаархи ойлголтыг хариуцлага хүлээдэг ахлах сувилагч нарын хэтийн төлвөөс тодруулах
(iii) Монголын түүх соёлын хүрээнд энэ судалгааны ажлын үр дүнг харуулах
(iv) Судалгааны үр дүнг сувилахуйн практик ажлын үүрэг болон цар хүрээг баримтжуулсан бусад улстай харьцуулах.

Арга зүй: Энэ судалгаанд хэрэглэгдэж байгаа арга зүй нь угсаатан зүйн арга юм. Угсаатан зүйн судалгаа нь соёлын бүлгийн итгэл үнэмшил, үнэ цэнэ, үйл ажиллагааны талаарх ойлголтыг хөгжүүлэх зорилгод тохиромжтой юм (Morse & Field, 1995). Угсаатан зүйн судалгаа нь хүмүүс ажиллаж, амьдарч байгаа бодит орчинд олон цагаар хийгддэг онцлогтой юм. Угсаатны зүйн судалгаа нь мэдээлэл цуглуулах гурван үндсэн аргаас бүрддэг: хүмүүсийн ажиллаж амьдарч байгаа газар ажиглалт хийх, ярилцлага хийх, баримт бичгийн дүн шинжилгээ (Roper & Shapira, 2000).

A. Талбарын ажиглалт Талбарын судалгаа Монголын нийслэл Улаанбаатар хотын нэг болон түүнээс дээш тооны түргэн тусламжийн төвүүд дэхь мэс заслын тасагт хэвтэн эмчлүүлж буй өвчтөнүүд дээр хийгдэх болно. Мэс заслын сувилагчид ихэнх монгол сувилагчдын энэ талбарт ажилд ордог шиг сонгогдон ажилладаг. 2017 оны 10-р сараас 2018 оны 4-р сар хүртэл хамгийн багадаа 200 цаг талбарын ажиглалт хийнэ гэж төлөвлөж байна. Өдөр, шөнийн ээлжийг хоёуланг нь оролцуулаад сувилагчдын ажлын цагаар тэднийг даган хийхээр төлөвлөж байна. Энэ нь тэднийг ээлжинд гарч байхдаа юу хийдгийг шууд ажиглан харах боломжтой юм. Үүнд ээлжийн тэмдэгдэл өгөхийг сонсох, эм өгөх ээлжин дээр нь сувилагчийг дагах, шарх боох эмчлэхийг ажиглах, хуралд суух, хоолны цагаар ярилцах гэх мэт зүйлс багтах болно. Талбарын ажиглалт хийх үед 2 сувилахуйн тасагт нэгээс дээш тооны сайн дурын ажилтны хүсэлт нь янз бүрийн сувилагч нарт, ажлын хэв маягийг нь харуулахыг нэмэгдүүлэх, нэгээс илүү сувилахуйн тасагт хэд хэдэн сайн дурынхантай ажиллах учраас нэр хүндийг өсгөх явдал юм.

B. Хагас-бүтэцтэй ярилцлага 2018 онд эхэлнэ. Би талбарын ажиглалт хийх эмнэлэгээсээ оролцогчдын татан оролцуулах болно. Би өргөн хүрээтэй ойлголт өгөх болон нэр хүндийг өсгөхийн тулд бусад эмнэлэгүүдээс нилээд хэдэн сайн дурын ажилтнуудыг татан оролцуулна. Мэс заслын тасагт хэвтэн эмчлүүлж байгаа өвтөнүүдийн сувилагчид, эмч нар болон удирлагууд удирдлагын харицлага эсвэл хяналт шалгалт ба төлөөлөгч, мөн бусад хамааралтай эмнэлгийн ажилтнууд оролцохоор уригдахын аль алинаар нь дамжуулан сувилагчдын ажилд нөлөөлдөг. Ярилцлага 60 минут үргэлжилнэ. Энэхүү судалгааны хамрах хүрээнд ижил төстэй угсаатны зүйн судалгаа дээр үндэслэн өгөгдлийг хангаж авахын тулд 15 сайн дурын ажилтан хэрэгтэй болно.

C. Энэхүү судалгааны баримт бичиг нь судалгааны асуултуудад тохиромжтой ажил үүргийн тодорхойлолт ба зарчимууд гэх мэт олон нийтэд нээлттэй баримтууд байх болно. Хэдийгээр сувилахуйн өвчтөний түүх ба анкетууд тэмдэглэгдэж болох боловч, өвчтөний түүхийг үүнд оруулахгүй болно сувилагч нарын хөтлөж, бөглөж байх ёстой баримт бичиг гэх мэт.

Гарах үр дүн: Энэхүү судалгааны үр дүн нь түргэн тусламжийн сувилагч нарын гардан ажлын цар хүрээ, үүргийн нарийвчилсан дүрслэл, сувилагчдын итгэл үнэмшил, үнэ цэнэ болон бусад эрүүл мэндийн мэргэжилтнүүдэд байдаг сувилахуйн талаарх ойлголт зэргийг багтаана. Эмнэлэг сувилагчдын дунд угсаатан зүйн судалгааны ажил хийгдээгүй байгаа шиг одоогийн байдлаар ийм төрлийн судалгааны ажил Монголд хийгдээгүй байна. Монголд хийгдсэн ихэнх судалгаанууд тоон болон чанарын үзүүлэлтээр хийгдсэн шиг, угсаатны зүйн судалгаа нь сувилахуйн талаар өөр төрлийн мэдээлэл цуглуулах хэлбэртэй байдаг. Тийм учраас, Судалгааны баримтууд нь Монгол дахь сувилагч нарын сэдвээр судалгаа хийхэд хувь нэмэр оруулах болно. Энэ судалгааны үр дүнг бусад сувилагч, эмнэлэгийн захирал, сувилахуйн багш нарт сувилагч байх нь ямар утгатай болох, ажлын талбар дээр сувилагч нарт юу чухал болохыг ойлгоход тус болж чадах юм. Сувилахуйн ирээдүйд ямар өөрчлөлтүүд тус болж болохыг ойлгоход бас тустай байж болох юм.

Монголын эрүүл мэндийн систем илүү төвлөрсөн бус систем уруу шилжсээр байгаа бөгөөд сувилагчдын үүрэгийг өргөжүүлэхээр засгийн газар ажиллаж байгаа (Дэлхийн Эрүүл Мэндийн Байгууллага, 2013), эмнэлэгүүдийн сувилахуйн гардан ажлын талаарх ойлголтыг хөгжүүлснээр мөн түүнчлэн үүнд нөлөөлөх бодит гаднын хүчин зүйлүүд, бодлого, боловсрол, судалгаа ба албадуудад мэдээлж болохуйц чухал ойлголтыг өгөх юм.

Лавлагаа

BIRO, A.L., 2012. Creating conditions for good nursing by attending to the spiritual. *Journal of nursing management,* 20(8), pp. 1002-1011.

FEALY, G.M., 2004. 'The good nurse': Visions and values in images of the nurse. *Journal of advanced nursing,* 46(6), pp. 649-656.

HENDERSON, V., 2006. The concept of nursing. *Journal of advanced nursing,* 53(1), pp. 21-34.

ten HOEVE, Y.., JANSEN, G. and ROODBOL, P., 2014. The nursing profession: Public image, self-concept and professional identity: a discussion paper. *Journal of advanced nursing,* 70(2), pp. 259-309.

LARRABEE, J.H. and BOLDEN, L.V., 2001. Defining patient-perceived quality of nursing care. *Journal of nursing care quality,* 16(1), pp. 34-60.

MORSE, J.M. and FIELD, P.A., 1995. *Qualitative research methods for health professionals.* 2nd edn. Thousand Oaks, CA: SAGE Publications.

ROPER, J.M. and SHAPIRA, J., 2000. *Ethnography in Nursing Research.* Thousand Oaks, California: Sage Publications.

WORLD HEALTH ORGANIZATION, 2013. *Mongolia Health System Review.* Geneva, WHO Press.

Appendix 12. Key Informants

Key Informants (code names)

1. Willow: age=late-40s; position=Senior head nurse in a private hospital (deputy nursing director), graduated as a Physician's Assistant but worked in the city as a nurse and subsequently obtained bachelor and master's degrees in nursing; longest known of the key informants - met and became friends through a nursing English class I taught in 2007
2. Tadorna: age=mid-20s; position=post-graduate student, previously worked as a ward nurse in a tertiary hospital in Ulaanbaatar; met through Mongolian friends
3. Rose: age=mid-30s; position=nursing faculty at a university in Ulaanbaatar; met through my volunteer work at a university
4. Valerian: age=late-40s; position=head nurse in a tertiary hospital in Ulaanbaatar; was a former student in a nursing English class I taught several years prior to this research
5. Cygnus: age=mid-30s; position=head nurse for a specialty medical ward in a private hospital; met through my volunteer work at a university
6. Hazel: age=mid-30s; position=nurse educator at a private hospital; met through my volunteer work at a university
7. Nonea: age-mid/late 30s; position=medical doctor in a tertiary hospital in Ulaanbaatar; met at an event through the American Center for Mongolian Studies

Appendix 13. Participant Demographics

Participant Demographics

Participant[1]	Gender	Age	Job Title	Unit	Current Job in years	Monthly Income[2]	Marital Status[3]	Household size[4]	Minutes Commuting (one way)	Religion[5]
field	Female	29	nurse	surgical	6	1	2	incomplete	60	1
field	Female	33	nurse	surgical	6	1	1	incomplete	60	1
field*	Female	35	nurse	surgical	6	1	2	5	60	1
field	Female	50	nurse manager	surgical	29	2	incomplete	4	30	1
field	Female	53	head nurse	surgical	32	2	2	3	40	1
field*	Female	28	nurse	surgical	2	1	3	3	40	1
field*	Female	24	nurse	surgical	2	1	1	4	80	6
field	Female	41	nurse	surgical	1	1	1	5	65	1
field	Female	23	nurse	surgical	2	1	1	9	40	1
field	Female	26	nurse	surgical	2	1	incomplete	2	incomplete	5
field	Female	26	nurse	medical	5	1	1	incomplete	60	1
field*	Female	42	nurse	medical	3	1	2	2	60	1
field*	Female	26	nurse	medical	0.5	1	2	4	60	1
field*	Female	25	nurse	medical	3	1	1	7	90	2 + 7
field*	Female	46	nurse	medical	13	2	2	incomplete	30	1 + 2
field*	Female	29	nurse	medical	7	1	2	3	90	7
field*	Female	46	assistant nurse	medical	5	1	4	3	40	1

[1] Asterix denotes nurses shadowed
[2] Income reported for 2017-2018: 0=n no income; 1=less than Tg500,000/month; 2=500-750,000/month; 3=750-100,000/month
[3] Marital Status: 1=single; 2=married/common-law; 3=divorced/separated; 4=deceased
[4] Household size = number of people living together
[5] Religion: 1=Buddhist; 2=Shamanist; 3=Christian; 4=Muslim; 5=Atheist; 6=Agnostic; 7=Other (non-specified)

Participant[1]	Gender	Age	Job Title	Unit	Current Job in years	Monthly Income[2]	Marital Status[3]	Household size[4]	Minutes Commuting (one way)	Religion[5]
field*	Female	48	nurse	medical	30	2	2	6	20	1
field*	Female	27	nurse	medical	0.2	1	2	3	45	2
field	Female	33	nurse methodologist	medical	1	1	2	4	30	2
field	Female	52	nurse	medical	30	2	1	1	35	1
field	Female	32	ICU nurse	medical	3	1	2	2	120	1
field*	Female	50	nurse	medical	20	2	2	3	50	1
field	Female	42	nurse	medical	18	1	2	5	30	6
field*	Female	29	nurse	medical	1.5	1	1	incomplete	40	1
Interview 2019-05-13	Female	29	nurse	medical	1.5	1	1	incomplete	40	1
Interview 2019-05-28	Female	27	nurse	surgical	4	1	2	incomplete	120	incomplete
Interview 2019-05-30	Female	52	nurse	surgical	32	3	2	4	45	1
Interview 2019-06-12	Female	24	nurse	medical	1	2	1	1	40	1
Interview 2019-06-14	Female	40	nurse	medical	20	2	2	4	100	7
Interview 2019-01-23	Female	45	nurse director	medical	12	3	2	4	80	1
Interview 2018-02-23	Male	30	doctor	medical	1.25	2	2	3	35	1
Interview 2018-02-26	Male	50	surgeon	surgical	23	4	2	5	18	1
Interview 2019-01-17	Female	24	doctor	medical	0.3	0	1	5	incomplete	3

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Appendix 14. Field Site Data

Field Site Data

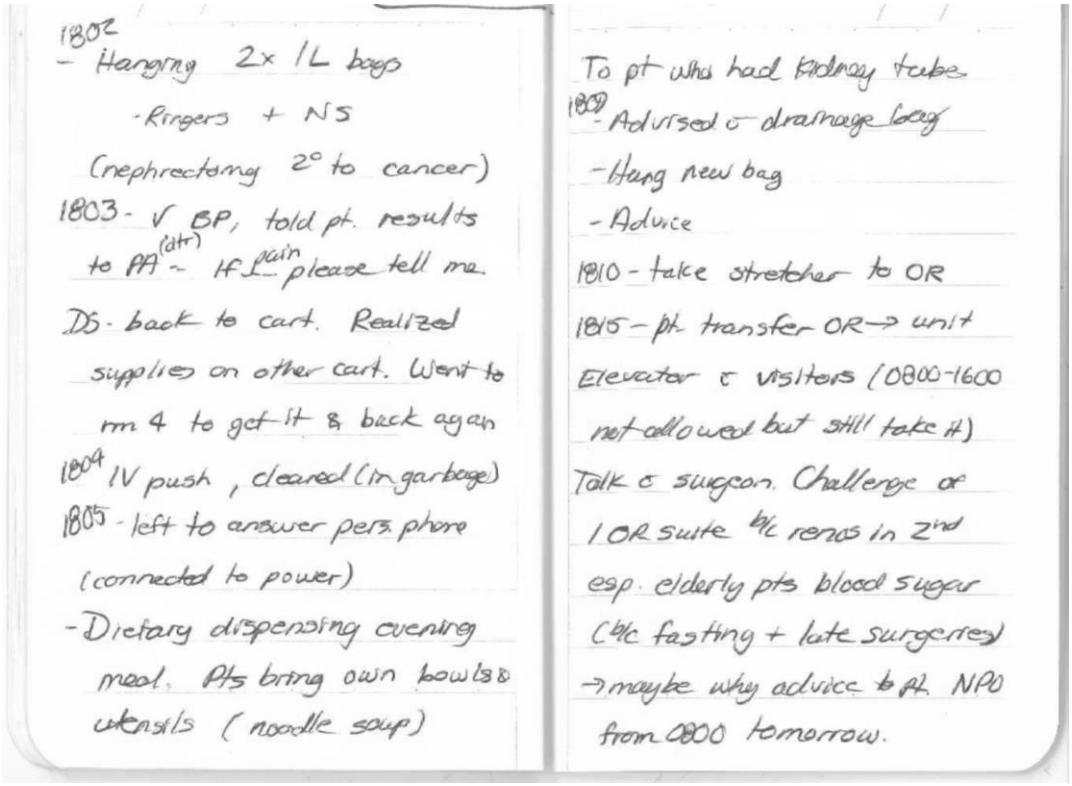
Code Name[1]	Official Hours	Total Hours on the ward	Nursing Unit	Shift Schedule	Distance Walked	Number of patients/nurse[2]	Day of the Week
Shift 01D	8	8.5	Surgical	Day Shift	2-2.9 km	20-24 pts	Wednesday
Shift 02N	16	17	Surgical	Night Shift	2-2.9 km	20-24 pts	Thursday-Friday
Shift 03D	8	8.5	Surgical	Day Shift	4-4.9 km	15-19 pts	Tuesday
Shift 04N	16	17	Surgical	Night Shift	5-5.9 km	20-24 pts	Thursday-Friday
Shift 05D	8	8.5	Surgical	Day Shift	2-2.9 km	15-19 pts	Friday
Shift 06D	8	8.5	Surgical	Day Shift	2-2.9 km	15-19 pts	Sunday
Shift 07D	8	8.5	Surgical	Day Shift	4-4.9 km	Unassigned[3]	Monday
Shift 08D	8	8.5	Surgical	Day Shift	2-2.9 km	15-19 pts	Monday
Shift 09D	8	8.5	Surgical	Day Shift	Not recorded[4]	Unassigned	Tuesday
Shift 10D	8	9	Medical	Day Shift	3-3.9 km	Unassigned	Monday
Shift 11D	8	8.5	Medical	Day Shift	3-3.9 km	18 pts	Wednesday
Shift 12D	8	8.5	Medical	Day Shift	5-5.9 km	Unassigned	Monday
Shift 13N	16	16	Medical	Night Shift	3-3.9 km	30-34 pts	Tuesday-Wednesday
Shift 14N	16	18.5	Medical	Night Shift	3-3.9 km	25-29 pts	Sunday-Monday
Shift 15D	8	9	Medical	Day Shift	3-3.9 km	30-34 pts	Thursday
Shift 16D	8	9	Medical	Day Shift	3-3.9 km	25-29 pts	Monday
Shift 17D	8	10	Medical	Day Shift	3-3.9 km	Unassigned	Thursday
Shift 18N	16	19	Medical	night Shift	8-8.9 km	40+ pts[5]	Tuesday-Wednesday
Shift 19DN	24	24.5	Medical	24-hour	5-5.9 km	40+ pts	Sunday-Monday

1. Shifts 1-15 took place in a tertiary-level hospital; Shifts 16-19 took place in a secondary-level hospital.
2. Numbers varied through the shift depending on admissions and discharges
3. Unassigned was a result of shadowing a nurse who had specialist responsibilities (e.g., senior nurse, wound care nurse, assistant nurse).
4. Distances walked during this shift were not recorded as the nurse I was with did mostly specialty work that day.
5. Patient census data ranged over two weeks from 74-102 patients, with variation depending on numbers of admissions/discharges per shift. As the 2 nurses divided tasks between them (e.g., one nurse would do computer entries for all patients, another would answer most of the call bells), I reported the average/nurse rather than a specific number.

Appendix 15. Transcription of Fieldnotes

Original Fieldnotes and Transcribed Fieldnotes: Sample 1

Note: PA renamed as CA; names changed in transcripts; italics denote my reflections or questions


1802
- Hanging 2x 1L bags
- Ringers + NS
(nephrectomy 2° to cancer)
1803 - ✓ BP, told pt. results to PA (attr) - If pain please tell me.
DS - back to cart. Realized supplies on other cart. Went to rm 4 to get it & back again
1804 IV push, cleared (in garbage)
1805 - left to answer pers. phone (connected to power)
- Dietary dispensing evening meal. Pts bring own bowls & utensils (noodle soup)

To pt who had kidney tube
1809 - Advised re drainage bag
- Hung new bag
- Advice
1810 - take stretcher to OR
1815 - pt. transfer OR → unit
Elevator c visitors (0800-1600 not allowed but still take it)
Talk c surgeon. Challenge of 1 OR suite b/c renos in 2nd
esp. elderly pts blood sugar (b/c fasting + late surgeries)
→ maybe why advice to pt NPO from 0800 tomorrow.

1802 Serratula hangs two 1litre bags of fluids; one is Ringer's Lactate and the other Normal Saline. The patient had a nephrectomy because of cancer.

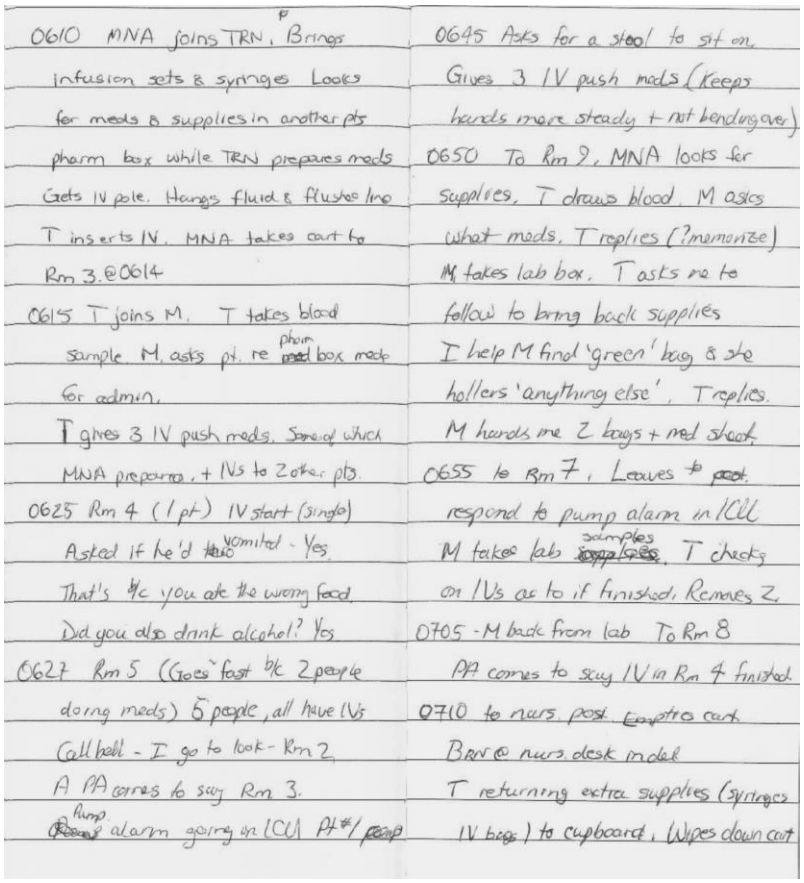
1803 She checks the patient's BP and gives the results to the CA, saying that if the patient has any pain that the CA should let her know.
Serratula goes to the med cart at the nursing station. She realized that her supplies were on the other cart so goes to room 4 to retrieve this cart. She gives an IV push medication and disposes of the syringe.

1805 Serratula leaves to answer a call that came on her personal phone. Her phone is at the nursing station because it needs to be plugged in.
Dietary services is on the ward and distributing the evening food. Patients or their CAs come out to the hallway, bringing their own bowls and mugs. Noodle soup is being served.

1809 We go to a patient with a kidney tube. Serratula gives anticipatory advice re the drainage bag. She hangs a new IV.

1810 We take a stretcher up to the OR. We transfer a fresh post-op patient to the stretcher and take the elevator up one flight to the 4th floor. The elevator is full of visitors. Although visiting hours are from 0800-1600, many visitors still remain. There is a sign on the elevator stating it is for patient and hospital use only, but people still take it.
While waiting for the transfer in the OR anteroom, a surgeon initiates conversation with me. He talks of the challenge with only having 1 OR suite because of renovations taking place on the 3rd floor OR suite. He says it is particularly difficult for elderly patients because many of them have been fasting throughout the day but only have their surgery in the evening. *His concern about the effects of prolonged surgery makes sense to me as I had wondered why Serratula told one patient that they could eat until 0800 tomorrow. So I am guessing that that patient's surgery is scheduled for the evening.*

Original Fieldnotes and Transcribed Fieldnotes: Sample 2



0610 MNA joins TRN, P Brings infusion sets & syringes Looks for meds & supplies in another pts pharm box while TRN prepares meds Gets IV pole. Hangs fluid & flushes line T inserts IV. MNA takes cart to Rm 3. @0614

0615 T joins M. T takes blood sample. M asks pt. re pharm med box meds for admin. T gives 3 IV push meds. Stands which MNA prepares, + IVs to 2 other pts.

0625 Rm 4 (1 pt) IV start (single) Asked if he'd vomited - Yes That's b/c you ate the wrong food. Did you also drink alcohol? Yes

0627 Rm 5 (Goes fast b/c 2 people doing meds) 5 people, all have IVs Call bell - I go to look - Rm 2 A PA comes to say Rm 3. Pump alarm going in ICU Pt#/ beep

0645 Asks for a stool to sit on. Gives 3 IV push meds (Keeps hands more steady + not bending over)

0650 To Rm 9, MNA looks for supplies, T draws blood. M asks what meds, T replies (?memorize) M takes lab box. T asks me to follow to bring back supplies I help M find 'green' bag & she hollers 'anything else', T replies. M hands me 2 bags + med sheet.

0655 to Rm 7, Leaves to post. respond to pump alarm in ICU M takes lab samples, T checks on IVs as to if finished. Removes 2.

0705 - M back from lab To Rm 8 PA comes to say IV in Rm 4 finished.

0710 to nurs. post. Empties cart. Brings to nurs. desk in bed T returning extra supplies (syringes IV bags) to cupboard. Wipes down cart

0610 Stacy joints Avens for medication administration. She brings the infusion sets and syringes. She looks for the medications and other supplies in the patients' pharmacy baskets, while Avens prepares the medications. She gets IV poles when needed. She hangs the IV bags and flushes the lines. Avens does the IV insertions. Stacy then takes the cart to room 3 at 0614.

0615 Avens comes into room #3 where is Stacy is. Avens takes another blood sample. Stacy asks patients about their medication supplies. Avens gives three IV push medications. Some of the syringes of medication have been prepared by Stacy. Avens also gives IVs to two other patients in the room.

0625 they go into room #4, where there is one patient. Avens does an IV start. She asks if the patient had vomited. The patient says yes. Avens tells him 'that's because you ate the wrong food. Did you also drink alcohol?' 'Yes' the patient replies. *Avens had told me earlier that especially for the Mongolian new year the type of food that is traditional is very bad for the patients on her unit. However, because of the strong tradition, many of them will eat the food which in turn makes them sicker.*

0627 We go to room #5. It seems to go much faster now because both Avens and Stacy are doing medication administration. There are five patients, all of whom have IVs. A patient's call bell goes, and they ask me to look. It is room #2. Then a CA comes by to say that an IV has finished in room #3. Then the pump alarm goes off for patient #1 in ICU.

0645 Avens asks for a stool to sit on. She has three IV push medications that she is to give one patient. She attaches one syringe and pushes the medication in. She then presses on the vein to prevent venous blood from leaking out, disconnects the syringe, and reattaches another syringe. She repeats the process for this syringe and for the next one. It seems that she can keep her hands steadier for this process as she is sitting on a stool and not bending over.

0650 we go to room 9. Stacy is looking for supplies in the pharmacy baskets. Avens draws blood for the lab sample. Stacy asks her which meds are to be given. Avens tells her. *Note: I am surprised that Avens didn't feel she needed to check. Perhaps she knows this patient from a previous day's shift. Mongolians tend to be very good with memorizing, so that is also a possibility, combined with the general lack of treatment for any co-morbidities.*

Stacy takes the lab box with all the blood samples. Avens asks me to follow [Stacy] and bring back supplies. I help Stacy find a bag and she hollers [to Avens] anything else? Avens replies. Stacy hands me two bags and a medication sheet.

Appendix 16. Observation & Interview Reflections

Field Observation Reflections: Sample 1

SHIFT: Nights

DATE: ____ / Approximate estimate of distance walked during the shift: 5.5 km

General Impressions:

Serratula left the unit at 10:30 AM. That meant she was on the unit from 16:00-10:30 (18 ½ hours). As in many places, people come in a half hour early to prepare for their nursing shift, but why so long afterwards? This night shift was fairly busy. It didn't have the intense business of the first 8 hours of another night shift, but it was steadily busy, with some downtime between 3:30-5:45AM. (On my iphone, I recorded 1,408 steps from 1600-08:59, but between 0400-0600AM I only had 94 steps recorded, approximately 5 ½ km according to my iphone).

I am guessing that one of the reasons for the long post-shift overtime is because of the high numbers of patients assigned for the professional nurses. The two nurses on shift last night completed all of the nursing tasks that they were required to do (e.g. medications, wound care, taking patients to and from the OR, referrals and transfer of a patient, blood & urine sample collections, etc.) for 45 patients. However, they stayed late because of having to finish charting. Given that charting is something that is done 'after' something has been done or said, it is always the last task. Or at least it should be the last task because it is written as 'completed'. On another night shift, one of the nurses did a lot of charting early in the shift because she said she wouldn't have time later. I'm guessing she charted based on anticipation of what she would do rather than what she did. Tonight, the nurses didn't get much time to chart except between the hours of 4-6AM. However, they were both so tired they couldn't keep awake during the lull in physical activity. I watched one nurse try and chart on the computer. She would open it up, look at her options (i.e. drop downs), her eyelids would slowly lower, and her head slump forward. She would then put her arms on the desk and place her head on her arms. This happened a few times. After the official shift ended, but before she left, I asked her about it. She said that every time she looked at the computer, she couldn't focus. I asked her if handwritten charts were better. She said 'no' because with handwritten charts her hand and wrist would get really sore.

Reflecting on the activities and pace of this shift, there was indeed little time for each nurse to fully chart on more than the 20 patients each had been assigned. Plus there were the unplanned, work-intense happenings that added to the charting load (two emergency surgeries, one patient transfer to another hospital, 3 new admissions).

I was able to stay awake for the entire shift because I had made myself sleep for 3 hours on the day I started the night shift (1030-1330 hrs) before leaving for the hospital at 1525 hrs. I asked Serratula if she had been able to sleep. She said she hadn't because she had errands she had to run during the day. (I also know that she has a school-aged child – so she may have had to get her to school too.) So working the official long shift of 16 hours, plus the unofficial (and unpaid) overtime of 30 minutes prior to shift start and 2 hours afterwards all without having slept since the previous night means being awake for over 24 hours. We know that we need sleep to function, so it is understandable that she and the other nurse couldn't focus on charting during the quiet hours from 3:30-5:45 during the end of the shift. Even if they had slept prior to coming on to shift, the only prolonged opportunity available for charting came after 11 hours on shift without a break except for a brief period just before midnight (over 6 hours into the shift) when we had our supper break… I say 'break', but they took their food to the desk and charted while eating.

Field Observation Reflections: Sample 2

Date:_____ iPhone measurements: Distance walked during shift = >3km; Stairs = 8 flights
DAY SHIFT: Officially 08:30-16:30… My hours (including bus transport to & from work: 07:00 hrs-19:00 hrs)

Impressions:

Four major impressions from my shift were: (1) nursing practice as done by many nurses has a lot of work that I would not consider to be nursing, (2) transportation challenges for nurses getting to/from work, (3) patients in hospitals here are generally 'healthier' than the patients admitted to western hospitals, (4) patient medication routines don't consistently follow the 5-Rights of drug administration as taught to nursing students.

(1) Nursing Practice: As I was following Penny in her nursing work, I felt that much of what she does could be done by someone with less training such as porters or clerks or purchasing. I arrived around 08:30. Penny told me she had arrived an hour earlier… I'm not sure what she did prior to my coming, but I hope to find out on Thursday – assuming I get there in sufficient time. I arrived on the unit together with the nursing director (ND). The nurse going off shift (having completed 24 hours) gave report on numbers of patients and anything of note that happened on shift. The ND asked if I wanted to follow an older or a younger nurse. I said I'd like to follow the older nurse for this first shift. She introduced me to Penny. Penny has been nursing for almost 30 years. She is in her late 40s. She graduated from a one-year nursing diploma program.

Penny's first task seems to be finding patients and getting them to their specialist appointments. This means going to their rooms. Those independently able (or those with a "PA" Personal Attendant) are told which floor and which room they need to go to. Penny accompanies those needing assistance or who are elderly. She tells me that it isn't right to make the elderly go on their own. There still seems to be a lot of respect that is given to the elderly as shown by looking out for them e.g. walking with them and making sure they get to the right place, giving the elderly seats on a bus, etc. But many patients are not in their rooms. So my impression is that a lot of time is lost looking for patients on the ward or having to check with the specialists to see if the patient scheduled to meet with them has actually shown up. Later in the day we also had to go up to the doctors' offices to look for patients' medical charts and then bring them to the in-patient unit physicians. I wonder why porters aren't hired to accompany patients to medical appointments or to courier charts. To me, this is not work I consider to be a nursing priority job. Sometimes nurses might need to accompany patients or look for charts, but for the most part, I think this is an activity that could be done by people with less training – e.g. porters or even nursing assistants.

The second activity that seems to take a significant amount of time was procurement and distribution of pharmaceutical supplies, including medication, syringes, tubing, and IV solutions. Supplies for 48 hours are distributed on Mondays & Wednesdays, On Fridays, supplies for 72 hours are given. My impression of procurement of pharmaceutical supplies and the counting of costs for patients being discharged (done in the first hospital as well as here) is that these tasks could be done by people other than nurses -e.g. clerks, pharmacy technicians

Penny had to wait until the inpatient units' doctors had updated their list of medications for the patients. This meant that Penny went a couple times to the supply room to see if the order was put in. When it finally was made available, it took 40 minutes to get the supplies loaded on the cart. Penny then took the cart to the unit and together with another nurse, they spent the next 55 minutes distributing the medications to the patients who would put them in their pharmacy boxes. This procedure was repeated again at the end of the shift for the

people who had been admitted during the day. Today 38 patients were admitted. The nurse working in the critical care room had responsibility for getting the supplies and distributing them. They started the process at 5pm because of having to wait for the list to be finalized and made available, and when I left the ward around 5:30, they were still giving out medications to the new patients. I'm not sure when they were finished – but it meant that the day nurses did unpaid overtime – which Penny tells me is common as she often works until 6 or sometimes 7pm.

I asked one of the younger nurses (early 30s) if what she does in nursing is what she thought it would be when she chose to become a nurse. She told me that it is very different. She says that a lot of what she thought nurses would do, especially provision of personal care to sick patients and giving advice, is something they almost never do because they have so much other work to do.

(2) Transportation: At 6am, I started to look for buses on a city bus app. (I thought there were 2 possibilities, though I later learned there are 3 buses that go where I need to go.) The one bus stop only showed two buses in operation, neither of which were the route I needed. The other bus stop started showing my bus shortly after 6:30am. The ETA at my stop was just after 7am, so I walked to the stop and waited. After about 5 minutes, the bus came. As it turned the corner, it leaned as it was packed with people. The bus drove past the main stop before stopping and letting off passengers. As I was closest, I joined the crush of people (about 10 or more) trying to get on the bus. About 4 people squeezed on ahead of me and one person behind me before the driver closed the door as it was impossible to wedge in any more people. People not able to get on let out a despairing exclamation as the doors closed them out. As it was, I was on the top step and one was still on the middle step at the front of the bus. I'm not good at guessing how many were on the bus – but I would guess about 100. We were so jammed in that there was barely room to move. Those getting off at the next stop had to start worming their way through the crowd to get to the closest exit. By 'worming' I mean squeezing between people, twisting and stretching as needed. I was glad it was still cool outside as it meant the temperature in the bus was not too hot and as it meant I could bury my valuables under two layers thereby protecting them from pickpockets.

The bus was jammed full of people until 2 stops before I needed to get off. But the traffic was light and we made good time – about a 30 minute trip. I wonder what happened to those who didn't get on this bus. When I checked my app, it looked like more buses had begun traveling on the route, but traffic would also increase, making the trip longer. If they were supposed to start work at 8am, they likely would not make it. And they didn't have a choice as there were no earlier buses. At another hospital, the head nurses seemed for the most part to be very understanding of nurses arriving late, although my impression of the nursing director was that she had less tolerance for nurses arriving late with the excuse of transportation problems. I am also coming to understand why nurses can't start their shifts earlier (e.g. 7am) as public transport is very minimal before 7-8am. I also understand why people might wait to apply their make-up etc. until they arrive at work as the crush of the bus ride is quite uncomfortable and often long – which means those who have to get up early might not have time if they prefer to sleep as long as possible or if they have to get children to caregivers.

On the return trip, I left work early as my belongings were in the Nursing Director's office and I needed to get them before the room was locked for the day. I tried a different bus stop (further away from the direction I was planning to go) in the hopes that I could get a seat and not have to stand. Thankfully I was able to get a seat as the bus quickly filled up. The trip back was in rush hour traffic and it took me just over an hour to travel the 7km home on a route that was slightly shorter than the one I took in the morning.

I was near the back of the bus, so to get off the bus, I had to squeeze my way through people. I had a backpack with my nursing uniform and lunch bag, and I had to carry it below my waist as it was impossible to move when it was higher – simply because there was not any space because of the crush of people. By the time I got home, it was 7pm. If I had stayed the same amount of time as the nurse I shadowed, I would have been another hour or two. So, for me today, an 8-hour shift meant 12 hours by the time I traveled and did (unpaid) overtime.

(3) Patients admitted to hospital in Mongolia are generally less 'ill' than those admitted in 'western' nations such as the UK, Canada, the USA, Australia, etc. My impression of this started at the first hospital where I did field observations, but at this secondary level hospital, this seems more apparent. This morning when looking for patients, most of them were not in their beds or rooms. I asked Penny where they were, and she said that many of them were getting breakfast. I need to follow-up what that means, but likely it means they went off the ward to meet with family who brought them food. (It wasn't that they were in the bathrooms as the bathrooms on the ward consisted of two toilets – one for men and one for women. There was a sink in each patient room – so if they had been doing morning care, they would have been in the room.) For patients to go off the unit and be a challenge to find, suggests to me that they are fairly independent. During the distribution of medication into patients' pharmacy baskets, almost every patient walked out of their room and waited for their turn to get their medication. Sometimes they would ask the nurses about a medication that they thought they were getting but didn't get. Other times the nurses would ask the patient what the doctor had prescribed. For the patients to know their own medications suggests to me that they are well enough to cognitively process and memorize all of their medications.

My impression is that people seem to be admitted to the hospital for antibiotic treatment given IM or IV (push or drip). There seems to minimal antibiotics given orally. Lily, a clinical nurse educator, told me today that she would like to have a place for patients to come and do dressing changes as it isn't good for them to do it at home because the conditions aren't sanitary, and they might not do it. I wonder if 'compliance' is a reason people are admitted to hospital… I.e. they are more likely to complete a course of antibiotics if they are admitted to hospital than if they were just given medication to take at home. In my years of living in Mongolia, I have heard that often people will take medicine when they don't feel well and that they stop when they feel better (rather than completing the prescribed time). They also share medication among themselves (e.g. if someone's blood pressure is elevated or they think it is elevated, someone else will share their medication with them, perhaps one or two pills, and then if the person feels better, then they won't take any more). In addition, many people here think of going to the hospital for one week of treatment to be a holiday or time of rest. I have often heard of people being admitted to hospital and when I express concern because I didn't realize they were ill, my Mongolian friends will look at me and say something like "Oh, she is just in for some rest and vitamin and treatments. She isn't really sick." Seven-to-ten days is considered a standard length of stay, and the National Health Insurance is based on a 7-10 day stay, after which most people's coverage finishes and they have to pay on their own. However, this length of stay means that even for those who were relatively sick on admission, many of them will start feeling better by day 3-5, yet they will stay on until their 7-10 day admission is completed. (I think this also contributes to overcrowding as today 7 beds were set up in the hallway as there wasn't any more spaces in the rooms.)

(4) **Patient medication administration routines**: Penny never consulted patient charts when giving out medication – and when I asked her how she knew which medication to give at the 1400 hr medication round, she just smiled and said to me "I've worked here a long

time. I just know." So… either the giving out of medications in the morning helps her to know her patients prescribed medication…. Although with 25+ patients, that is a lot to memorize! Or more likely, because I assume that the medications are routine and standard, she knows what is to be given when she looks into their pharmacy baskets – eg. TID antibiotics.

Post-Interview Reflections: Sample

DATE____ 10:00-11:15AM (note – the time stamp on the audio file is incorrect)

We arrived at Halenia's office just shortly before 10AM. When I phoned her yesterday, she had said that it was a very busy week. I offered to come back later such as at the end of February or sometime in the springtime. She said that it would be ok if I came on Wednesday, but only from 10-11AM sharp.

She was coming out at the same time we arrived at her door. She exclaimed 'Oh!' and then went back into the room, followed by me and Bart the translator.

I set up quickly, using the extension cord I brought to plug in my phone so I would have two recordings (the digital recorder and my phone for back-up). We decided on a room arrangement. The room is long and narrow and the only place two people can easily sit across from each other is at Halenia's desk that is at a 45^{o} angle. Apart from Halenia's chair, there is one chair in the room that I sat on, across from Halenia. There is a settee that Bart sat on and twisted slightly sideways so he could join the conversation. I explained about recording the interview on 2 devices – one for backup that will be deleted from my phone once a good audio file recording has been saved to my computer and back-up drives.

About 5 minutes in to our session, Halenia said that people would be coming in the room looking for her – so she wrote out a 'do not disturb' on a yellow post-it. I think that there were about 5 times that people opened the door. With the exception of the cleaner, the one's that looked inside quickly shut the door when they saw the 3 of us talking.

As I expected, Halenia responded to my question about the nurses' role in the way that nurses envision the nursing role – i.e. it connects and cares for the patient's heart & emotions. I decided to try and get more specific reflections on what happens on a daily basis by asking her about what specific responsibilities nurses have. From this question, it emerged that time management is a big challenge.

Personally, I don't think that time management alone can solve the issues regarding ensuring medication is given on time. Halenia alluded to some of that saying it is hard for nurses when they are in the midst of giving medications but then are interrupted by others and expected to respond – e.g. to a doctor's request, to disconnect a patient's medication that has run through, etc. Learning how to manage these requests is important, but historically nurses are considered assistants, so they haven't asserted themselves when asked by others.

As with Juni (Interview #3), I appreciated that Halenia could see strengths and weaknesses among the various nurses that she supervises with and teaches. She would talk about the strengths of the younger generation, but also the things that are challenging. She did likewise with older nurses, ward nurses, and specialty nurses.

Halenia would talk for long periods before having Bart translate. Most of the time, I understood what she was saying – at least the main ideas. As a result, Bart didn't do exact translation, but rather summarized. I think this was ok because (1) it allowed better flow of ideas for Halenia, (2) I think I understood most of it anyways, and (3) it saved us some time. When Halenia spoke, initially she looked directly at me. As having Bart present was a new dynamic, at first she looked at me when talking. Then, when Bart started to become part of the conversation because of translating, she started to look at Bart when she was speaking. Later she again looked more at me – probably settling back into conversation with me as we had done informally prior to today. I also felt I was engaged in following most of her

conversation (eye contact, smiles, etc.). I probably also looked sometimes at Bart and sometimes directly at Halenia when talking.

I didn't want to lose the opportunity to discuss administrative aspects and hierarchy/authority issues with Halenia, as I result, I asked her to clarify who directs the work of nurses. *(After the interview was finished and my translator and I were walking to the bus stop he told me I had asked the question twice. I hope it wasn't negatively perceived, but rather that I was trying to understand things).* When Halenia described the ward nurses as working under two systems, I thought that was a good observation/description that I hadn't articulated prior to today: the ward (multidisciplinary, headed by the head MD) and nursing. *[In review of the transcripts, I feel that my question was appropriate and brought clarification and new information. It would be very interesting to do an Institutional Ethnography as it seems that the government has put forward restructuring of authority and job descriptions as a means to propel system change, rather than reflecting the practices and systems that are in use today]*

I also found her insight into the legacy of the health system as developed during the communist era, as well as the current transition stage that they are in reflective of what I have been thinking about – the difference being that she has worked in that system and is now tasked for changing things. The second thing that was new to me was her description of the role that inspections have in delaying progress in the development of nursing. Inspections are a legacy from the communist era.

I tried to be sensitive to her request that we finish by 11AM and gave her an opportunity to conclude our interview. However, she went on for about 5-10 minutes longer (including translation). Halenia has many insights and ideas. My impression is that she also cares for the nurses she is responsible for. Interestingly, having also worked on the ward with the nurses, I know that they don't always see her as caring. It would be an interesting study to look at the relationship dynamics between nurses in administration with oversight and ward nurses.

At the end, I gave her a box of Merci chocolates. She seemed surprised. Possibly it was too much as I had already brought a few mandarins. She said there was a nurses' meeting tomorrow so she would share them with them. I told her that would be a nice idea and asked her to give the nurses my greetings.

Bart and I packed everything up and then left to take the bus home. Incidentally, the bus we took had, in my opinion, a somewhat aggressive driver. About one minute after commenting on that to Bart, our bus was in an accident. Knowing it would be a huge delay, we walked two bus stops toward where we wanted to go (about 2 km) and caught a bus for the rest of the way.

Appendix 17. Interview Guide

Semi-structured Interview Guide for Nurses

1. Why did you become a nurse?
2. Is your job different than expected?
3. What is the main task of a ward nurse?
4. What things are important to do during a shift?
5. What things are hard or stressful for nurses?
6. What things are you responsible for to the Head Nurse? Senior nurses? Doctors?

Appendix 18. Nursing Job Descriptions

Translation of Ministerial Order for Revised Nursing Job Descriptions

HEALTH MINISTER'S ORDER

MONGOLIA

18 May 2012 No.183 Ulaanbaatar

Re: revising the template for job descriptions of nurses and medical specialists

In accordance with Article 48.3.2 of the Labour Law of Mongolia, and "Health Sector Human Resources Development Policy 2010-2014", it hereby ORDERS:

1. Approve job description templates for the following medical professionals as specified in the following Appendices: a job description for a head of the Nursing Department as specified in Appendix 1, nursing methodologists - Appendix 2, a head nurse – Appendix 3, a nurse at the family/village health centres - Appendix 4, nurses at the Soum health centers and InterSoums hospitals –Appendix 5, nurses at the gastroenterology wards of Aimag/district general hospitals – Appendix 6, nurses at the gastroenterology cabinets of Aimag/district general hospitals –Appendix 7, nurses at the surgical wards of Aimag/district general hospitals - Appendix 8, nurses at the surgical cabinets of Aimag/district general hopsitals - Appendix 9, nurses at the gastroenterology wards of the state central hospitals, specialized centres and RDTCs – Appendix 10, nurses at the outpatient gastroenterology cabinets of the state central hospitals, specialized centres and RDTCs – Appendix 11, nurses at the surgical wards of the state central hospitals, specialized centres and RDTCs – Appendix 12, nurses at the outpatient surgical cabinets of the state central hospitals, specialized centres and RDTCs –Appendix 13, laboratory technicians at the family/village health centers – Appendix 14, laboratory technicians at the Aimag/district health centres, state central hospitals, specialised centres and RDTCs – Appendix 15, diagnostic imaging technicians –Appendix 16, pharmacologists - Appendix 17, pharmacists at the Soum pharmacies –Appendix 18, midwives at the Soum health centres and InterSoums hospitals – Appendix 19, midwives at the Aimag central hospitals, maternal hospitals, RDTCs and specialized centres – Appendix 20.
2. Oblige directors, heads and managers of health organisations to revise job descriptions in accordance with these templates and ensure its' compliance.
3. Oblige State Administrative and Management Body (S.Bayar) to oversee the fulfilment of this order.
4. Approval of this order invalidates the Health Minister's Order No.442 dated in 2009.

MINISTER N.KHURELBAATAR

Translation of Secondary Level Medical Ward Nurse Job Description

Appendix 6 of the Health Minister's
Order No.183 dated on 18 May 2012

A JOB DESCRIPTION TEMPLATE
No.: …

"A" General provision

Name of an organization		Name of unit	
Aimag/District general hospital		**Gastroenterology ward**	
Name of a job		Classification	Grade
Nurse		As specified in the Government resolution	
Job (position) that has a direct relation		Job (position) that has a direct relation	
- Head of the Nursing Department - Ward manager		Nurse, assistant nurse, other medical professionals, other staff	
Aim of the job	Within the framework of duties relevant to an organisation's ward and unit, provide health care services at a professional level in accordance with the approved standard requirements and the approved guidelines on nursing care services		
Key objectives of the job	1. Provide nursing care and services 2. Provide public health care and services 3. Provide emergency care and services 4. Attend training and engage in scientific work 5. Other		

"B" Key duties

Key duties:	Timeframe
In relation to key objective 1:	
- Receive patients to the ward, take a survey, check patients' health, make records on patients' histories, relevant forms and documents in accordance with the required standards	- Regularly
- Provide nursing care services in accordance with the nursing guideline	- As needed
- Monitor patients' health conditions and treatment results, and provide update to the doctor when necessary	- Regularly
- Comply with occupational health and safety rules, and rules to prevent infectious disease in a hospital environment	- Regularly
- Provide instruction and advice to assistant nurses, other nurses, and medical specialists on treatment and nursing; oversee them	- Regularly

- Provide information and advice to patients and their carers on the patients' health conditions, treatments, diagnosis, results, risks and difficulties, by using a clear, simple language	- Regularly
<u>In relation to key objective 2:</u> - Provide advice to patients on healthy lifestyle and health promotion - Organize and attend training within the ward/unit on health promotion - Participate in other public health activities	 - Regularly - Regularly - Regularly
<u>In relation to key objective 3:</u> - When necessary, work in rural areas to provide specialized professional care and services in emergency situations - Provide health care services on an emergency and in life-threatening situations to anyone regardless of their residency - Work during a pandemic and disaster	- As needed - As needed - As needed
<u>In relation to key objective 4:</u> - Attend repeat training as per the organization's human resource mid-term plan - Participate in the post-graduation training package and hourly programs - Take part in scientific and research work, present at conferences, contribute to developing and translating treatment manuals, tools and professional books	- Every 3-5 years - Every year - As needed
<u>In relation to key objective 5:</u> - Participate in activities organised by the organization - Take part in developing evidence-based medicine - Improve legal knowledge	- Regularly - Regularly - Regularly

"C" Requirements

		Indicators	Required	Desired
1. Job requirements	1.1 Medical competency	Education	Diploma or BA degree	
		Profession	- Nurse - A license to engage in "Nursing" activities	- Professional grade
		Specialty	- Took specialized training or have a professional certificate	- Attended specialized training - Have BA and MA in nursing

		Experience	- Have at least 1 year experience working at family/Soum health centres, InterSoum hospitals, Aimag/district general hospitals	
	1.2 Non-medical competency	Foreign language	- Have a basic knowledge of English	- Other languages
		Computer knowledge	- Able to use applied computer programs - Able to use internet and intranet	
		Research methodology	- Able to conduct analysis	
	1.3 Other competency	- Team-working skills - Communication and interpersonal skills - Legal knowledge		
	1.4 Specific requirements :	- Comply with the relevant ethical rules, discipline and culture as a civil servant and medical professional - Comply with Anti-Corruption Law		

"G" Factors:

2. Relevant subjects for collaboration	
<u>Internally:</u> - With a Ward Manager on improving workplace condition, ensuring standard requirements, regarding social issues, improving quality of treatment & nursing care & services; - With the Head of the Nursing Department and a Senior Nurse of the unit as per hierarchy, on improving quality of professional care & services, duties & responsibilities, nursing care & services, and regarding the nurses' social issues; - With the Cabinet, doctors and other nurses & medical professionals, on clients' diagnosis, treatment and research issues.	<u>Externally:</u> - Clients, their family members and carers, guardians on the patient's health issues; - Other public organisations and NGOs that engage in nursing activities, took part in their activities voluntarily
3. Responsibilities	Shall report to the Ward Manager and Head of Aimag/District General Hospital and shall be

		responsible for duties described in the job description.
4. Workplace resources and items	4.1. Financial	- Basic salary shall be calculated as per the Government Resolution - Incentives, additional salary and bonus shall be given as per relevant legislations
	4.2. Material	- Necessary medical equipment and tools - Room and furniture that meet the workplace standard requirements - Computer and relevant items - Work uniform, personal protective items - Internal communication & network
	4.3. Human resource	- Collaborate with ward nurses, doctors, medical specialists and other staff
	4.4. Other	- Entitled to free of charge medical test and examination annually
5. Workplace condition		Normal
6. Jobs to be done alongside or alternatively		When necessary, shall work in ambulatory as a nurse

“D” Approval

Job description was approved by		I have read the job description and agreed
Head of Aimag/District general hospital …….. Initial of the surname/first name …… /Signature/ Date:……	……..……/ward name/ Ward manager …….. Initial of the surname/first name …… /Signature/ Date:……	……/ward name/ Nurse …….. Initial of the surname/first name …… /Signature/ Date:……

Translation of Tertiary Level Surgical Ward Nurse Job Description

Appendix 12 of the Health Minister's
Order No.183 dated on 18 May 2012

A JOB DESCRIPTION TEMPLATE
No.: …

"A" General provision

Name of an organization	Name of unit	
State central hospital, specialized centre, RDTC	**Surgical ward**	
Name of a job	Classification	Grade
Nurse	As specified in the Government resolution	
Job (position) that has a direct relation	Job (position) that has a direct relation	
- Head of the Nursing Department - Ward manager	Nurse, assistant nurse, other medical professionals, other staff	
Aim of the job	Within the framework of duties relevant to an organisation's ward and unit, provide health care services at a professional level in accordance with the approved standard requirements and the approved guidelines on nursing care services	
Key objectives of the job	1. Provide nursing care and services 2. Perform surgical nursing tasks 3. Provide public health care and services 4. Provide emergency care and services 5. Attend training and engage in scientific work 6. Other	

"B" Key duties

Key duties:	Timeframe
In relation to key objective 1:	
- Receive patients to the ward, take a survey, check patients' health, make records on patients' histories, relevant forms and documents in accordance with the required standards	- Regularly
- Provide nursing care services in accordance with the nursing guideline	- As needed
- Comply with occupational health and safety rules, and rules to prevent infectious disease in a hospital environment	- Regularly
- Monitor patients' health conditions and treatment results, and provide update to the doctor when necessary	- Regularly

- Get advice from a head nurse when necessary and prevent the situation to become worse - Provide instruction and advice to assistant nurses, other nurses, and medical specialists on treatment and nursing; oversee them - Provide information and advice to patients and their carers on the patients' health conditions, treatments, diagnosis, results, risks and difficulties, by using a clear, simple language	- Regularly - As needed - Regularly
<u>In relation to key objective 2:</u> - Provide emergency and planned surgical care & services in accordance with the standard requirements - Monitor regularly the post-operation treatment and nursing	- Regularly - Regularly
<u>In relation to key objective 3:</u> - Provide advice to patients on healthy lifestyle and health promotion - Organize and attend training within the ward/unit on health promotion - Participate in other public health activities	- Regularly - Regularly - Regularly
<u>In relation to key objective 4:</u> - When necessary, work in rural areas to provide specialized professional care and services in emergency situations - Provide health care services on an emergency and in life-threatening situations to anyone regardless of their residency - Work during a pandemic and disaster	- As needed - As needed - As needed
<u>In relation to key objective 5:</u> - Attend repeat training as per the organization's human resource mid-term plan - Take part in scientific and research work, present at conferences, contribute to developing and translating treatment manuals, tools and professional books	- Every 3-5 years - As needed
<u>In relation to key objective 6:</u> - Oversee the nursing assistants and support them in improving knowledge - Take turn in working as a surgical nurse in the ward - Participate in activities organised by the organization - Take part in developing evidence-based medicine - Improve legal knowledge	- Regularly - Regularly - As needed - Regularly - Regularly

"C" Requirements

1. Job requirements	1.1 Medical competency	Indicators	Required	Desired
		Education	Diploma or BA degree	
		Profession	- Nurse - A license to engage in "Nursing" activities	- Professional grade
		Specialty	- Took training on surgery	
		Experience	- Have at least 2 years of professional work experience	
	1.2 Non-medical competency	Foreign language	- Have a basic knowledge of English	- Other languages
		Computer knowledge	- Able to use applied computer programs - Able to use internet and intranet	
		Research methodology	- Able to use statistical research packages and conduct analysis	
	1.3 Other competency	- Team-working skills - Communication and interpersonal skills - Legal knowledge		
	1.4 Specific requirements :	- Comply with the relevant ethical rules, discipline and culture as a civil servant and medical professional - Comply with Anti-Corruption Law		

"G" Factors:

2. Relevant subjects for collaboration	
<u>Internally:</u> - With a Ward Manager on improving workplace condition, ensuring standard requirements, regarding social issues, improving quality of treatment & nursing care & services; - With the Head of the Nursing Department and a Senior Nurse of the unit as per hierarchy, on improving quality of professional care & services, duties & responsibilities,	<u>Externally:</u> - Clients, their family members and carers, guardians - Doctors at the Aimag/District general hospitals - Doctors at the central hospitals, specialized hospitals, RDTCs - Relevant medical professional societies and associations - Other public organisations and NGOs

nursing care & services, and regarding the nurses' social issues; - With the Cabinet, doctors and other nurses & medical professionals, on clients' diagnosis, treatment and research issues.		
3. Responsibilities		Shall report to the Ward Manager and shall be responsible for the duties under the key objectives.
7. Workplace resources and items	7.1. Financial	- Basic salary shall be calculated as per the Government Resolution - Incentives, additional salary and bonus shall be given as per relevant legislations
	7.2. Material	- Necessary medical equipment and tools - Room and furniture that meet the workplace standard requirements - Computer and relevant items - Work uniform, personal protective items - Internal communication & network
	7.3. Human resource	- Collaborate with ward nurses, doctors, medical specialists and other staff
	7.4. Other	- Entitled to free of charge medical test and examination annually
8. Workplace condition		Normal
9. Jobs to be done alongside or alternatively		When necessary, shall work in ambulatory as a nurse

"D" Approval

Job description was approved by		I have read the job description and agreed
Head/director …….. Initial of the surname/first name …… /Signature/ Date:……	Ward manager …….. Initial of the surname/first name …… /Signature/ Date:……	Nurse …….. Initial of the surname/first name …… /Signature/ Date:……

Copy of Mongolian Ministerial Order Regarding Revised Job Descriptions

МОНГОЛ УЛСЫН
ЭРҮҮЛ МЭНДИЙН САЙДЫН ТУШААЛ

2012 оны 05 сарын 18 өдөр Дугаар 183 Улаанбаатар хот

Сувилагч, эмнэлгийн тусгай мэргэжилтний ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг шинэчлэн батлах тухай

Монгол Улсын Хөдөлмөрийн тухай хуулийн 48.3.2 дах заалт, "Эрүүл мэндийн салбарын хүний нөөцийг 2010-2014 онд хөгжүүлэх бодлого"-ыг тус тус үндэслэн ТУШААХ нь:

1. Сувилахуйн албаны даргын ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг нэгдүгээр, арга зүйч сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг хоёрдугаар, ахлах сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг гуравдугаар, ерх, тосгоны эрүүл мэндийн төвийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг дөрөвдүгээр, сумын эрүүл мэндийн төв, сум дундын эмнэлгийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг тавдугаар, аймаг, дүүргийн нэгдсэн эмнэлгийн дотрын тасгийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг зургаадугаар, аймаг, дүүргийн нэгдсэн эмнэлгийн дотрын кабинетийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг долоодугаар, аймаг, дүүргийн нэгдсэн эмнэлгийн мэс заслын тасгийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг наймдугаар, аймаг, дүүргийн нэгдсэн эмнэлгийн мэс заслын кабинетийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг есдүгээр, төв эмнэлэг, тусгай мэргэжлийн төв, бүсийн оношлогоо, эмчилгээний төвийн дотрын тасгийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг аравдугаар, төв эмнэлэг, тусгай мэргэжлийн төв, бүсийн оношлогоо, эмчилгээний төвийн амбулаторийн дотрын кабинетийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арваннэгдүгээр, төв эмнэлэг, тусгай мэргэжлийн төв, бүсийн оношлогоо, эмчилгээний төвийн мэс заслын тасгийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арванхоёрдугаар, төв эмнэлэг, тусгай мэргэжлийн төв, бүсийн оношлогоо,

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эмчилгээний төвийн амбулаторийн мэс заслын кабинетийн сувилагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арвангуравдугаар, өрх, сум, тосгоны эрүүл мэндийн төвийн лаборантын ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арвандөрөвдүгээр, аймаг, дүүргийн нэгдсэн эмнэлэг, төв эмнэлэг, бүсийн оношлогоо, эмчилгээний төв, тусгай мэргэжлийн төвийн лаборантын ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арвантавдугаар, дүрс оношлогооны техникчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арванзургаадугаар, эм найруулагчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арвандолоодугаар, сумын эмийн санчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арваннаймдугаар, сумын эрүүл мэндийн төв, сум дундын эмнэлгийн эх баригчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг арванесдүгээр, аймгийн нэгдсэн эмнэлэг, амаржих газар, бүсийн оношлогоо, эмчилгээний төв, тусгай мэргэжлийн төвийн эх баригчийн ажлын байрны тодорхойлолтын үлгэрчилсэн загварыг хорьдугаар хавсралтаар тус тус батлагдсугай.

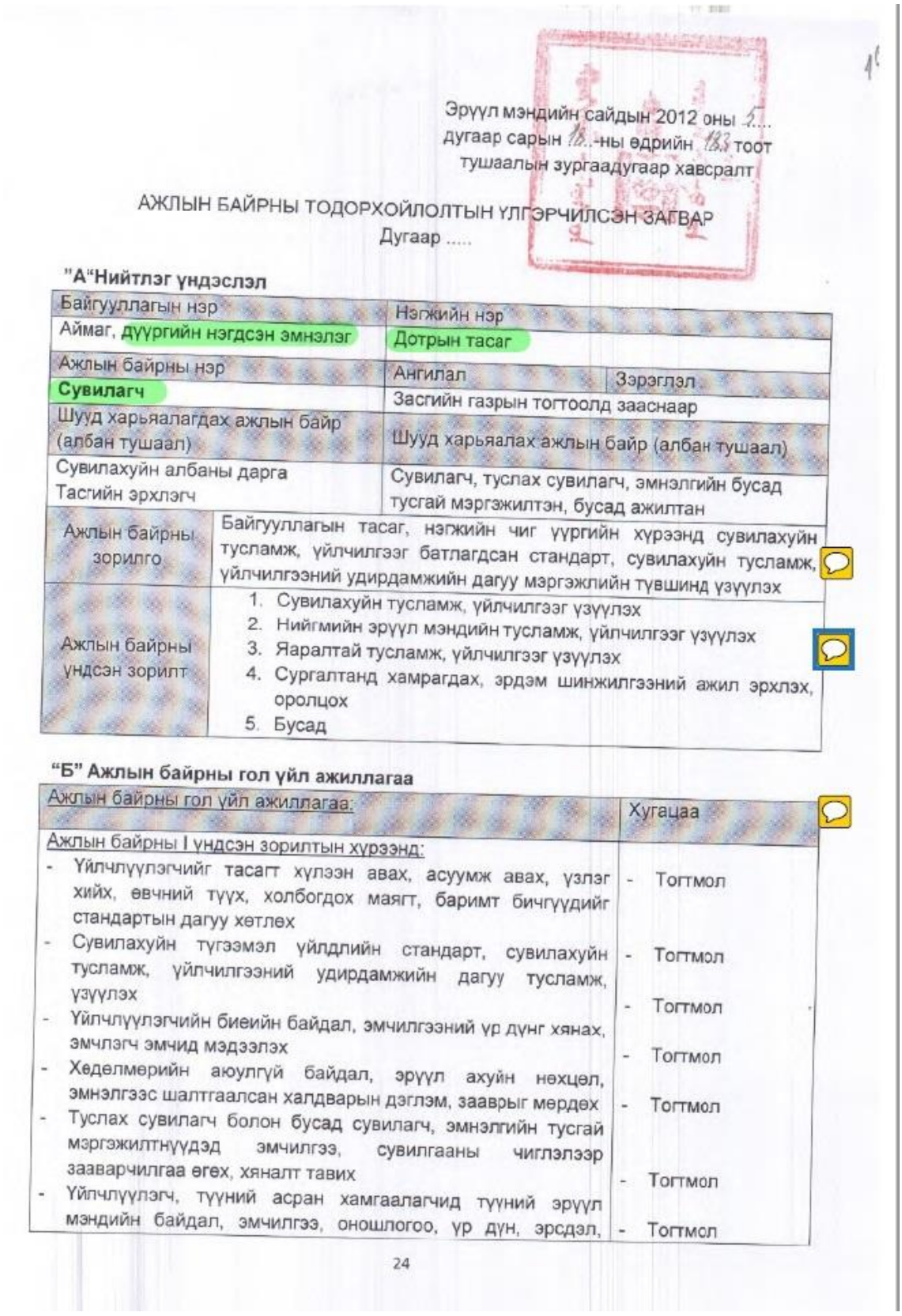
2. Энэхүү загварын дагуу ажлын байрны тодорхойлолтыг шинэчилж, мөрдүүлэхийг эрүүл мэндийн байгууллагын захирал, дарга, эрхлэгч нарт үүрэг болгосугай.

3. Тушаалын хэрэгжилтэд хяналт тавьж ажиллахыг Төрийн захиргааны удирдлагын газар (Б.Баярт)-т даалгасугай.

4. Энэхүү тушаал батлагдсантай холбогдуулан Эрүүл мэндийн сайдын 2009 оны 442 дугаар тушаалыг хүчингүй болсонд тооцсугай.

САЙД Н.ХҮРЭЛБААТАР

Copy of Mongolian Secondary Level Ward Nurse Job Description



Эрүүл мэндийн сайдын 2012 оны 5...
дугаар сарын 18..-ны өдрийн 183 тоот
тушаалын зургаадугаар хавсралт

АЖЛЫН БАЙРНЫ ТОДОРХОЙЛОЛТЫН ҮЛГЭРЧИЛСЭН ЗАГВАР
Дугаар .....

"А"Нийтлэг үндэслэл

Байгууллагын нэр	Нэгжийн нэр	
Аймаг, дүүргийн нэгдсэн эмнэлэг	Дотрын тасаг	
Ажлын байрны нэр	Ангилал	Зэрэглэл
Сувилагч	Засгийн газрын тогтоолд зааснаар	
Шууд харьяалагдах ажлын байр (албан тушаал)	Шууд харьяалах ажлын байр (албан тушаал)	
Сувилахуйн албаны дарга Тасгийн эрхлэгч	Сувилагч, туслах сувилагч, эмнэлгийн бусад тусгай мэргэжилтэн, бусад ажилтан	
Ажлын байрны зорилго	Байгууллагын тасаг, нэгжийн чиг үүргийн хүрээнд сувилахуйн тусламж, үйлчилгээг батлагдсан стандарт, сувилахуйн тусламж, үйлчилгээний удирдамжийн дагуу мэргэжлийн түвшинд үзүүлэх	
Ажлын байрны үндсэн зорилт	1. Сувилахуйн тусламж, үйлчилгээг үзүүлэх 2. Нийгмийн эрүүл мэндийн тусламж, үйлчилгээг үзүүлэх 3. Яаралтай тусламж, үйлчилгээг үзүүлэх 4. Сургалтанд хамрагдах, эрдэм шинжилгээний ажил эрхлэх, оролцох 5. Бусад	

"Б" Ажлын байрны гол үйл ажиллагаа

Ажлын байрны гол үйл ажиллагаа:	Хугацаа
Ажлын байрны I үндсэн зорилтын хүрээнд:	
- Үйлчлүүлэгчийг тасагт хүлээн авах, асуумж авах, үзлэг хийх, өвчний түүх, холбогдох маягт, баримт бичгүүдийг стандартын дагуу хөтлөх	- Тогтмол
- Сувилахуйн түгээмэл үйлдлийн стандарт, сувилахуйн тусламж, үйлчилгээний удирдамжийн дагуу тусламж, үзүүлэх	- Тогтмол
- Үйлчлүүлэгчийн биеийн байдал, эмчилгээний үр дүнг хянах, эмчлэгч эмчид мэдээлэх	- Тогтмол
- Хөдөлмөрийн аюулгүй байдал, эрүүл ахуйн нөхцөл, эмнэлгээс шалтгаалсан халдварын дэглэм, зааврыг мөрдөх	- Тогтмол
- Туслах сувилагч болон бусад сувилагч, эмнэлгийн тусгай мэргэжилтнүүдэд эмчилгээ, сувилгааны чиглэлээр зааварчилгаа өгөх, хяналт тавих	- Тогтмол
- Үйлчлүүлэгч, түүний асран хамгаалагчид түүний эрүүл мэндийн байдал, эмчилгээ, оношлогоо, үр дүн, эрсдэл,	- Тогтмол

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хүндрэлийн талаар энгийн, ойлгомжтой хэллэгээр тайлбарлах, зөвлөгөө өгөх	
Ажлын байрны II үндсэн зорилтын хүрээнд:	
Үйлчлүүлэгчид эрүүл аж төрөх ёс, зөв хооллолт, дасгал хөдөлгөөн, эрүүл мэндийг дэмжих чиглэлээр зөвлөгөө өгөх	- Тогтмол
- Эрүүл мэндийг дэмжих чиглэлээр тасаг, нэгжийн хүрээнд сургалт зохион байгуулах, оролцох	- Тогтмол
- Нийгмийн эрүүл мэндийн бусад үйл ажиллагаанд оролцох	- Тогтмол
Ажлын байрны III үндсэн зорилтын хүрээнд:	
- Шаардлагатай тохиолдолд яаралтай тусламжийн дуудлаганд эмчтэй хамт явах	- Тухай бүр
- Амь тэнссэн болон яаралтай тохиолдолд эмнэлгийн тусламж, үйлчилгээ үзүүлэх	- Тухай бүр
- Олон улсын хөл хориот өвчний голомт, гамшгийн үед дайчлагдан ажиллах	- Тухай бүр
Ажлын байрны IV үндсэн зорилтын хүрээнд:	
- Байгууллагын хүний нөөцийн дунд хугацааны төлөвлөгөөний дагуу давтан сургалтанд хамрагдах	- 3-5 жил тутамд
- Төгсөлтийн дараах сургалтын багц цагийн хөтөлбөрт хамрагдах	- Жил бүр
- Онол практикийн хуралд илтгэл тавих, оношлогоо, эмчилгээний гарын авлага, аргачлал, мэргэжлийн ном туурвихад оролцох	- Тухай бүр
Ажлын байрны V үндсэн зорилтын хүрээнд:	
- Байгууллагаас зохион байгуулж буй үйл ажиллагаанд оролцох	- Тогтмол
- Нотолгоонд суурилсан анагаах ухааныг хөгжүүлэхэд оролцох	- Тогтмол
- Хууль эрх зүйн мэдлэгийг дээшлүүлэх	- Тогтмол

"В" Тавигдах шаардлага

		Үзүүлэлт	Байлшгүй шаардлагатай	Шаардлагатай
1.Ажлын байранд тавигдах шаардлага	1.1 Эмнэл зүйн ур чадвар	Боловсрол	Дипломын болон бакалаврын боловсролын зэрэгтэй	
		Мэргэжил	- Сувилагч - "Сувилах" үйл ажиллагаа эрхлэх зөвшөөрөлтэй	Мэргэжлийн зэрэгтэй байх
		Мэргэшил	- Үндсэн мэргэшлийн сургалтанд хамрагдсан буюу мэргэжлийн дипломтой байх	- Төрөлжсөн мэргэшлийн сургалтанд хамрагдсан - Сувилахуйн магистр, докторын

			зэрэгтэй байж болно
	Туршлага	- Өрх, сум, тосгоны эрүүл мэндийн төв, сум дундын эмнэлэгт 1-ээс доошгүй жил ажилласан	-
1.2 Эмнэл зүйн бус ур чадвар	Гадаад хэл	- Англи хэлний анхан дунд түвшнээс доошгүй мэдлэгтэй	- бусад хэлний анхан дунд түвшнээс доошгүй мэдлэгтэй
	Компьютерийн мэдлэг	- Хэрэглээний программ бүрэн ашиглах - Интернэтийн орчин, дотоод сүлжээнд чөлөөтэй ажиллах	
	Судалгаа... арга зүй	- Статистик шинжилгээ хийх	
1.3 Бусад ур чадвар		- Багаар ажиллах - Яриа, харилцаа, хувийн соёлтой байх - Хууль эрх зүйн мэдлэгтэй байх	
1.4.Тусгай шаардлага:		- Төрийн албан хаагчийн болон Эмнэлгийн мэргэжилтний ёс зүйн хэм хэмжээ, төрийн байгууллагын соёл, дэг журмыг сахин ажиллах - Авлигын эсрэг хуулийн хүрээнд ажиллах, авлигаас ангид байх	

"Г" Хүчин зүйлс:

2. Ажлын байрны харилцах субъект	
Байгууллагын дотор талд:	Байгууллагын гадна талд:
- Тасгийн эрхлэгчтэй ажлын байрны нөхцөлийг сайжруулах, ажлын байрны стандартыг хангуулах, нийгмийн асуудлаа шийдвэрлүүлэх, эмчилгээ, сувилгааны тусламж, үйлчилгээний чанарыг сайжруулах талаар; - Сувилахуйн албаны дарга, нэгжийн ахлах сувилагчтай мэргэжлийн тусламж, үйлчилгээ, ажлын үүрэг, хариуцлага болон сувилахуйн тусламж, үйлчилгээний чанарыг сайжруулах, сувилагч нарын нийгмийн асуудлаар; - Кабинет, эмч нар, бусад сувилагч,	- Үйлчлүүлэгч, түүний асран хамгаалагч, ар гэрийнхэнтэй үйлчлүүлэгчийн эрүүл мэндийн асуудлаар; - Сувилахуйн чиглэлээр үйл ажиллагаа явуулдаг төрийн бус байгууллагатай сайн дурын үндсэн дээр үйл ажиллагаанд нь оролцох.

эмнэлгийн мэргэжилтэнтэй үйлчлүүлэгчийн оношлогоо, эмчилгээ, сувилгааны асуудлаар харьцана.		
3. Албан тушаал эрхлэгчийн хүлээх хариуцлага	Ажлын байрны үндсэн чиг үүрэгт заасан үйл ажиллагаатай холбостой асуудлыг тасгийн эрхлэгч, аймаг, дүүргийн нэгдсэн даргын өмнө хариуцна.	
4. Ажлын байрны нөөц хэрэгсэл	4.1.Санхүүгийн:	- Үндсэн цалинг Засгийн газрын тогтоолын дагуу тооцож олгох - Хууль тогтоомжийн дагуу нэмэгдэл, нэмэгдэл хөлс, урамшил олгох
	4.2.Материалын	- Шаардлагатай эмнэлгийн тоног төхөөрөмж, эмнэлгийн багаж - Ажлын байрны стандартыг хангасан өрөө, тавилга - Компьютер, дагалдах хэрэгслийн хамт - Ажлын тусгай хувцас, хувийн хамгаалах хэрэгсэл - Дотуур холбоо, дотоод сүлжээ
	4.3.Хүний	- Тасгийн эмч, сувилагч, эмнэлгийн тусгай мэргэжилтэн, бусад ажилтантай хамтран ажиллах
	4.4.Бусад	- Эрүүл мэндийн үзлэг, шинжилгээнд жил бүр үнэ төлбөргүй хамрагдах
5. Ажлын байрны нөхцөл		Ердийн
6. Орлон ба хавсарч ажиллах ажлын байрны нэр		Шаардлагатай үед тасаг, амбулаторийн мэргэжлийн эмчээр орлон ба хавсран ажиллах

"Д" Баталгаажуулалт

Ажлын байрны тодорхойлолтыг баталсан		Ажлын байрны тодорхойлолттой танилцаж, зөвшөөрсөн
Аймаг, дүүргийн нэгдсэн эмнэлгийн дарга ..... /Эцэг/эхийн нэрний эхний үсэг, өөрийн нэр/ ..... /Гарын үсэг/ оны ...сарын ... ны өдөр	..... /тасгийн нэр/ Эрхлэгч ..... /Эцэг/эхийн нэрний эхний үсэг, өөрийн нэр/ ..... /Гарын үсэг/ оны ...сарын ...-ны өдөр	..... /тасгийн нэр/ Сувилагч ..... /Эцэг/эхийн нэрний эхний үсэг, өөрийн нэр/ ..... /Гарын үсэг/ оны ...сарын ...-ны өдөр

Copy of Mongolian Tertiary Level Surgical Ward Nurse Job Description

Эрүүл мэндийн сайдын 2012 оны ..5..
дугаар сарын 12..-ны өдрийн 183 тоот
тушаалын арванхоёрдугаар хавсралт

АЖЛЫН БАЙРНЫ ТОДОРХОЙЛОЛТЫН ҮЛГЭРЧИЛСЭН ЗАГВАР

Дугаар.....

"А"Нийтлэг үндэслэл

Байгууллагын нэр	Нэгжийн нэр	
Төв эмнэлэг, тусгай мэргэжлийн төв, бүсийн оношлогоо, эмчилгээний төв	Мэс заслын тасаг	
Ажлын байрны нэр	Ангилал	Зэрэглэл
Сувилагч	Засгийн газрын тогтоолд зааснаар	
Шууд харьяалагдах ажлын байр (албан тушаал)	Шууд харьяалах ажлын байр (албан тушаал)	
- Сувилахуйн албаны дарга - Тасгийн эрхлэгч	Сувилагч, туслах сувилагч, эмнэлгийн бусад тусгай мэргэжилтэн, бусад ажилтан	
Ажлын байрны зорилго	Байгууллагын тасаг, нэгжийн чиг үүргийн хүрээнд эрүүл мэндийн тусламж, үйлчилгээг батлагдсан стандарт, сувилахуйн тусламж, үйлчилгээний удирдамжийн дагуу мэргэжлийн түвшинд үзүүлэх	
Ажлын байрны үндсэн зорилт	1. Сувилахуйн тусламж, үйлчилгээг үзүүлэх 2. Мэс заслын сувилахуйн ажилбар хийх 3. Нийгмийн эрүүл мэндийн тусламж, үйлчилгээг үзүүлэх 4. Яаралтай тусламж, үйлчилгээг үзүүлэх 5. Сургалтанд хамрагдах, эрдэм шинжилгээний ажил эрхлэх, оролцох 6. Бусад	

"Б" Ажлын байрны гол үйл ажиллагаа

Ажлын байрны гол үйл ажиллагаа:	Хугацаа
Ажлын байрны I үндсэн зорилтын хүрээнд:	
- Үйлчлүүлэгчийг тасагт хүлээн авах, асуумж авах, үзлэг хийх, өвчний түүх, холбогдох маягт, баримт бичгүүдийг стандартын дагуу хөтлөх	- Тогтмол
- Сувилахуйн сувилахуйн тусламж, үйлчилгээний удирдамжийн дагуу тусламж үзүүлэх	- Тухай бүр
- Хөдөлмөрийн аюулгүй байдал, эрүүл ахуйн нөхцөл, эмнэлгээс шалтгаалсан халдварын дэглэм, зааврыг мөрдөх	- Тогтмол
- Үйлчлүүлэгчийн биеийн байдал, эмчилгээний үр дүнг хянах, шаардлагатай тохиолдолд эмчлэгч эмчид мэдээлэх	- Тогтмол
- Шаардлагатай нөхцөлд бусад ахлах сувилагчаас зөвлөгөө авах, хүндрэлээс сэргийлэх	- Тогтмол
- Туслах сувилагч, бусад сувилагч, эмнэлгийн тусгай	

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мэргэжилтнүүдэд эмчилгээ, сувилгааны чиглэлээр зааварчилгаа өгөх, хяналт тавих	- Тухай бүр
- Үйлчлүүлэгч, түүний асран хамгаалагчид түүний эрүүл мэндийн байдал, эмчилгээ, оношлогоо, үр дүн, эрсдэл, хүндрэлийн талаар энгийн, ойлгомжтой хэллэгээр тайлбарлах, зөвлөгөө өгөх	- Тогтмол
Ажлын байрны II үндсэн зорилтын хүрээнд:	
- Мэс заслын яаралтай болон төлөвлөгөөт тусламж, үйлчилгээг стандартын дагуу үзүүлэх	- Тогтмол
- Хагалгааны дараах үеийн эмчилгээ, сувилгаанд байнгын хяналт тавих	- Тогтмол
Ажлын байрны III үндсэн зорилтын хүрээнд:	
- Үйлчлүүлэгчид эрүүл аж төрөх ёс, эрүүл мэндийг дэмжих чиглэлээр зөвлөгөө өгөх	- Тогтмол
- Эрүүл мэндийг дэмжих чиглэлээр тасаг, нэгжийн хүрээнд сурталт зохион байгуулах, оролцох	- Тогтмол
- Нийгмийн эрүүл мэндийн бусад үйл ажиллагаанд оролцох	- Тогтмол
Ажлын байрны IV үндсэн зорилтын хүрээнд:	
- Шаардлагатай тохиолдолд яаралтай тусламжийн дуудлагаар орон нутагт ажиллаж, төрөлжсөн мэргэжлийн тусламж, үйлчилгээ үзүүлэх	- Тухай бүр
- Амь тэнссэн болон яаралтай тохиолдолд эмнэлгийн тусламж, үйлчилгээ харьяалал, товлол харгалзахгүйгээр үзүүлэх	- Тухай бүр
- Олон улсын хөл хорио өвчний голомт, гамшгийн үед дайчлагдан ажиллах	- Тухай бүр
Ажлын байрны V үндсэн зорилтын хүрээнд:	
- Байгууллагын хүний нөөцийн дунд хугацааны төлөвлөгөөний дагуу давтан сургалтанд хамрагдах	- 3-5 жил тутамд
- Эрдэм шинжилгээ, судалгааны багт орж ажиллах, онол практикийн хуралд илтгэл тавих, оношлогоо, эмчилгээний гарын стандарт, авлага, аргачлал, мэргэжлийн ном туурвих, орчуулахад оролцох	- Тухай бүр
Ажлын байрны VI үндсэн зорилтын хүрээнд:	
- Туслах сувилагчийн үйл ажиллагаанд хяналт тавих, мэдлэг боловсролыг дээшлүүлэхэд дэмжлэг үзүүлэх	- Тогтмол
- Тасагт мэс заслын сувилагчаар ээлжлэн ажиллах	- Тогтмол
- Байгууллагаас зохион байгуулж буй үйл ажиллагаанд оролцох	- Тухай бүр
- Нотолгоонд суурилсан анагаах ухааныг хөгжүүлэхэд оролцох	- Тогтмол
- Хууль эрх зүйн мэдлэгийг дээшлүүлэх	- Тогтмол

"В" Тавигдах шаардлага

1.Ажлын байранд тавигдах шаардлага	1.1 Эмнэл зүйн ур чадвар	Үзүүлэлт	Зайлшгүй шаардлагатай	Шаардлагатай
		Боловсрол	Дипломын болон бакалаврын боловсролын зэрэгтэй	
		Мэргэжил	- Сувилагч - "Сувилах" үйл ажиллагаа эрхлэх зөвшөөрөлтэй	- Мэргэжлийн зэрэгтэй байж болно
		Мэргэшил	- Мэс заслын чиглэлээр мэргэжлийн сургалтанд хамрагдсан	
		Туршлага	- Мэргэжлээрээ 2-оос доошгүй жил ажилласан	
	1.2 Эмнэл зүйн бус ур чадвар	Гадаад хэл	- Англи хэлний зохих түвшний мэдлэгтэй	- бусад хэлний мэдлэгтэй
		Компьютерийн мэдлэг	- Хэрэглээний программ бүрэн ашиглах - Интернэтийн орчин, дотоод сүлжээнд чөлөөтэй ажиллах	
		Судалгааны арга зүй	- Статистик судалгааны программуудыг ашиглах, дүн шинжилгээ хийх	
	1.3 Бусад ур чадвар	- Багаар ажиллах - Яриа, харилцаа, хувийн соёлтой байх - Хууль эрх зүйн мэдлэгтэй байх		
	1.4 Тусгай шаардлага:	- Төрийн албан хаагчийн болон Эмнэлгийн мэргэжилтний ёс зүйн хэм хэмжээ, төрийн байгууллагын соёл, дэг журмыг сахин ажиллах - Авлигын эсрэг хуулийн хүрээнд ажиллах, авлигаас ангид байх		

"Г" Хүчин зүйлс:

2 Ажлын байрны харилцах субъект	
Байгууллагын дотор талд:	Байгууллагын гадна талд:
- Тасгийн эрхлэгчтэй ажлын байрны нөхцөлийг сайжруулах, ажлын байрны стандартыг хангуулах, нийгмийн асуудлаа шийдвэрлүүлэх, эмчилгээ, сувилгааны тусламж, үйлчилгээний чанарыг сайжруулах талаар; - Сувилахуйн албаны дарга, нэгжийн ахлах сувилагчтай мэргэжлийн тусламж, үйлчилгээ, ажлын үүрэг, хариуцлага болон сувилахуйн тусламж, үйлчилгээний чанарыг сайжруулах, сувилагч нарын нийгмийн асуудлын	- Үйлчлүүлэгч, түүний ар гэр, асран хамгаалагч, харгалзан дэмжигч - Аймаг, дүүргийн нэгдсэн эмнэлгийн эмч нар - Бусад төв эмнэлэг, тусгай мэргэжлийн эмнэлэг, бүсийн оношлогоо, эмчилгээний төвийн эмч нар - Тухайн мэргэжлийн чиглэлээрх мэргэжлийн нийгэмлэг, холбоод - Төрийн болон төрийн бус бусад байгууллага

талаар шат дараалан харьцах; - Кабинет, эмч нар, бусад сувилагч, эмнэлгийн мэргэжилтэнтэй үйлчлүүлэгчийн оношлогоо, эмчилгээ, сувилгааны асуудлаар харьцана.		
3 Албан тушаал эрхлэгчийн хүлээх хариуцлага		Ажлын байрны үндсэн зорилтод заасан үйл ажиллагаатай холбоотой асуудлыг тасгийн эрхлэгчийн өмнө хариуцна.
4 Ажлын байрны нөөц хэрэгсэл	4.1.Санхүүгийн	- Үндсэн цалинг Засгийн газрын тогтоолын дагуу тооцож олгох - Хууль тогтоомжийн дагуу нэмэгдэл, нэмэгдэл хөлс, урамшил олгох
	4.2.Материалын	- Шаардлагатай эмнэлгийн тоног төхөөрөмж, эмнэлгийн багаж - Ажлын байрны стандартыг хангасан өрөө, тавилга - Компьютер, дагалдах хэрэгслийн хамт - Ажлын тусгай хувцас, хувийн хамгаалах хэрэгсэл - Дотуур холбоо, дотоод сүлжээ
	4.3.Хүний	- Тасгийн эмч, сувилагч, эмнэлгийн тусгай мэргэжилтэн, бусад ажилтантай хамтран ажиллах
	4.4.Бусад	- Эрүүл мэндийн үзлэг, шинжилгээнд жил бүр үнэ төлбөргүй хамрагдах
5 Ажлын байрны нөхцөл		Хэвийн
6 Орлон ба хавсарч ажиллах ажлын байрны нэр		Шаардлагатай үед амбулаторит сувилагччар орлон ба хавсран ажиллах

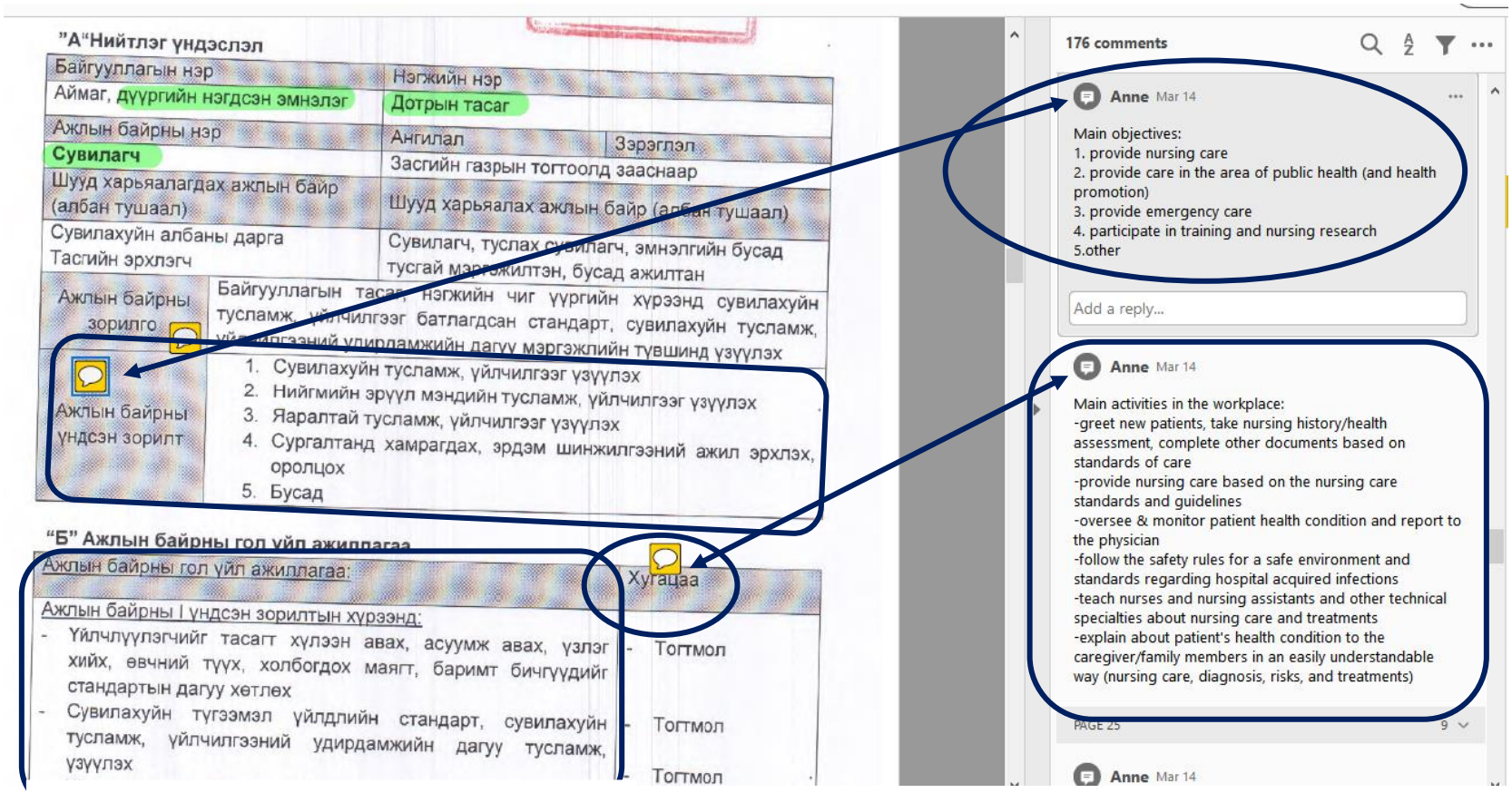
"Д" Баталгаажуулалт

Ажлын байрны тодорхойлолтыг баталсан		Ажлын байрны тодорхойлолттой танилцаж, зөвшөөрсөн
дарга/захирал ..... Эцэг эхийн нэрийн эхний үсэг/өөрийн нэр ..... /Гарын үсэг/ оны ...сарын ...-ны өдөр	тасгийн эрхлэгч ..... Эцэг эхийн нэрийн эхний үсэг/өөрийн нэр ..... /Гарын үсэг/ оны ...сарын ...-ны өдөр	Сувилагч ..... Эцэг эхийн нэрийн эхний үсэг/өөрийн нэр ..... /Гарын үсэг/ оны ...сарын ...-ны өдөр

Job Description Translation Verification

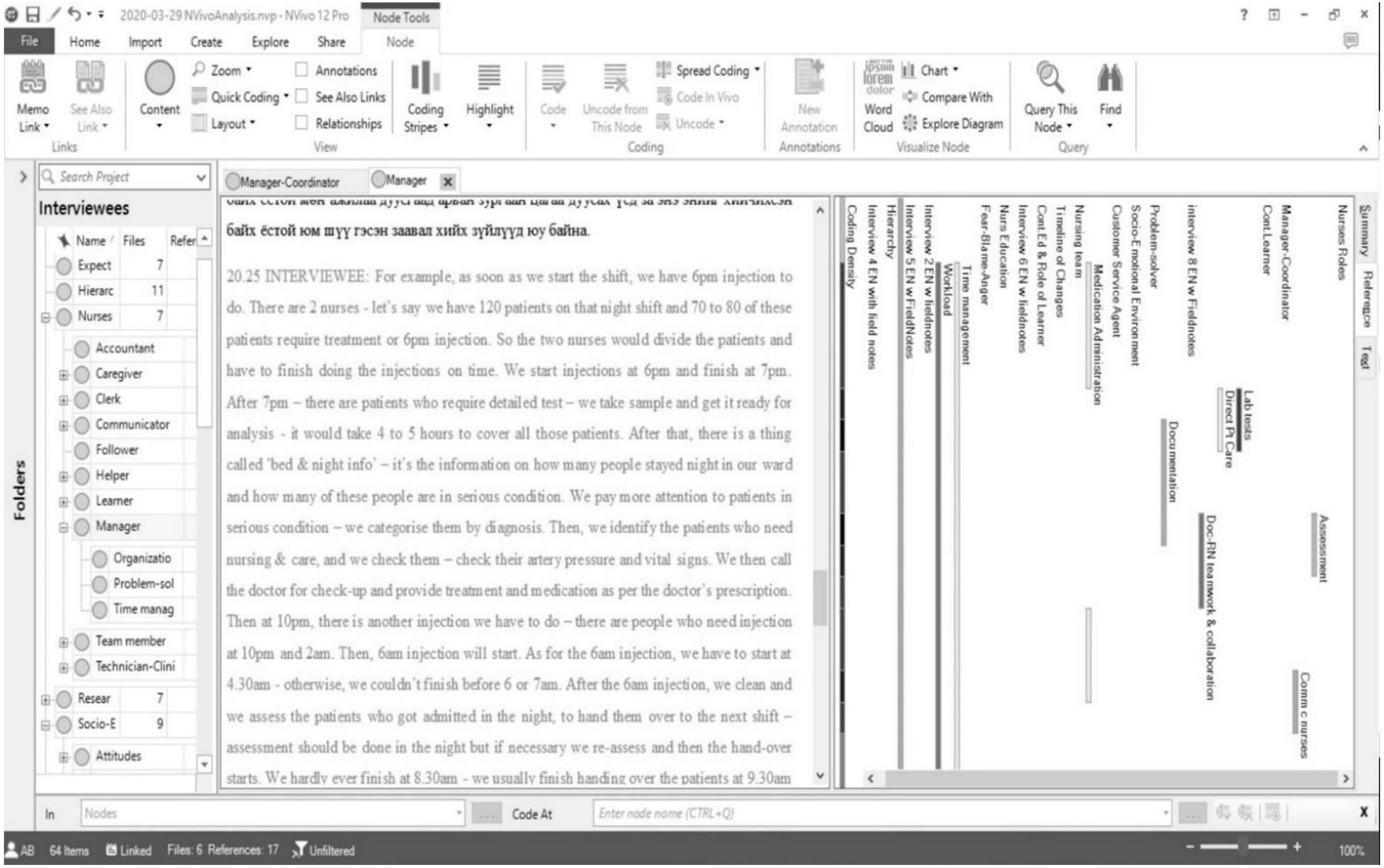
Sample of Digital Notes Recorded from a Verbal Translation with a Mongolian Nurse (March 2017)

Secondary-Level Hospital: Medical Ward Nurse Job Description

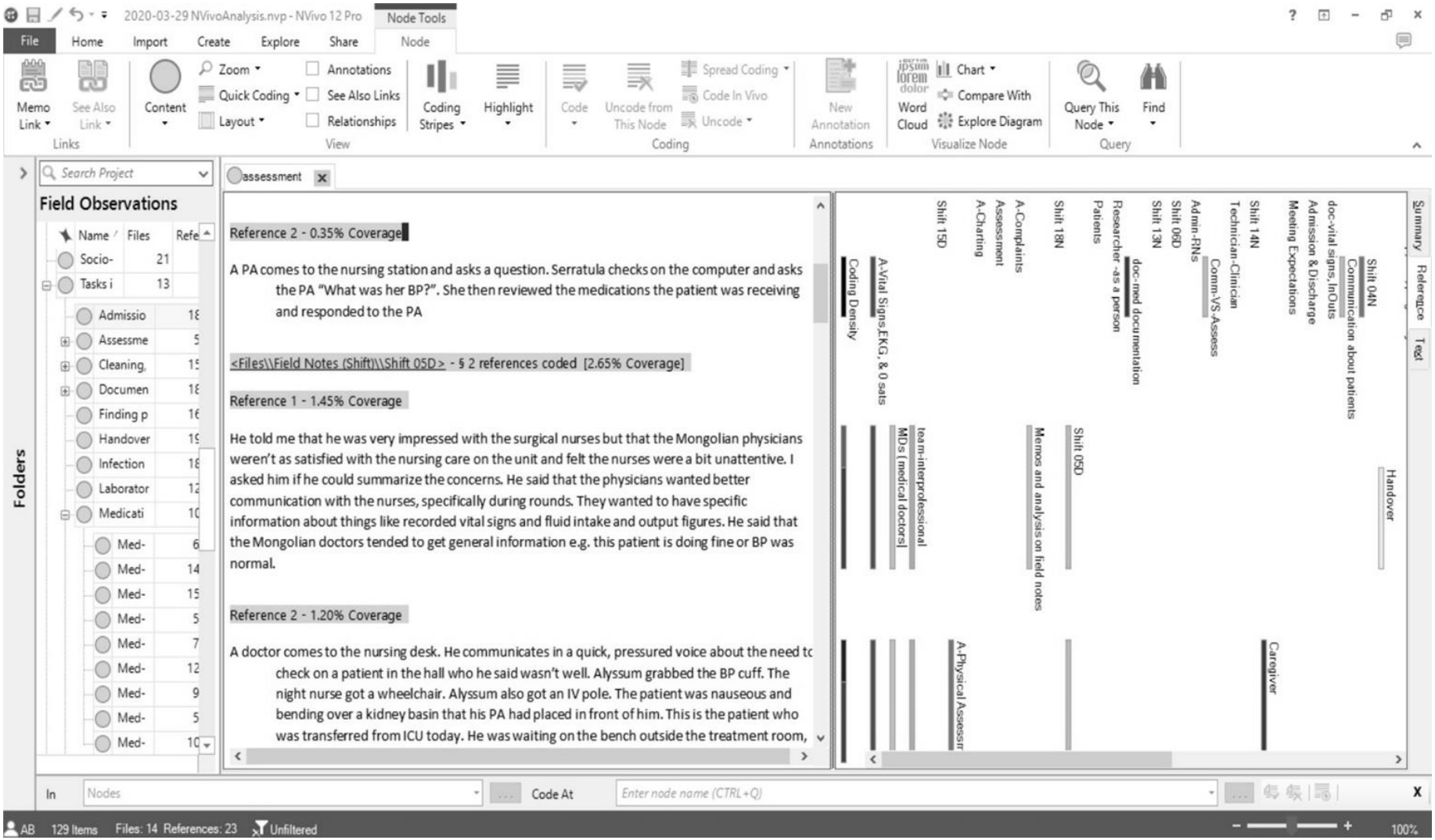


Appendix 19. Coding Samples

NVivo Coding: Screen Shot - Interviews



NVivo Coding: Screen Shot – Field Observations



Code Definitions for Nursing Roles: Interviews

Note: This table contains nursing role nodes specific for interviewees and key informants as exported from NVivo

Nursing Role Nodes (Interviews)	Definition
Nurses Roles	Nursing roles as understood as a categorization of functions for the purpose of carrying out responsibilities. This node lists nursing roles as coded and compared between interviewees and field observations as recorded in field notes.
Accountant	This node contains references to areas where the nurse needs to be accountable for services that have an expense. This includes calculating patient expenses for medications and supplies. It also includes references to when nurses have been accused of charging patients for items or services they have personally taken advantage of.
Caregiver	The nurse as a caregiver as defined in this category includes references to direct patient-care activities of the nurse, including patient education. Although part of caregiving includes non-direct aspects, those aspects are included in other nursing roles such as clerk (documentation), manager (organizing work so as to be able to caregiver), communicator (how the nurse interacts when giving care), etc.
Direct Pt Care	Descriptions of work that relates to hands-on tasks such as vital signs, physical assessment (using auscultation, palpation, percussion), medication administration, personal care, etc.
Patient education	Description of educational activities and/or communication undertaken by the nurse for the patient (&/or family member of the patient)
Clerk	A clerk describes the role of the nurse in documentation, including assembling and updating charts with documentation such as lab results, consults, etc. Clerks can also function as receptionists. Although clerks often do accounting, a separate node has been made for tasks associated with accounting.
Documentation	the work of the nurse as it relates to both reading documents to determine what the nurse needs to do (med orders, etc.) as well as the work of documenting nursing activities and patient assessments
Communicator	The role of communicator reflects the communication patterns and perceived responsibilities of ward nurses. This node focuses primarily on verbal and non-verbal communication, with the majority of written communication being assigned to the role of 'clerk'. Communication with and between nurses, doctors, patients, patient families, and managers is included in this node. Attitudes as communicated by nurses is also a part of this role.

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Nursing Role Nodes (Interviews)	Definition
Comm c nurses	Communication between nurses for the purpose of providing patient care. Includes communication during handovers from one shift to the next.
Comm w doctors	Communication between doctors and nurses that happens or that is expected but doesn't happen.
Comm w NAs & cleaners	Communication by nurses with ward nursing assistants and cleaners
Comm w pts	Verbal and non-verbal interactions of nurses and patients. Includes what is communicated, how it is perceived to be communicated/interpreted.
Comm w Sr RN	Communication with senior nurses, team leader, head nurse, etc. Includes what is communicated and why things are done/communicated.
Communication effectiveness	Comments about the effectiveness or inadequacy of communication as it relates to interprofessional communication or patient-provider communication
Follower	References to nurses following doctor's orders and instructions from senior nurses. They are not expected in these situations to be creative or innovative. Sometimes a 'follower' does things just because that's how it has been done. However, followers can also choose to follow after carefully thinking and considering the situation. This node contains both instances.
Helper	The role of the nurse as a 'helper' includes the altruistic component of wanting to help. This can be shown in ways such as motivation for being a nurse and dedication to the job. The role of helper also includes that of an 'assistant', but it isn't limited to the task of assisting, but rather of being a part of a process to bring healing and help to those in need, recognizing that helpers can be 'good' or 'bad'.
Learner	The role of the nurse as a learner. This node includes references to continuing education, basic nursing education, transitioning from a student-to-RN, and other learning opportunities. It also includes some references as to the academic differences between doctors and nurses as expressed by interviewees.
Cont.Ed & Role of Learner	References to nurses being engaged in continuing education, developing/maintaining knowledge, etc
Cont.Learner	References to continuing learning that may be required or may occur as part of the nurses' work; may include examples of when learning opportunities were not follow-through on
Nurs Education	Comments about nursing education
Orienting RNs	Issues related to nursing students becoming ward nurses. Includes comparisons between student and nurse expectations as well as orientation issues.

Nursing Role Nodes (Interviews)	Definition
Student-RN transition	Descriptions reflecting whether or not the actual role of the RN differed from what the interviewee expected when a nursing student; some of the characteristics typical of new nurses
Manager	Perspectives that pertain to nursing management. It includes references to nursing positions that include responsibilities for management as well as references referring to how ward nurses manage their time and workload. Problem solving responsibilities is included. (It could also include how nurses manage their personal stresses in the workplace in regards to the impact on others - patients or other staff but these were not included in the initial coding... so needs to be checked before being finalized).
Organization	organization of shifts, supervision, etc
Problem-solver	references to the problem-solving and critical thinking required of nurses
Time management	References to how nurses manage their time
Team member	The nurse has individual responsibilities to carry out, but in the context of hospital care for the purpose of improving patient health and wellbeing, the tasks done by an individual nurse contribute to the whole care that includes the work of other professionals. The nurse is also a member of a team and shares responsibilities by working together with other nurses to manage the workload.
Doc-RN teamwork & collaboration	References to the work and relationships that nurses and doctors from the same ward have as they interact in various ways
Misunderstanding	Descriptions of misunderstanding as it occurs in the workplace
Nursing team	References made to the work and relationships among nurses as it relates to ward nursing
Technician-Clinician	The nurse as a technical and clinician refers to the work of the nurse that requires hands-on skills to perform and which requires direct patient contact. Examples include medication administration, assessment, and phlebotomy, It is a part of caregiving, but also distinct because the focus is not holistic - although that can simultaneously occur depending on the provider.
Assessment	References to assessments and nursing assessments as the responsibility of nurses
Inspections	references to things that nurses must do to meet requirements (which might or might not be relevant to the purpose of the activity e.g. how to give injections). Information for this node was from one interview (senior management nurse) and one key informant (senior management nurse)
Lab tests	Expectations of nursing responsibilities related to lab tests
Medication Administration	The role of the nurse in giving medications. Includes what the nurse does/should do, how the nurse knows what to do, and what the nurse needs to know, Examples of when there have been problems in medication administration are also included.

Appendix 20. Memo Samples

Fieldnotes Research Memo Sample: Manager-Coordinator

Narrative: Manager-Coordinator

Ward nurses have roles as managers in that they have responsibility for managing the effective use of resources. Resources that ward nurses need to manage include the various supplies that are needed to carry on the nursing work on the ward, use of time, and division of work assignments.

Personnel Management

During weekday shifts, the head nurse generally overseas the management of the ward. The head nurse is responsible for scheduling shifts, assigning workloads, and managing supplies. Senior nurses who work weekday shifts helped with these responsibilities when the head nurse was not present. Ward nurses were assigned to patient rooms while senior nurses were usually tasked with making orders of medications and other supplies. In addition, senior nurses frequently did admissions, discharges, and patient assessments, including all the related charting. This would free up time for the ward nurses to attend to medication administration, charting, and other work. On night and weekend shifts, the nurse who was more senior was assigned to have the lead role and had responsibility for the shift report. As unanticipated events happened throughout the course of a shift, for example an emergency admission or surgery or death, nurses would have to rearrange their workloads. This was often done among themselves.

Supplies Management

Nurses were conscious of the need to make supplies last for as long as possible. When an IV went interstitial, nurses were observed removing the needle and re-inserting it in a different site rather than waste the single-use IV set and medication. Supplies of gloves, bags, equipment such as thermometers or dispensers used during medication administration, and the fluid used for reconstituting drugs were carefully rationed.

> *I ask her if there is a policy on wearing gloves (I had not been able to notice any pattern in her use when doing medications, inserting IVs etc. Sometimes she wore gloves, sometimes she didn't, and sometimes she used sanitizer gel on her gloves when going between patients). She said that they have to be careful with the use of gloves and other resources, so they don't run out when they really need it. She asked me if I remembered her cutting a yellow [rubbish] bag in half (which she took one half of and wrapped it around the blood plasma bag, securing it with scotch tape and labeling it to be stored in the fridge for 24 hours for retrieval if there was a patient reaction to the blood product received). I told her I remember. She said that they try to save as much in costs as possible which is why they are supposed to cut the bags in half. The same budget mindset goes for the gloves and other supplies.* (2.1)

On each of the wards I was on, at some point, it seemed that the head nurse had arranged that each nurse received a thermometer that was to be their responsibility for maintaining. However, on two wards, the thermometers had almost all disappeared, leaving only 1-2 thermometers for use on the ward. Only axillary temperatures were taken. On Ward C, the nurses still had the thermometers they had been given and would retrieve them only when needed.

> *A patient comes to the nursing post saying that another patient in her room is feverish and coughing. Pixie goes to her locker and gets a thermometer. (Each nurse has responsibility for her own thermometer. This hospital also gives them a monthly allotment of gloves and garbage bags. Sharps boxes are unlimited.)* (19.1-16:45)

Time Management

Nurses had to carefully manage time during a shift in order to accomplish their tasks, with the added goal of accomplishing them in a timely manner. Some of the more senior nurses who had responsibilities for ordering supplies would often come in 1-1.5 hours in advance of the start of their shift. This was unpaid overtime, but it gave them the time they needed to accomplish their tasks. Nurses also had to manage time carefully as

there was always the potential for unexpected events such as an emergency admission, emergency surgery, deterioration in a patient's health status, or a death. Nurses would mentally triage their patients to determine who was more critically ill and needy so that they could better manage their time. This was especially important when there was a very high patient-nurse ratio. One very time-consuming task for nurses where they needed good time management was documentation.

> *I asked her about charting procedures. She tells me that the standard is that the nurse can only chart after having done an intervention such as medication administration or assessment. But she tells me that it is not possible to get charting completed in this way. She admits that sometimes they chart in advance. I ask her if they also charted in advance on electronic charts. She tells me they do that as well, although they're not always able to get the electronic charting done in advance. She tells me it's difficult because if you chart in advance it is against policy and you will get scolded. But if you don't do it in advance it is impossible to complete your workload within your shift hours.* (14.1)

Social Events Coordination

Nurses took on coordinator roles for events such as the traditional new year were celebrated by medical and nursing ward staff. They spent time deciding what was needed and then who would do it.

> *I asked Jasmine if it was the nurses who did all the organizing. She replied, 'No. The doctors and nurses planned this together.' However, I observed that it was only nurses who were preparing the food, handing out tea, and ensuring everyone had food on their plates. I didn't stay after it was finished, but I am fairly sure that the nurses would also be the ones cleaning up… I later shared my observations with Willow (a Key Informant) about nurses' perceptions of planning things together with physicians but my observation of nurses doing all the serving and preparation. She said that this was generally true.* (14.1,2)

Excerpts from sub-nodes under Manager-Coordinator

Note: These excerpts were used in constructing the above narrative and includes references to source files

Node & sub node details

- Supplies & Expenses Management:
  - Saving money by stretching supplies (2.1) *I ask her if there is a policy on wearing gloves (I had not been able to notice any pattern in her use when doing medications, inserting IVs etc. Sometimes she wore gloves, sometimes she didn't, and sometimes she used sanitizer gel on her gloves when going between patients). She said that they have to careful with the use of gloves and other resources, so they don't run out when they really need it. She asked me if I remembered her cutting a yellow bag in half (which she took one half of and wrapped it around the blood plasma bag, securing it with scotch tape and labeling it to be stored in the fridge for 24 hours for retrieval if there was a patient reaction to the blood product received). I told her I remember. She said that they try to save as much in costs as possible which is why they are supposed to cut the bags in half. The same budget mindset goes for the gloves and other supplies.* (2.1)
  - Nursing Assistants carefully count each linen item and record it in a book. If any goes missing, the NA must bear the cost. *Back on the unit, Iris returns from the laundry with new supplies. Tansy starts to make the post-op bed with the hospital linen. She doesn't raise the bed so has to bend over to make the bed. While Tansy makes the bed, Iris records the linen count in a notebook. She tells me that if linen is missing then the NAs bear the cost/fault. This is why they keep records.* (7.1@0930)

    - Explains to the patient what dressing costs are not covered and gives information on supplies the patient must purchase and where to buy them (8.1)
    - On ward C, each nurse is responsible for their own supplies. They get a specified number of gloves/month that they have to make last, they have their own dispenser bottles that they use on the medication cart, and they have their own thermometers that they are responsible for keeping. *A patient comes to the nursing post saying that another patient in her room is feverish and coughing. Pixie goes to her locker and gets a thermometer. (Each nurse has responsibility for her own thermometer. The hospital also gives them a monthly allotment of gloves and rubbish bags. Sharps boxes are unlimited.)* (19.1@16:45)
- Time management
    - Preparing patients for morning surgeries (4.1)
    - Starting shift early to be able to review doctors orders and prepare for pharmacy orders and getting patients to consultations (16.1)
    - Timing of charting (pre-task; after shift finishes; during the time of the shift when nurses are tired) *I asked her about charting procedures. She tells me that the standard is that the nurse can only chart after having done an intervention such as medication administration or assessment. But she tells me that it is not possible to get charting completed in this way. She admits that sometimes they chart in advance. I ask her if they also charted in advance on that electronic charts. She tells me they do that as well, although they're not always able to get the electronic charting done in advance. She tells me it's difficult because if you chart in advance it is against policy and you will get scolded. But if you don't do it in advance it is impossible to complete your workload within your shift hours and so you won't work late.* (4.1, 14.1)
    - Work overload related to unplanned events (e.g. new patient admitted from emergency, emergency surgery, code)
    - Triaging the neediest patients as related to diagnosis and presence of a PA and managing time accordingly.
    - Ensuring you have supplies before those with access to supplies leave (e.g. garbage bags kept in the HN room 4@1727)
- Delegation
    - Sending a nurse to find out what a policeman wants (5.1)
    - requesting cleaners to wash the floor when urine has been spilled or people have vomited and it gets on the floor.
- Social events: (coordinated various tasks for Tsagaansar) *Before I sat down, I asked Jasmine if it was the nurses who did all the organizing. She replied 'No. The doctors and nurses planned this together.' However, I observed that it was only nurses who were preparing the food, handing out tea, and ensuring everyone had food on their plates. I didn't stay after it was finished, but I am fairly sure that the nurses would also be the ones cleaning up… I later shared my observations with a KI about nurses' perceptions of planning things together with physicians but my observation of nurses doing all the serving and preparation. She said that this was generally true. Although there is 'talk' about working together equally, nurses tend to do the serving. (She said that operating room teams tend to be less hierarchical.)* (14.1,2)
- Human Resource management & coordination
    - Supervision and scheduling of shifts is done by the head nurse. (i6@15:44)
    - Patient assignments are divvied according to rooms as determined by the head nurse. (i9.1,2,3)
    - Nursing tasks are divided among the nurses. Ward nurses do the medication administration. Senior day nurses often do all the admissions, discharges, and assessments, including charting. <task-centered care vs. pt. centered care> (1.1)

Interview Research Memo Sample: Manager & Organizer

Narrative: Manager & Organizer (sub-node under Nursing Roles)

One of the nurse's roles is that of a manager. Although ward nurses are not considered 'managers' from the perspective of a hospital's administration, ward nurses need to be skilled in time management, management of resources, management of problems, and able to manage interpersonal work relationships. Nurses are also organizers. They have responsibilities for organizing their workspaces such as medication carts, dressing trays, and the nursing station. Unofficially nurses were observed as doing much of the organization for a staff celebration during a national holiday.

Time management was mentioned by interviewees as one of the challenging aspects of ward nursing. The main priority for nurses was to give injectable medications at the prescribed time. Given the high workload, nurses had to be time-efficient if they were to meet their targets. If they weren't able to perform in an efficient manner, it was often assumed to be the fault of the nurses. *[note: in analysis section, comment on why the blame on nurses and not on the system set-up, over-prescription of injectable medications, etc.]*

> Recently, many people got admitted to our ward due to influenza or similar disease and we had a high workload – around 100 patients in our ward and the workload per nurse increased sharply. However, according to my observation, the nurses tend to spend a lot of energy inefficiently, spending longer time on certain things unnecessarily. Consequently, they make themselves tired, waste time, and work [unpaid] overtime, etc. (4.3)

In addition to the administration of injectable medications – including checking on the gravity-fed IV systems, nurses had other tasks to accomplish and unless there was an emergency, these other tasks were fitted around medication rounds. Examples include patient assessment, obtaining blood and urine samples, checking charts and the medical doctor for treatment updates, ordering and obtaining medications and other supplies, new admissions, charting, writing shift summaries and handover reports, etc. Triage skills were also important, particularly when nurses were responsible for significantly large numbers of patients, as they had to know which patients were more critically ill and required closer attention. Good time management skills also extended to having nurses arrive on time for their shifts in order to ensure proper handover.

Nurses need to be comprehensive in thinking through situations. Nurses are responsible to consider other factors affecting a person's health such as social and emotional needs and the needs of someone who will be discharged home. Just completing tasks without thinking things through can be problematic. One doctor mentioned an incident where a nurse took blood for a fasting blood sugar without first checking with the patient to determine if they had something to eat or drink prior to giving the blood sample. (3.1) Shift team leaders need basic management skills as they are responsible to see that all the work for each shift is completed as planned and as they have oversight for any new nurses t working their shift.

> For discussion: Time management alone is unlikely to solve the issues for giving medication on time. Are nurses being asked to accomplish something that isn't possible? While some nurses may be extraordinarily efficient, the number of times this issue has been raised suggests that there are other things happening that are impacting the ability of nurses to give medications as scheduled. Factoring in interruptions is one consideration e.g. responding to a doctor's request, disconnecting a patient's medication that has run through, etc. Learning how to manage these requests is important, but historically nurses are considered assistants, so they haven't asserted themselves when asked by others. (4.6FN)

Excerpts from sub-nodes under Manager & Organizer

Note: These excerpts were used in constructing the narrative and includes references to source files

Manager node details

- Nurse managers: balance between being a supervisor and showing one cares (4FN)
- Approach to discipline/correction: If it is an issue that a doctor has with a nurse, it might be first mentioned anonymously in a group setting. If things don't change then the head nurse (or director) will meet one-on-one. If that doesn't work, then the doctor will meet with the nurse. (2.1)
- Management will develop strategies to address perceived needs (e.g. workload), often in consultation with nurses, but nurses don't always implement those strategies (4.1)
- Helping to address work overload during medication administration time by having ambulatory nurses help at peak times.
- Management levels and responsibilities are set out by the MOH: ward nurse – head nurse (day to day activities) – ward manager – unit manager (4.3)
- Head nurses do evaluations on nurses every three months
- Head nurses supervise and correct nurses if they are doing something incorrectly (8)
- Management is not purely separated as nursing and medical; there are two systems simultaneously at work: the ward (multidisciplinary, headed by the senior MD) and nursing
- Time management of a ward nurse:
    - Tasks: priority for giving injections at scheduled time / then lab testing / completion of shift summary / checking with the MD re diagnostic & treatment plans for patients / finish admission for new patients / prepare handover reports
    - Triage: need to know which patients are more critically ill and check on them more often; also which patients need ADL assistance but don't have a PA

Manager: organization node details:

- Time management by individual nurses: complete tasks on time! (develop a schedule that works for them – based on experience and personal time management skills) (4.1)
- Staffing – each ward is different; some have only RNs, others have NAs; fewer nurses work night shifts. If there is a new night nurse, she will first be paired with an experienced nurse. (9)
- Patient assignment is done by the head nurse is based on rooms and is done by the head nurse or her deputy (9.1,3)
- Shifts: 8/16/24 One hospital's rotations were done with 3 consecutive shifts 2 days + 1 night; another hospital had nurses who chose nights only. (9.1)
- The shift's team leader has oversight for all the room (esp with a new nurse) 9.1
- When there is an ICU (or special observation room), usually one of the nurses on permanent days has oversight of that room during the weekdays plus which ever rooms are closest to the nursing post (9.2)

- Handover: nurses who had the same room assignment will give the incoming nurse updates on patients (esp level of acuity, any critical conditions, priorities, tasks to be done). Usually done by going from room to room together.
- Schedules have changed over the years (e.g. used to do medications in the afternoon, now they are done mid-morning)

Problem-solving

- Just completing tasks without thinking things through can be problematic. E.g. taking blood for a fasting blood sugar without checking with the patient to determine if they had something to eat or drink prior to giving the blood sample. (3.1)
- Nursing requires creative thinking because nurses are responsible to consider other factors affecting a person's health (e.g. social and emotional needs, practicalities of lost income) 4.1
    - But the nursing profession requires from the nurse many other skills including psychological skill – how to help this patient, what is the key issue, what I can do for this person, what kind of help the doctor can show, would there be a social welfare for this person after being discharged – the nurse concerns about all these issues and devotes her mind and heart. The nurse thinks about all these creatively and comes up with solutions. To people's eyes, the nurse looks like someone who just does treatment but it's care. (4.2)
- If a problem arises that is not within the scope of practice of the head nurse then she will communicate that to the nursing director (e.g. managing overload, other inconveniences) 4.4.

Time Management

- Nurses need to arrive at work on time. This is important for good handover (3.1)
- Injections need to be given on time (3.2)
- Nurses need to finish tasks on time
- Nurses need to time their breaks so that patients are at risk (e.g. IVs running through when the nurse is on a break) 3.2
- Nurses should return frequently to check on [gravity-fed] IVs to insure they are running as intended, and if not, to problem-solve and get it working again. (3.3)
- Nurses need to be sensitive to patient expenses and not allow unnecessary wastages and related patient charges for drugs or supplies. (3.3) *Why not have more responsibility with the doctor's and hospital's choice of supplies – e.g. single vs multiple use IVs*
- Nurses need to have good personal time management skills. (4.2)
- Nurses need to be able to prioritize and be efficient at what they do
    - Recently, many people got admitted to our ward due to influenza or similar disease and we had a high workload – around 100 patients in our ward and the workload per nurse increased sharply. However, according to my observation, the nurses tend spend a lot of energy inefficiently spending longer time on certain things unnecessarily. As a consequence, they make

themselves tired, waste time and work overtime, etc. (4.3)

- *Is it realistic to expect nurses to always be efficient? How can interruptions, problems requiring more attention, etc. be factored into an average day so that the efficiency is tempered by reality?*
    - I don't think that time management alone can solve the issues regarding ensuring medication is given on time. Halenia alluded to some of that saying it is hard for nurses when they are in the midst of giving medications but then are interrupted by others and expected to respond – e.g. to a doctor's request, to disconnect a patient's medication that has run through, etc. Learning how to manage these requests is important, but historically nurses are considered assistants, so they haven't asserted themselves when asked by others. (4.6FN)
- Nurses need to schedule or plan their days in an efficient and effective way (4.4; 5.1)
- Additional help during peak workload times can be help ward nurses to complete their work on time. (4.5)

Combined Fieldnotes & Interview Memo Sample

Memo: Nursing Roles (major node)

Interview Codes (March 3, 2020)	Field Note Codes (March 3, 2020)
• Accountant, • Caregiver, - • Clerk, • Communicator, - - • Follower, • Helper, • Learner, • Manager, - - - - - • Team member, • Technician-Clinician	• (*not coded but examples for this in fieldnotes*) • Caregiver, • Cleaner, • Clerk, • (*not coded but examples for this in fieldnotes*) • Courier, • Educator (Teacher), • (*not coded but examples for this in fieldnotes*) • (*not coded but examples for this in fieldnotes*) • (*not coded but examples for this in fieldnotes)* • Manager-Coordinator • Mediator, (likely subsume under manager &/or communicator) • Nursing Assistants, (subsume into other roles e.g. helper, cleaner,.etc) • Porter, • Professional, • Record Keeper (docs), (subsume into 'Clerk?; create separate roles under the node Clerk?) • Team Member, • Technician-Clinician
Combined List of Roles (March 3, 2020) (Note: Nurs Asst's will be redistributed into other roles) 1. Accountant	

2. Caregiver
3. Cleaner
4. Clerk (includes 'record keeper')
5. Communicator
6. Courier *(Note: 'Transporter' according to the dictionary includes both 'courier' and 'porter'. Should these two be combined or separated? Keeping them separated might be preferable because in the hospital setting (1) the terms courier and porter and better understood as work that is usually done by a human and (2) courier usually denotes transporting packages and porter denotes transporting people.)*
7. Customer service agent (includes criteria of service that characterizes 'profession')
8. Educator (rename as 'teacher?)
9. Follower
10. Helper
11. Learner
12. Manager-coordinator-organizer
13. Porter
14. Team member
15. Technician-Clinician
    - medication administration (injectable medications)
    - assessment (physical, VS, cognition, socio-emotional wellbeing)
    - phlebotomy & other lab samples
    - medical devices (urinary catheters, chest tubes, cardiac monitors, IV pumps)
    - wound & skin care
    - computer (trouble-shooting)

Appendix 21. Audit Trail for Documentation and Coding

Documentation and Coding Process

A. Preparation of Field Notes & Reflections

1. Personal reflections on experiences and observations from observed hospital shifts were typed out within 24 hours following each shift. Notes from meetings and Key Informant discussions were typed or written within 24 hours after they occurred.
2. Handwritten notebook field notes were scanned to create an electronic back-up copy of the original notes.
3. Field notes were transcribed from the handwritten notebook to the computer.
4. Backups were made on an encrypted hard drive and the university's storage drive.
5. Field Notes & Reflections were uploaded to NVivo.
6. Corrections were made to each document as stored in NVivo if they were subsequently found to have spelling or grammatical errors. If there was a question about terms used in the transcript, the researcher checked the original handwritten notes.

B. Coding of Field Notes

1. Field notes were the first documents to be analysed.
2. Memos on the (i) organization of data and (ii) coding decisions and thoughts were documented and reviewed throughout the analysis and stored in NVivo.
3. Descriptive codes were created for each of the field observations.
4. Each transcript was read line by line. Topical coding was determined by answering the question 'What is described in this excerpt as it relates to what a nurse does?'
    a. Additional categories were created to capture descriptions that didn't specifically answer the question about the role and activities of a nurse, but which described the physical, social, and emotional environment that nurses worked in.
    b. Categories were deleted, renamed, or sub-divided based on coding of subsequent transcripts.
    c. To check on consistency of initial coding categories, the first four transcripts were printed out and re-coded by hand. They were then compared to previous coding. Most major changes and creation of categories were made during these two rounds of analysis of the first four transcripts.
5. Categories were read through and summarized in a category memo.
    a. For some categories, a word frequency search was done to provide further insight
6. Analytical coding was done by reanalyzing categories describing nursing tasks and inter-professional interactions in answer to the question 'What is the role of the nurse?'.
7. Further analysis was done by reanalyzing the nursing task category summaries as to the skills and knowledge needed for providing direct and indirect care. Summaries were written in the category memos.

C. Preparation of Interview Transcripts

1. Digital recording of interview was uploaded to the researcher's (a) computer and (b) encrypted flash drive. Additional backups were made on an encrypted hard drive and the university's storage drive.
2. Interviews were transcribed by an accredited transcription and translation service.
3. The transcriptionist-translator listened to the interview a second time to ensure correct transcription.
4. The transcriptionist-translator translated the responses of the interviewee and of interviewer from Mongolian to English.
5. The researcher listened to the original digital recording and compared it to the transcripts to check for accuracy of the Mongolian transcription.
6. The researcher reviewed the English translation by comparing it to the Mongolian translation. English spelling and grammatical errors that impact understandability were corrected.
7. When there was a question about the accuracy of the translation, the researcher discussed this with the translator to come to a mutual decision.
8. Interview transcripts and field notes were uploaded to NVivo for analysis.

D. Coding of the Interview Transcripts

1. Memos on the (i) organization of data and (ii) coding decisions and thoughts were documented and reviewed throughout the analysis and stored in NVivo.
2. Descriptive codes were created for each of the interview transcripts.
3. Transcripts were read line by line. Topical coding was guided by the question 'What is described in each excerpt as it relates to what a nurse does, perceptions related to work, or reasons for actions or perspectives?'.
4. As a result of ongoing analysis of new transcripts, a refining of topical/descriptive categories took place after four transcripts had been analyzed. In addition to refinement of descriptive categories, analytical coding was done by reanalyzing the interviews in answer to the question 'What is the role of the nurse?'.
5. Findings were combined with the Nursing Role categories developed from analysis of field notes through the method of constant comparison. If a finding from the interview had no corresponding category as initially developed from field observations, a new category was created.

E. Comparison of Ethnographic and Integrative Review Findings

1. Constant comparison was the method used to compare work activities identified from the integrative literature review and the analysis of the job description to the nursing roles as derived from the analysis of field observations and interviews.
    a. Work activity items from the integrative review were compared to the role descriptions. Similar work activities were entered into the cells corresponding to the roles. Where there were differences in findings, these were noted by (i) a blank cell in the table if there were no similarities or (ii) a footnote explaining differences. The summarized table is displayed in the discussion chapter.

b. Job description work activity findings were compared to (i) nursing roles as derived from field observations and interviews and (ii) work activities as derived from the integrative review. The same process as in E.1.a was used to note any differences.

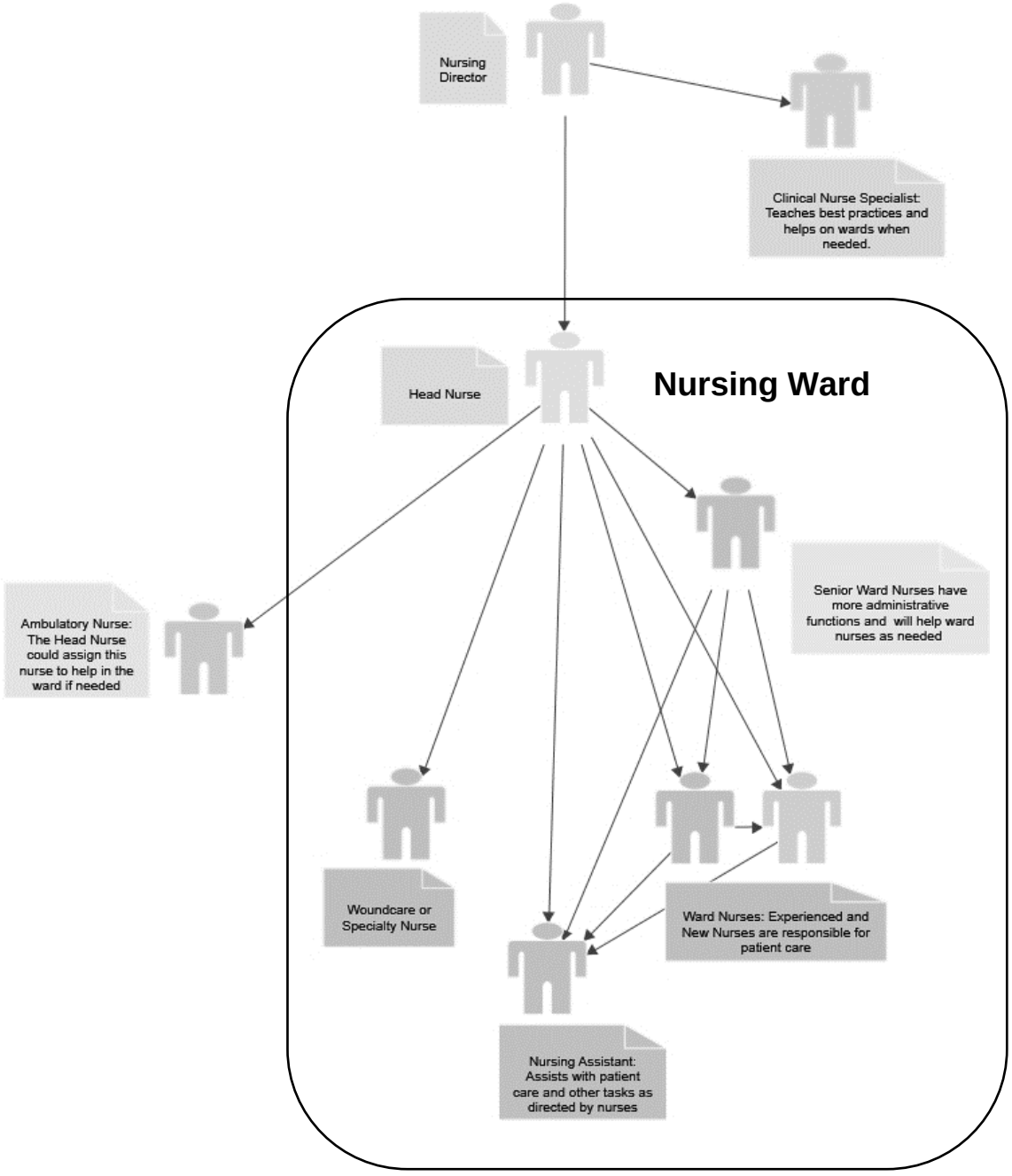
F. Refinement of the Nursing Roles & Development of a Model

1. Refinement of the names of Mongolian nursing roles and their role descriptions occurred throughout the different stages of the analysis process. Effort was made to use role description terms that were sufficiently generic so they could be understood by nurses from different countries. Some of the earlier lists were maintained in hard and/or soft copies for the purpose of an historical record of changes. The synthesis of the following contributed to the development and refinement of the nursing roles and development of the conceptual Model of Acute Care Nursing Work:
    a. Field observations
    b. Interviews
    c. Job descriptions
    d. Integrative review
    e. Published literature about Mongolia and Nursing
    f. Expert review for validation purposes

Appendix 22. Organizational Chart of Ward Nursing Staff

Nursing Positions on Medical-Surgical Wards

Arrows denote direction of authority



Appendix 23. Synonyms for Roles and Responsibilities

Synonyms for Roles and Responsibilities

Terms Defined in This Dissertation	Synonyms
Role	function, duty, tasks, responsibilities, theme[1]
Responsibilities	tasks, activities, work, nursing interventions, nursing care, fundamental care, NMDS[2]
Notes: 1. Theme was used in some qualitative studies to describe the work of the nurse 2. NMDS was included as a term because it contains nursing interventions	

Appendix 24. Articles Selected According to Database and Search Terms

Articles Selected According to Database and Search Terms

Note: Some articles were found in more than one database and/or search term

Database	N	References
Scopus	19	(Al-Kandari, Thomas 2009, Ball, Griffiths et al. 2016, Bekker, Coetzee et al. 2015, Chang, Lam et al. 1998, Farquharson, Bell et al. 2013, Goossen, Epping et al. 2000, Goossen, Epping, Paul J. M. M. et al. 2001, Grosso, Tonet et al. 2019, Kusi-Appiah, Dahlke et al. 2019, Lee, Yu 2018, Morris, Matthews et al. 2014, Park, Lee 2015, Roche, Duffield et al. 2016, Schluter, Seaton et al. 2011b, Schubert, Glass et al. 2008, Shuriquie, While et al. 2008, Turtiainen, Kinnunen et al. 2000, van Belle, Giesen et al. 2020, Westbrook, Ampt 2009, Westbrook, Duffield et al. 2011)
PubMed	11	(Asmirajanti, Hamid et al. 2019, Briatte, Allix-Béguec et al. 2019, Lima, Silva, Ana Elisa Bauer de Camargo et al. 2020, Park, Suh et al. 2016, Schluter, Seaton et al. 2011, Schubert, Glass et al. 2008, Simborg 1976, van den Oetelaar, W. F. J. M., van Stel et al. 2018, Westbrook, Duffield et al. 2011)
NAHD	7	(Butler, Treacy et al. 2006, Jackson, White et al. 2014, Dochterman, Titler et al. 2005, Morris, Matthews et al. 2014, van Belle, Giesen et al. 2020, Jacob, McKenna et al. 2014)

Search Term	N	References
Ethnography (ward/unit)	1	(van Belle, Giesen et al. 2020)
NMDS	7	(Butler, Treacy et al. 2006, Goossen, W. T. F., Epping, Paul J. M. M., Feuth, van den Heuvel, Wim J. A., Hasman, and Dassen 2001b, Park, Lee 2015, Ranegger, Hackl et al. 2014, Ranegger, Hackl et al. 2015, Turtiainen, Kinnunen et al. 2000, Goossen, Epping et al. 2000)
Role	6	(Al-Kandari, Thomas 2009, Ball, Griffiths et al. 2016, Bekker, Coetzee et al. 2015, Chang, Lam et al. 1998, Jackson, White et al. 2014, Shuriquie, While et al. 2008)
Scope of Practice	6	(Kusi-Appiah, Dahlke et al. 2019, Lee, Yu 2018, Morris, Matthews et al. 2014, Roche, Duffield et al. 2016, Jacob, McKenna et al. 2014)
Task or Activity	9	(Briatte, Allix-Béguec et al. 2019, Dochterman, Titler et al. 2005, Grosso, Tonet et al. 2019, Lima, Silva, Ana Elisa Bauer de Camargo et al. 2020, Park, Suh et al. 2016, Schubert, Glass et al. 2008, Simborg 1976, van den Oetelaar, W. F. J. M., van Stel et al. 2018)
Work Observation	3	(Farquharson, Bell et al. 2013, Westbrook, Ampt 2009, Westbrook, Duffield et al. 2011)

Appendix 25. Record of Database Searches

Background to Database Searches

I conducted six searches in three databases. The search process was a learning experience, as early searches were less precise than later searches. Search parameters (e.g., filters and phrases) were adjusted according to each database's unique search system.

Questions guiding the six separate searches were based on search terms that were identified through reading on related topics and exploring MeSH terms (Medical Subject Headings).

Key Term	Question
ward or unit ethnography	What are the descriptions of nurses' activities on medical and surgical inpatient wards as described through ethnography?
NMDS	What nursing minimum data sets have been published with lists of nursing interventions or activities?
Role	What are the roles of medical and surgical ward nurses?
scope of practice	What is the scope of practice of ward nurses on medical and surgical inpatient units, as described by what they do?
task or activity	What are the nursing activities/tasks done ward nurses on medical and surgical inpatient units?
work observation	What are the nursing activities/tasks that have been identified through work observation with analysis of tasks?

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
1a	May 25	Scopus	Nursing Minimum Data Set	Article English	ALL (“nursing minimum data set”) AND DOCTYPE (ar) AND LIMIT-TO (SUBJAREA, “NURS”)) AND (LIMIT-TO (LANGUAGE, “English”))	318	24	4	4
1b	June 3	NAHD	“Nursing Minimum Data Set” NMDS Nursing (MeSH)	Scholarly journals, Article, English • Applied filters • (nurses OR nursing) NOT (communities AND ecology AND nursing homes AND public health AND ecosystems AND microorganisms AND deoxyribonucleic acid--dna AND fungi AND community structure AND ecosystem biology AND gene sequencing AND rrna 16s AND taxa AND community composition AND forests AND habitats AND mental disorders AND mental health AND neuromuscular diseases AND phylogenetics AND species diversity AND species richness AND fish AND genes AND life sciences AND nitrogen)	ab("minimum data set") OR ab(NMDS) OR ab("nursing minimum data set") AND mesh.Exact("Nursing") NOT "nursing home"	28	5	3	1

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
1c	June 3	PubMed	“minimum data set” NMDS nursing		(((((("minimum data set"[Abstract] OR NMDS[Abstract]) AND ("nursing"[Subheading] OR "nursing"[All Fields] OR "nursing"[MeSH Terms] OR "nursing"[All Fields] OR "breast feeding"[MeSH Terms] OR ("breast"[All Fields] AND "feeding"[All Fields]) OR "breast feeding"[All Fields])) NOT "nursing/breastfeeding"[All Fields]) NOT "nursing/home"[All Fields]) NOT "nursing/community"[All Fields]) NOT "nursing home"[All Fields]	59	9	2	2
2a	May 26	Scopus	WOMBAT nursing	Article	(Atitle-ABS-KEY (wombat) AND KEY (nursing)) AND DOCTYP (ar)	4	3	3	3*[28]
2b	May 26	NAHD	WOMBAT nursing		WOMBAT (anywhere) AND nursing (anywhere)	17	1	1	1*

[28] 1 article was the same in Scopus, PubMed, & NAHD (Thus a total of 3 articles under this search term were included, rather than 5)

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
2c	May 26	PubMed	WOMBAT nursing		WOMBAT (All Fields) AND (“nursing”[subheading] OR “nursing”[all Fields] OR “nursing[MeSH Terms] OR “nursing [All Fields] NOT breastfeeding	61	2	2	1*
3a	May 26	Scopus	“nursing tasks” “nursing activities”	Article Filtered out: ICU, Psych”, aged, adolescent, critical care, child, newborn, occupational health, nursing home, occupational diseases	“nursing tasks” OR “nursing activities” AND hospital	267	5	1	1
3b	May 26	NAHD	Task analysis hospital	Article	Mainsubject (task analysis) AND hospital (anywhere) AND su(nursing) NOT breastfeeding	101	8	2	1
3c	May 26	PubMed	Tasks Activities Nursing Hospital		("tasks"[Abstract] OR "activities"[Abstract]) AND hospital[Abstract] AND nursing[Abstract] NOT breastfeeding[Abstract]	346	15	9	7

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
4a	May 27	Scopus	"scope of practice"	Article English	(TITLE-ABS-KEY ("Scope of practice") AND TITLE-ABS-KEY (hospital) AND TITLE-ABS-KEY (nurses) or TITLE-ABS-KEY (nursing) AND NOT TITLE-ABS-KEY (breastfeeding) AND DOCTYP (ar)	329	21	9	5[29]
4b	June 3	NAHD	"scope of practice"	Scholarly Journal, Article, English Filters: NOT (nurse practitioners AND physicians AND primary care AND emergency medical care AND medical personnel AND midwifery AND public health AND primary health care AND pediatrics AND nursing education AND students AND mental health AND physician assistants AND dentists AND child)	ab("scope of practice") AND nurs* AND hospital AND (medical OR surgical)	141	11	3	1
4c	May 27	PubMed	"scope of practice"			161	3	2	1

[29] 2 articles were duplicates thus there were a total of 6 articles included with this search term. Duplicate articles included: Scopus & NAHD=1; Scopus & PubMed=1

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
5a	May 27	Scopus	Ethnography Ward OR unit Nursing		(TITLE-ABS-KEY (ethnography) AND TITLE-ABS-KEY (ward OR unit) AND KEY (nursing) OR TITLE-ABS-KEY (nurs) AND NOT TITLE-ABS-KEY (breastfeeding)) and DOCTYP (ar)	281	13	3	1[30]
5b	May 27	NAHD	Ethnography Ward OR unit Nursing	English Scholarly Journals Not: trade journals, wire feeds, books, magazines); general info, evidence based healthcare, commentary, undefined, news, editorial, review, conference proceeding, front matter, table of contents, biography, correction/retraction, correspondence, credit/acknowledgement, recipe, speech/lecture	Ethnography AND (ward OR unit) AND nursing NOT breastfeeding <u>Additional filters</u> Included Subjects: qualitative research, ethnography, nurses, nursing, hospitals, nurse's role Excluded subjects: older people, middle aged, aged, mental disorders, mental health, dementia, quality of life, families & family life, public health, palliative care, nursing homes, medicine, physicians, aging, psychiatry, aged, 80 & over, adolescent, intensive care	277	8	1	1

[30] One article was duplicated as found in Scopus & NAHD, thus only one ethnography was included in the review.

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
5c	May 27	PubMed	Ethnography Ward OR unit Hospital Nursing		Ethnography AND “ward OR unit” AND hospital AND nursing ((((“anthropology, cultural”[MeSH Terms] OR (“anthropology”[All Fields] AND “cultural[All Fields]) OR cultural anthropology”[All Fields] OR “ethnography”[All Fields]) AND (ward[All Fields] OR unit[All Fields])) AND (“hospitals’[MeSH Terms] OR “hospitals”[All Fields] OR “hospital”[All Fields])) AND (nursing[Abstract] OR nurses[Abstract]) AND medline[sb]	397	5	3	0
6a	June 9	Scopus	Nursing role “Medical Surgical” Hospital	Limit to: Nursing Article Review English	(TITLE-ABS-KEY (nursing AND role) AND TITLE-ABS-KEY (medical AND surgical) AND TITLE-ABS-KEY (hospital)) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re")) AND (LIMIT-TO (SUBJAREA , "NURS")) AND (LIMIT-TO (LANGUAGE , "English"))	339	14	6	5

Search Code	Date	Database	Search Terms	Limits	Search Phrase	Total articles	Relevant Titles	Total Abstracts	Total Selected
6b	June 9	NAHD	“nursing role” “medical surgical unit”	Scholarly Journals Article English Filters: nurses or nursing or nurse’s role	"nursing role" AND (medical surgical unit)	277	9	5	1
6c	June 5	PubMed	Nursing Role hospital		(("nursing"[Subheading] AND role[Abstract]) AND ("hospitals"[MeSH Terms] OR "hospitals"[All Fields] OR "hospital"[All Fields])) NOT ("breast feeding"[MeSH Terms] OR ("breast"[All Fields] AND "feeding"[All Fields]) OR "breast feeding"[All Fields] OR "breastfeeding"[All Fields])	269	0	0	0
All Database Searches						**3672**	**156**	**59**	**36**
Duplicates								**5**	**4**
TOTAL Articles								**55**	**32**

Appendix 26. Summary of Key Components in Integrative Review Articles

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
AL-KANDARI, F. and THOMAS, D., 2009. Factors contributing to nursing task incompletion as perceived by nurses working in Kuwait general hospitals. Journal of Clinical Nursing, 18(24), pp. 3430-3440.	Missed/unfinished care (research looked at 5 questions: workload, tasks, missed care, factors contributing to missed care, correlations of staffing-demographics-incomplete tasks.]	Quantitative: Exploratory design using descriptive and inferential statistics	Survey: Med-surg RNs in 5 government hospitals in Kuwait	Selection from a pre-determined list of nursing activities (tasks) adapted from a survey tool developed by the International Hospital Outcomes Consortium.	Identified 5 most common activities: medication administration, patient assessment, nursing care plans, patient monitoring, & health teaching. 5 most unmet care activities: comfort talk with patients, adequate documentation of nursing care, oral hygiene, routine catheter care, & timeliness of IV administration.
ASMIRAJANTI, M., HAMID, A.Y.S. and HARIYATI, R.T.S., 2019. Nursing care activities based on documentation. *BMC nursing,* 18, pp. 32.	ID nursing activities based on documentation	Quantitative: Cross-sectional Retrospective design using univariate statistics	240 medical records randomly selected from patients with 10 most common medical & surgical diseases at a hospital in Indonesia	Selection from a pre-determined list of nursing activities developed by the authors and tested for validity and reliability.	Areas poorly documented include: functional assessment, pressure ulcer assess, physical assessment, nursing diagnoses, patient teaching re meds; monitoring ADLS; monitoring vital signs; mobilization & rehab; ID of nursing outcomes; discharge planning for home; discharge nursing summary

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
BALL, J.E., GRIFFITHS, P., RAFFERTY, A.M., LINDQVIST, R., MURRELLS, T. and TISHELMAN, C., 2016. A cross-sectional study of 'care left undone' on nursing shifts in hospitals. *Journal of advanced nursing,* 72(9), pp. 2086-2097.	ID factors association with undone care	Quantitative: Cross-sectional survey design using descriptive statistics and regression analysis	10,175 RNs (general med & surg) from 79 acute care hospitals in Sweden	Selection from a pre-determined list of missed-care derived from the BERNCA instrument (Schubert et al, 2008) ; source of 'transferable activities' not detailed. Part of RN4Cast research.*	74% of RNs stated some care omitted on previous shift. Increased number of patients assigned, patient acuity/needs; time of shift, nurse's roles, and the practice environment (e.g. participation in hospital affairs, managerial support, doctor-RN relationships) correlated with increased missed care
BEKKER, M., COETZEE, S.K., KLOPPER, H.C. and ELLIS, S.M., 2015. Non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals. *Journal of nursing management,* 23(8), pp. 1115-1125.	Job satisfaction as affected by care undone and non-nursing tasks	Quantitative: Cross-sectional survey design using descriptive statistics	1166 Prof Nurses, 60 medical and surgical units; public & private hospitals; 6/9 provinces in South Africa	Selection from a pre-determined RN4Cast survey questionnaire which included non-nursing tasks and tasks left undone.	Main non-nursing tasks were clerical work, arranging discharge transport & referrals, and non-nursing care. Main tasks left undone included comfort talk with patients, patient education, and developing nursing care plans. Job satisfaction decreased when there were nursing tasks left undone.
BRIATTE, I., ALLIX-BÉGUEC, C., GARNIER, G. and MICHEL, M., 2019. Revision of hospital work organization using nurse and healthcare assistant workload	Describe reorganization (audit logistics) based on daily measured	Quantitative: Prospective Observatio	RNS, HCA, cleaners from multiple departments in 1 large hospital in France with the following wards: medical, surgical,	Selection from a pre-determined SIIPS (nursing intensity measurement tool) based on 278 direct	Main areas of reorganization resulting in increased time caring for patients at the bedside included: handover, working time mgt (some tasks

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
indicators as decision aid tools. *BMC health services research,* 19(1), pp. 554.	workload (Nursing Intensity) indicators	nal design using descriptive statistics	obstetrics, geriatric, psychiatry (total of 1200 nurses and 1000 HCA were involved)	care tasks. For the indirect care activities listed, they were identified as linked to the hospital organization system although the process for development of this list was unclear.	reallocated to a different shift); pharmacy technicians coming to the unit (instead of nurses & HCA going to pharmacy); housekeeping cleaner teams organized independently from care units; food management (reorganization, checking what patients won't eat).
BUTLER, M., TREACY, M., SCOTT, A., HYDE, A. and ET AL, 2006. NURSING AND HEALTHCARE MANAGEMENT AND POLICY Towards a nursing minimum data set for Ireland: making Irish nursing visible. *Journal of advanced nursing,* 55(3), pp. 364.	Identify patient problems, nursing interventions, & nursing outcomes for an Irish MDS and make visible contribution nurses make to patient care in Ireland	Qualitative : Descriptive design using content analysis of focus groups and recorded data.	11 focus groups (59 general nurses); 45 sets of nursing records from four acute general hospital sites in Ireland	Selection from a pre-determined list of interventions as developed through focus groups, nursing documentation review, and a literature review.	Most items were similar to other data sets, but several new indirect interventions and organizing activities were identified that reflected the Irish nursing context. There were inconsistencies between what nurses said they did and what was documented in nursing records. Less visible aspects of nursing (especially psychological and social interventions) and documentation need to be more accurately recorded and accounted for as part of nursing work.

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
CHANG, LAM and LAM, 1998. Nursing activities following the introduction of health care assistants. *Journal of nursing management,* 6(3), pp. 155-163.	Impact of HCAs on the work of nurses	Quantitative: Quasi-Experimental design using parametric & non-parametric statistics	4 wards (medical, surgical, gynecological) + 4 control wards with HCAs & nurses (RNS, ENS, SNs) in Hong Kong	Selection from a pre-determined list of interventions as developed from Hovenga's (1990) activity sampling procedure for information systems	HCAs contributed to the work in the ward and changed some of the nurses' direct and indirect activities. HCAs did more basic patient care and nurses did more supervisory responsibilities.
DOCHTERMAN, J., TITLER, M., WANG, J., REED, D. and ET AL, 2005. Describing Use of Nursing Interventions for Three Groups of Patients. *Journal of Nursing Scholarship,* 37(1), pp. 57-66.	Describe the most frequent nursing interventions for 3 groups of patients (heart failure, hip fracture, fall prevention)	Quantitative: Descriptive design using descriptive statistics	Electronic documents from 1435 heart failure, 569 hip fracture, & 11,756 fall prevention hospitalizations in a large tertiary hospital in the USA	Selection from a pre-determined list of interventions from NIC taxonomy selected as to common interventions for patients with heart failure and hip fractures	Identified the types and frequencies of different nursing interventions according to the type of admission diagnosis. Patterns of interventions differed according to diagnosis. Patterns over time often varied although the number of nursing interventions at the time of discharge was still high suggesting nursing care was individualized and continued up until discharge.
FARQUHARSON, B., BELL, C., JOHNSTON, D., JONES, M., SCHOFIELD, P., ALLAN, J., RICKETTS, I., MORRISON, K. and JOHNSTON, M., 2013.	Describe frequency of different nursing tasks in	Quantitative: Repeated measures design	67 nurses from randomly selected medical & surgical wards in a large hospital in the UK	Selection from a pre-determined list of nursing tasks as developed for the WOMBAT method	Nurses spend the most time in direct care; Medical ward RNs spend more time in ward tasks than surgical ward RNs. Interruptions are common.

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
Frequency of nursing tasks in medical and surgical wards. *Journal of nursing management,* 21(6), pp. 860-866.	med & surg wards	using descriptive statistics		(included category name and types of activities)	Percentages (median) calculated for direct care=37.5%, indirect care=11.1%, and medication (11.1%). Interruptions reported in 62% of entries. Most RNs felt they had adequate time and resources to do their work.
GOOSSEN, EPPING, VAN, D.H., FEUTH, FREDERIKS and HASMAN, 2000. Development of the Nursing Minimum Data Set for the Netherlands (NMDSN): identification of categories and items. *Journal of advanced nursing,* 31(3), pp. 536-547.	ID of items and categories of nursing activities to include in the MDS for Holland	Multi-method: Exploratory design using content and document analysis, frequencies	16 wards among 8 hospitals in the Netherlands	Combination of a selection of pre-determined list of interventions based on the Belgian MVG (NMDS), a review of nursing documentation, and input from nurses	Identified 32 nursing interventions (plus other items related to the hospital, patient demographics, medical conditions, patient problems, nursing process items, outcomes, & complexity
GOOSSEN, W.T.F., EPPING, PAUL J. M. M., FEUTH, T., VAN DEN HEUVEL, WIM J. A., HASMAN, A. and DASSEN, T.W.N., 2001. *Using the nursing minimum data set for the Netherlands (NMDSN) to illustrate differences in patient*	Evaluate if the N-MNDS is a valid way to describe nursing a variety of populations in	Quantitative: Longitudinal design with repeated measures analysed	15 wards in 4 university and 5 general hospitals in the Netherlands. Specialty wards: internal medicine, cardiology, surgery, oncology surgical, oncology & nephrology, thorax surgery, neurology	Selection from a pre-determined list of tasks as compiled for the testing of an NMDS based on the Belgian MVG	Identified 24 nursing phenomena & 32 nursing activities and 4 results/outcomes of nursing care. Differences among different wards/specialties noted as to the type of nursing activities undertaken.

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
populations and variations in nursing activities.	the Netherlands	through frequencies and Ridit analysis	& ortho, neurology, mixed specialities, internal medicine-infectious diseases, neuro-plastic surgery.		
GROSSO, S., TONET, S., BERNARD, I., CORSO, J., DE MARCHI, D., DORIGO, L., FUNES, G., LUSSU, M., OPPIO, N., PAIS DEI MORI, L. and PALESE, A., 2019. Non-nursing tasks as experienced by nurses: a descriptive qualitative study. *International nursing review,* 66(2), pp. 259-268.	Describe non-nursing tasks	Qualitative: Descriptive design using content analysis of focus groups and recorded data.	Purposive sample of 22 nurses from a variety of settings in Italy	Identification of nursing roles came from this research *	Non-nursing tasks were described as 'being out of the nursing role' and occurred either in or outside the role of other health care providers. Dimensions included: (1) administrative work and (2) other care professions with either less education such as HCAs, same level such as PTs or higher levels such as MDs. Non-nursing staff were identified to be secretaries, HCAs, PTs, nutritionists, speech & language therapists, & physicians
JACKSON, K., WHITE, D.E., BESNER, J. and NORRIS, J.M., 2014. Optimizing enactment of nursing roles: redesigning care processes and structures. *Journal of*	Impact of job redesign on nurses' role accountabilities and patient outcomes	Multi-method: Quasi-experimental using iterative	120 nursing staff (RN, LPN, HCA) on 2 Medical wards (one control; one experimental) in Canada	Selection from a pre-determined list based on the Function Analysis™ tool *	More time needs to be spent in clinical role accountabilities in order to result in positive patient outcome changes

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
Healthcare Leadership, 6, pp. 1-14.		analysis, frequencies, and linear regression analysis			
JACOB, ELISABETH R, MED,RN, PHD, MCKENNA, LISA, PHD,RN, RM and D'AMORE, ANGELO,PHD, BSC, 2014. Senior nurse role expectations of graduate registered and enrolled nurses on commencement to practice. *Australian Health Review,* 38(4), pp. 432-9.	ID role expectations for new diploma and degree nurses	Quantitative: Descriptive design using descriptive statistics	Senior administrative or educational nurses, with almost 2/3 still doing some clinical roles in Australia	Selection from a pre-determined list adapted from the Nursing & Midwifery Board of Australia's document 'Competencies for RNs" and research by Lu (2008) on role competencies *	Significant lack of role clarity and role overlap between new RNs & ENs. Ongoing changes to EN roles creates ongoing/increasing confusion. New RNs are considered to be ready for RN roles except for leadership.
KUSI-APPIAH, E., DAHLKE, S., STAHLKE, S. and HUNTER, K.F., 2019. Acute care nursing team members' perceptions of roles: Their own and each other's. *Journal of nursing management,* 27(8), pp. 1784-1790.	How nursing team members perceive their own and others' role	Qualitative: Secondary Analysis of Grounded Theory	23 RNs, LPNs, HCAs on two wards in two hospitals in Canada	Descriptions of role perceptions came from this research *	Scope of practice changes contributed to role confusion and tension among team members. RNS are doing more leadership and less care provision
LEE, S.H. and YU, S., 2018. *Changes in nursing professions' scope of practice:*	Changes in nursing care activities as	Mixed Methods: Quasi-	10 inpatient nursing records (n=7340 electronic entries) - 5	Description of nursing activities came from this research based on the	Nurses do more patient assessments in comprehensive wards where there are no

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
A pilot study using electronic nursing records.	detailed in electronic nursing records between wards with comprehensive vs non-comprehensive care services	experimental (comparison analysis) using content analysis (frequencies) and semantic analysis	from comprehensive and 5 non-comprehensive care wards, from a random selection of research wards (3 surgical & 5 internal medicine) in a large general hospital (750 beds) in Korea	content of individual nursing statements as entered into patient electronic health records	personal caregivers. This requires an increase in nurses with a suggested nurse: patient ratio change to 1:8 from 1:15
LIMA, J.C.D., SILVA, ANA ELISA BAUER DE CAMARGO and CALIRI, M.H.L., 2020. Omission of nursing care in hospitalization units. *Revista latino-americana de enfermagem,* 28, pp. e3233.	Describe prevalence and reasons for missed nursing care	Quantitative: Cross-sectional design using descriptive statistics	267 professionals (nurses=79, nursing technical=177, nurse auxiliaries=11) from 10 hospitalization units (med, surg, ped, maternal-infant, ortho, tropical, ICU, NICU, surgical ICU) in a public teaching hospital in Brazil	Selection from a pre-determined list of nursing care activities from the MISSCARE_Brasil instrument (a Brazilian validated version of MISSCARE) *	The most common missed activities were (1) mobilization of patients (sitting or ambulation) were the most common missed activities, (2) participation in multidisciplinary discussions, and (3)discharge planning and patient teaching. Inadequate staffing and inadequate materials/equipment were cited as the most common reasons for missed care.
MORRIS, R., MATTHEWS, A. and SCOTT, A.P., 2014. *Validity, reliability and utility of the Irish*	Irish General Nursing NMDS construct	Quantitative: Repeated	Unit of analysis was a patient day with 200 cases reviewed by a	Selection from a pre-determined list of	The Irish NMDS is a reliable & valid data collection tool and is useful for assessing

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
Nursing Minimum Data Set for General Nursing in investigating the effectiveness of nursing interventions in a general nursing setting: A repeated measures design.	validity & internal reliability	measures using descriptive statistics, factor analysis, regression, and path analysis.	convenience sample of RNs working in general surgery and medicine wards in 6 hospitals in Ireland.	nursing interventions from the Irish MNDS	effectiveness of nursing interventions on patient outcomes
PARK, H. and LEE, E., 2015. Incorporating Standardized Nursing Languages Into an Electronic Nursing Documentation System in Korea: A Pilot Study. *International Journal of Nursing Knowledge,* 26(1), pp. 35-42.	Explore Korean nurses use of electronic nursing doc systems using NANDA language	Mixed Methods: Descriptive design using descriptive statistics and thematic analysis	10 nurses using the database system for 180 patients from medical-surgical, orthopedics, & neurosurgical units in a Korean tertiary hospital	Selection from a pre-determined list of nursing interventions from NIC. (Nurses had an option to manually record interventions not already in the NIC database, although only NIC items were included in the table of findings)	Identified the frequencies of a selection of nursing interventions. Nurses had mixed experiences with using NANDA, NIC, & NOC languages.
PARK, I.S., SUH, Y.O., PARK, H.S., AHN, S.Y., KANG, S.Y. and KO, I.S., 2016. The job analysis of Korean nurses as a strategy to improve the Korean Nursing Licensing Examination. *Journal of educational evaluation for health professions,* 13, pp. 24.	Describe general nursing responsibilities for the purpose of improving the relevance of the Korean	Mixed: DACUM (Development of a Curriculum Method) analysis and	Focus group (13 hospital nurses + 2 public health nurses); expert analysis (7 clinical specialty nurses + 6 nursing faculties); survey (sent to hospitals with 300-1,000 beds) in Korea	Identification of tasks and duties came from this research through use of the DACUM analysis method	Nursing job analysis describes 8 duties, 49 tasks, and 303 task elements

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
	nursing licensing exam	descriptive statistics			
RANEGGER, R., HACKL, W.O. and AMMENWERTH, E., 2014. A proposal for an Austrian Nursing Minimum Data Set (NMDS): a Delphi study. *Applied clinical informatics,* 5(2), pp. 538-547.	Identify nursing data elements for long-term and acute care settings	Mixed Methods:Two-round Delphi Study	22 experts individually interviewed and 5 nurse experts in a focus group in Austria	Nursing interventions identified for inclusion into the Austrian NMDS came from this research using Delphi methodology for expert interviews and focus groups	Identified 20 nursing care elements (assessment, diagnosis), 14 nursing intervention data elements, 8 outcomes, and categories for patient demographics, institutional info, medical diagnoses. Recommended implementation and testing of the Austrian NMDS.
RANEGGER, R., HACKL, W.O. and AMMENWERTH, E., 2015. Implementation of the Austrian Nursing Minimum Data Set (NMDS-AT): A Feasibility Study. *BMC medical informatics and decision making,* 15, pp. 75.	Assessment of data needed for routine nursing documentation (testing the feasibility of the Austrian NMDS)	Mixed Methods: Chart review using descriptive statistics	20 patient records representing 457 patient days on 2 adult general medical and surgical wards in one acute care hospital in Austria	Selection from a pre-determined list of nursing interventions from the Austrian NMDS	NMDS was feasible for Austria. Prior to introduction into the hospital systems, issues related to nursing documentation systems that need to be addressed were identified.
ROCHE, M.A., DUFFIELD, C., FRIEDMAN, S., DIMITRELIS, S. and ROWBOTHAM, S., 2016. Regulated and unregulated nurses in the acute hospital setting: Tasks performed, delayed or not	Differences between nurses and nursing assistants in acute hospital settings re tasks performed,	Quantitative: Descriptive design (Comparative) using	Regulated nurses (n=1630), unregulated nurses (n=25) on 62 acute medical and surgical and mixed med-surg nursing care units in 11 public general acute care	Selection of nursing tasks from a pre-determined list that was developed by the researchers based on previous research. The methodology for	Depending on the proportion of Assistants in Nursing (AIN), nurses on units with AINs reported fewer delayed tasks; AINs are significantly less likely than RN/ENs to perform skilled tasks (e.g. ECG, IV, discharge

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
completed. *Journal of Clinical Nursing,* 25(1-2), pp. 153-162.	delayed, or not completed	descriptive statistics	hospitals in Australia, of which 51 units were regulated nurses only and 11 units had AINs	selection of tasks was not stated. *	arrangments). Clear Scope of practice is important and assists in delegation.
SCHLUTER, J., SEATON, P. and CHABOYER, W., 2011. *Understanding nursing scope of practice: A qualitative study.*	Nursing role & scope of practice	Qualitative: Constructivist methodology through Critical Incident Technique using thematic analysis	16 RNs, 4 ENs on medical and surgical wards in 2 large teaching hospitals in Australia	Description of nursing scope of practice was generated from this research using thematic and comparative analysis *	Introduction of unregulated care workers is changing nurses' roles & scope of practice. Negotiation is becoming one of the main roles of the nurse working in mixed teams. RNs struggled with knowing that direct care was often not their best use of time and that it was ok to delegate instead of trying to do everything.
SCHUBERT, M., GLASS, T.R., CLARKE, S.P., AIKEN, L.H., SCHAFFERT-WITVLIET, B., SLOANE, D.M. and DE GEEST, S., 2008. Rationing of nursing care and its relationship to patient outcomes: the Swiss extension of the International Hospital Outcomes Study. *International journal for quality in health care : journal*	Association between missed or delayed care and patient outcomes	Quantitative: Cross-Sectional design using descriptive statistics & multivariate regression analysis	1338 nurses; 779 patients on 118 medical, surgical, and gynecological units in Switzerland	Pre-determined list of BERNCA (Basil Extent of Rationing Nursing Care) questionnaire items	Lower staffing (rationing) leads to lower patient outcomes

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
of the International Society for Quality in Health Care, 20(4), pp. 227-237.					
SHURIQUIE, M., WHILE, A. and FITZPATRICK, J., 2008. Nursing work in Jordan: an example of nursing work in the Middle East. *Journal of Clinical Nursing,* 17(8), pp. 999-1010.	nurses' perception of the nursing role	Quantitative: Cross-sectional survey design using descriptive and inferential statistics	348 medical-surgical staff nurses and practical nurses from 6 hospitals (public, private, & army sectors) in Jordon	Selection of a pre-determined list of nursing activities as developed by the author based on King's Nurse Performance Scale and from the author's personal experience. Reliability and validity measures of the tool are reported. *	General consensus among Jordanian staff nurses from the public, private, and military sectors as to the role of staff and practical nurses. Nursing care is primarily task-oriented.
SIMBORG, D.W., 1976. Rational staffing of hospital nursing services by functional activity budgeting. *Public health reports (Washington, D.C.: 1974),* 91(2), pp. 118-121.	ID of nursing tasks	Quantitative: Descriptive design using descriptive statistics	patient records (number not stated) from a large hospital in the USA	Descriptions of activities came from 1) Findings from a work sampling study (2) A list generated by a group of physicians and nurses; (3) A list of timed categories of activities generated from computer records. Methodology for each of these is not clearly described.	Nurses spend the most time on tasks as specified by physicians' orders and on the nursing care plan. Time spend in tasks varies from day to day. Additional tasks not included in the original listing need to be added (e.g. patient education).

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
TURTIAINEN, A.-., KINNUNEN, J., SERMEUS, W. and NYBERG, T., 2000. The cross-cultural adaptation of the Belgium Nursing Minimum Data Set to Finnish nursing. *Journal of nursing management,* 8(5), pp. 281-290.	Testing the cultural validity of the Belgian NMDS	Mixed Methods: Methodological design testing the Belgium NMDS using content analysis, descriptive and inferential statistics	Multiple data sources within Finland: pt nursing notes, doctoral theses, healthcare administrators	Selection of nursing interventions from a pre-determined list (Belgian MVG/NMDS)	The BeNMDS is valid, but it is missing aspects on spiritual wellbeing and psychosocial care interventions.
VAN BELLE, E., GIESEN, J., CONROY, T., VAN MIERLO, M., VERMEULEN, H., GETTY HUISMAN-DE WAAL and HEINEN, M., 2020. Exploring person-centred fundamental nursing care in hospital wards: A multi-site ethnography. *Journal of Clinical Nursing,* 29(11-12), pp. 1933-1944.	Describe how nurses provide person-centred fundamental care	Qualitative: Focused Ethnography using framework analysis	30 RNs in 2 hospitals in the Netherlands during morning shift	Categories of nursing care were generated from this research through Framework Analysis and Thematic Analysis	Classified fundamental nursing tasks into 3 categories/themes: physical, psychosocial, and relational. Most time spent on physical needs, least time spent on relational needs. Some nurses displayed more active listening, compassion and empathy (more person-centred) than other nurses (more task-centered). Most nurses were task-focused.

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
					Frequent interruptions by nurses interrupted care processes.
VAN DEN OETELAAR, W. F. J. M., VAN STEL, H.F., VAN RHENEN, W., STELLATO, R.K. and GROLMAN, W., 2018. Mapping nurses' activities in surgical hospital wards: A time study. *PloS one,* 13(4), pp. e0191807.	Describe how nurses spend their days and differences between wards	Quantitative: Work - sampling methodology using descriptive and compositional analyses	6 surgical wards in an academic hospital in the Netherlands: ortho/trauma, vascular, oncology , otolaryngology, maxillofacial , ophthalmology, urology	Selection of pre-determined nursing activities based on a workload management method tool (NZi) and further evaluated using the Delphi method *	Nurses spend between 40-56% of their time in direct patient care; 11-14% in collective pt care with an average of 31% at the bedside.
WESTBROOK, J.I. and AMPT, A., 2009. *Design, application and testing of the Work Observation Method by Activity Timing (WOMBAT) to measure clinicians' patterns of work and communication.*	Test a work-sampling tool (WOMBAT) for data collection that is able to reflect a greater degree of work complexity	Quantitative: Descriptive design and methodological design using descriptive and inferential statistics	52 nurses from four wards (resp, renal-vascular, geriatric) at a major teaching hospital in Australia	Pre-determined work tasks and definitions as developed by the authors from their previous development of a multi-dimensional work measurement classification and subsequent review of the literature. General statement on reliability and validity. *	Nurses spent >40% of time in direct care or prof communication, with 11.8% multi-tasking. 25% of interruptions happened when preparing of doing med admin.
WESTBROOK, J.I., DUFFIELD, C., LI, L. and CRESWICK, N.J., 2011.	How nurses distribute time	Quantitative:	57 nurses for 191.3 hours on a medical and surgical	Pre-determined list of work tasks and	Nurses spent over 1/3 of their time with patients. Nurses

Citation	Purpose	Research Design	Data Type & Sample	Source for Nursing Activities *(Articles marked * were also included in Role Analysis)*	Results
How much time do nurses have for patients? A longitudinal study quantifying hospital nurses' patterns of task time distribution and interactions with health professionals. *BMC health services research,* 11, pp. 319.	across tasks and how work patterns changed over a 2 year period	Prospectiv e Observatio nal design using descriptive statistics	ward (n=2) in a teaching hospital in Australia	definitions as developed for the WOMBAT method. Validation from other studies referenced. *	spent less time talking with colleagues in Year 3 than in Year 1. Increasing trend of work fragmentation. Interruptions most commonly occurred during medication administration.

Appendix 27. Identification of Articles with Tables for Analysis

First Author	Tasks	Roles	Included	Roles
Al-Kandari	Y	N	ID specific tasks	
Asmirajanti	Y	N	ID specific activities	
Ball	Y	Y	ID missed care	3 role categories rt type of direct care responsibility
Bekker	Y	N	ID missed care	
Briatte	Y	N	ID indirect care activities; only general categories of direct care activities provided	
Butler	Y	N	ID direct & indirect interventions	
Chang	Y	N	List of activities that nurses felt they needed to have more time for	
Dochterman	Y	N	ID of nursing interventions	
Farquharson	Y	N	List of the most common types of activities	
Goossen-2000	Y	N	Summary list of nursing activity or intervention	
Goossen-2001	Y	N	ID of some nursing interventions (not all because there are too many to include in a research article)	
Grosso	N	Y	List of other workers' scope of practice that nurses will sometimes do in addition the 'nursing role (e.g., work of a physiotherapist, doctor, aide)	Different professional designations
Jackson	Y	Y	descriptions of activities by category	Different professional designations; List of role accountabilities
Jacob	Y	Y	descriptions of competencies	Different professional designations
Kusi-Appiah	Y	Y	Task themes by role breakdown on nursing team	Different professional designations
Lee	Y	N	compared differences between nursing care indicators on a few wards. Note: I excluded a table requiring textual analysis (additional details in text not included in this analysis)	
Lima	Y	Y	ID of nursing care omitted	Different professional designations
Morris	Y	N	ID nursing interventions	
Park.H	Y	N	IDs top two interventions for the top 10 nursing diagnoses (16/out of 280 NIC used in the system)	
Park.I	Y	N	ID main tasks of Korean nurses	

First Author	Tasks	Roles	Included	Roles
Ranegger-14	Y	N	ID of nursing interventions	
Ranegger-15	Y	N	ID of domains of nursing interventions	
Roche	Y	Y	ID of nursing tasks assigned to unregulated workers	Different professional designations
Schluter	Y	Y	ID of themes related to how nurses enact their scope of practice	Different professional designations
Schubert	Y	N	BERNCA questionnaire included a list of 20 common missed tasks under 5 categories	
Shuriquie	Y	Y	very clear ID of nursing tasks and roles	Different professional designations
Simborg	Y	N	ID of nursing tasks from 2 methods: work observation & doctors' expectations	
Turtiainen	Y	N	ID of nursing interventions	
van Belle	Y	N	Fundamental care categories (some details of tasks clarified in text)	
van den Oetelaar	Y	Y	ID groups of nursing tasks	Different professional designations
Westbrook-09	Y	Y	ID tasks categories and gave examples of tasks in those categories	Different professional designations
Westbrook-11	Y	Y	ID tasks categories and gave examples of tasks in those categories	Different professional designations

Appendix 28. Nursing Activities Identified from the Integrative Review

Initial List of Nursing Activities

The following list records the names of the initial list categories into which extracted data items (nursing activities) from the articles were coded:

1. ADL
2. ADL: mobilzation
3. ADL: oral hygiene
4. ADL: skin
5. ADL: Wound Care
6. Admin
7. Admission
8. Advocacy
9. Assessment
10. Assisting Doctors
11. Clinical Judgement
12. Communication: Colleagues
13. Communication: Patients
14. Continuing Education
15. Coordination
16. Discharge
17. Documentation
18. Elimination
19. Emergency
20. Emotional-Social Care
21. Equipment
22. Fluid Balance
23. Handover
24. Health Promotion
25. Housekeeping
26. Infection Prevention
27. Laboratory
28. Management
29. Meds: Admin
30. Meds: Blood
31. Meds: IV
32. Meds: Mgt
33. Monitoring
34. Nursing Care Plans
35. Nutrition
36. Pain Mgt
37. Professional
38. Research
39. Respiration
40. Safety
41. Self-care
42. Teaching
43. Team
44. Transit
45. Transport
46. Unspecified Nursing Care or Combination of Activities
47. Unspecified Nursing Treatment
48. Other

Final List and Count of Nursing Activities Extracted from Research Articles

Notes:

1. 'Nursing Activities' as recorded in the third column of the table reflects the total number of individual nursing activities extracted from integrative review articles and assigned into each category of nursing work activities.

2. The number of articles that had activity items allocated to each category is noted in the fourth column.

3. The number of countries represented from the research articles are indicated in the fifth column.

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
ADL (Activities of Daily Living)	Activities normally done by individuals when they are healthy. Includes wound prevention and care[31].	106	26	18
ADMINISTRATION	Tasks such as answering phones, arranging for tests & appointments, checking orders, placing orders (e.g., meals, supplies), clerical (e.g., filing), and coordinating services.	46	15	12

[31] Wound prevention and care was included in ADL as (i) wound prevention was often listed as part of skin care and (ii) prevention and wound care were often grouped together in descriptions of tasks.

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
ADMISSION & DISCHARGE	Tasks such as admission assessments, history taking, discharge planning and coordination, discharge teaching. Does not include documentation.	28	18	15
ADMISSION & DISCHARGE	Tasks such as admission assessments, history taking, discharge planning and coordination, discharge teaching. Does not include documentation.	28	18	15
ASSESSMENT	Any assessment of patients during their hospitalization as distinct from admission & discharge assessments. Examples include vital signs, allergy & blood glucose checks, responding to call bells for assessment of needs, cultural and emotional assessments, mental status, general appearance & physical checks, fall risk, pressure ulcers, weight, self-care ability, pain.	78	20	14
COMMUNICATION: PATIENTS	Any verbal communication with patients and their visitors by engaging in conversation. Examples include psycho-social support, answering questions, listening, orientation, and fear reduction. Formal patient teaching is not included.	33	15	10
DOCUMENTATION	Documentation on patient charts including records of admission & discharge, nursing care, appointments & services, input/output, adverse incidents, patient services. Does not include Nursing Care Plans.	33	19	12
HOUSEKEEPING	Tasks undertaken for the physical upkeep of the ward and its cleanliness. Includes bedmaking, moving furniture and equipment, cleaning rooms & equipment, gathering & returning equipment, handling linens, rubbish, supervision of cleaning,	22	11	10

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
LABORATORY	Tasks associated with the work of the medical laboratory including collection of samples for analysis, ordering & storing of lab supplies, and interpretation of lab results.	13	9	7
MANAGEMENT	Management and coordination activities for patient and nursing services. Includes staffing, bed management and patient flow, delegation, supervision, enforcing policies, setting priorities and managing resources, developing standards & criteria, coordinating multidisciplinary communication, coordinating with families, and organizing nursing care & planning.	37	16	11
MEDICATION	Tasks related to medication, including blood products, that require the nurse to administer, order, receive, store, prepare, control, check, clarify, & monitor. Includes routine and prn medications. Timeliness of administration is also included. Documentation on patient charts is excluded.	68	26	15
MONITORING	The purpose of monitoring is to maintain a continuous observation of patient status by direct patient observation and analysis of patient data as collected through observation, vital signs, or test results.	24	16	13
NURSING CARE PLANS	The work of the nurse specific to the development of nursing care plans and their documentation including formulation of nursing diagnoses, planning, implementation, and updates.	24	15	12
PROFESSIONAL ASPECTS	Activities considered to be characteristics of professions including knowledge & research, ethics, appearance & conduct, critical	31	10	8

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
	thinking & judgement, accountability, professional meetings, and self-care including breaks, socialization, and ergonomics.			
PSYCHO-SOCIO-EMOTIONAL-SPIRITUAL CARE	Activities engaged in by nurses intentionally intended to promote the pyscho-social-emotional-spiritual wellbeing of the patient. Included were listening, reassurance, empathy, comforting, presence, helping to cope, stress reduction, managing mood & anxiety, managing behavioural issues including substance abuse related issues, spiritual care, meaning of illness, and handling refusal of care requests.	40	15	12
SAFETY	Activities that foster a physical and emotional climate of safety including infection prevention & control, handwashing, isolation measures, patient dignity, privacy, patient identification, risk prevention & management, fall prevention, environmental safety, and tracking of outcomes.	29	20	14
SPECIALTY CARE (emergency, elimination, fluid balance, nutrition, pain mgt, promotion of health, respiration)	Activities related to specific foci of nursing care & interventions. Each could be a category of their own but have been grouped together for the purpose of this research. *Emergency (n=8)*: CPR & ALS, emergency response, disaster preparedness *Elimination (n=19)*: urinary & bowel care, enemas, suppositories, catheter insertion & removal *Fluid Balance (n=8)*: monitoring & restoration, management, tubes	104	24	15

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
	Nutrition (n=33): meal ordering, delivery, preparation, & feeding; tube feeding; assessment re appropriateness of diet, nutrition management *Respiration (n=16)*: oxygen administration, administering BiPAP, tracheostomy suctioning & care, airway management, promotion of deep coughing & breathing, easing breathing problems *Pain Management (n=8)*: pharmacological & non-pharmacological pain management and control *Health Promotion (n=12)*: encouraging adherence to treatment, sleep assessment, exercise promotion & therapy, sexual & reproductive health			
TEACHING	Teaching activities for (i) patients and families and (ii) staff and students. *Patients & Families*: assessing learning needs, giving of information & advice, medication teaching, health promotion, teaching self-care, guidance on health system *Staff & students*: preceptor for students, teaching skills, coaching, in-services, staff development	43	23	16
TEAM	Activities related to the wellbeing and functioning of the nursing and inter-professional teams. Includes: emotional assessment, collaboration, liaison, leadership, supervision, task-shifting, helping & supporting one another, understanding roles	30	17	14
TRANSPORT	Activities requiring the movement of the nurse between different areas. Includes transit between tasks, errands, finding doctors,	23	16	9

Nursing Responsibilities	Definition & Description of Activities	Individual Activities (N=888)	Articles (N=32)	Countries (N=18)
	walking to different departments (pharmacy, lab, kitchen, supplies, administration), and transporting patients (OR, x-ray, smoking areas, mortuary)			
UNSPECIFIED CARE & TREATMENT	Activities identified as care or interventions but vague as to details (e.g. advocacy, alleviating side effects of treatment, care of tubes, routine care, palliative care, treatments & procedures, diagnostic procedures, advocacy)	28	14	13
OTHER	Activities identified as (i) Direct or Indirect Care but without details (ii) vague descriptions (e.g. idle, other)	21	9	7

Appendix 29. Integrative Review Work Activities Allocated into the Model of Acute Care Nursing Work

Model of Acute Care Nursing Work:
Allocation of Work Activities from the Integrative Review

Explanation: Each activity item extracted from research articles was counted as n=1. Numbers in the table are the total count of activity items within a category. Counts of activity items are allocated according to (i) 7 functional categories from the Model of Acute Care Nursing Work and (ii) 22 nursing activity categories from the analysis of articles in the Integrative Review.

Integrative Review: Work Activity Categories	Model of Acute Care Nursing Work Functional Categories[a]							Excluded	TOTAL
	1	2	3	4	5	6	7		
ADL	106								106
Administration		46							46
Admission-discharge	28								28
Assessment	78								78
Communication-colleagues		27							27
Communication- patients	33								33
Documentation							33		33
Housekeeping			22						22
Laboratory		13							13
Management		37							37
Medication		68							68
Monitoring	24								24
Nursing care plans						24			24
Professional					31				31
Psycho-social care	40								40
Safety		29							29
Specialty Care	104								104
Teaching						43			43
Team				30					30
Transportation		23							23
Vague (Treatment)	28								28
Other (not described)								21	21
Total Number of Work Activities per Functional Category	441	243	22	30	31	67	33	21	888

Notes:

a. The Model of Acute Care Nursing Work includes 7 categories:

1. Patient Care
2. Patient Care & Ward Functioning
3. Ward Functioning
4. Ward Functioning & Professionalism
5. Professionalism
6. Professionalism & Patient Care
7. Patient Care, Ward Functioning, & Professionalism

Appendix 30. Analysis of Mongolian Job Description Activities

Table of Analysis for Mongolian Job Description Activities

Coding allocated according to: (1) Role codes from field note findings, (2) Nursing Work activities as developed from the Integrative Literature Review, and (3) Functional codes according to the Conceptual Model of Acute Care Nursing Work.

(1) Findings Code: Roles	Job Description: Extracted Activity Data Items* *(* identifies activities taken from Section #4 of the Job Descriptions)*	(2) Integrative Review Activity Codes	(3) Model of Acute Care Nursing Codes	Patient Care	Ward Function	Nurse Prof
Assessment / Administration / Recorder	Admission	Admission & Discharge	2	x	x	
Caregiver/Treatment	Provide nursing care	Unspecified care & treatment	1	x		
Communicator	Collaborate with clients, family members, & carers	Comm: patients	1	x		
Communicator	Update medical doctors	Comm: colleagues	2	x	x	
Communicator	Communication and interpersonal skills	Comm: vague		x	x	X
Follower	Follow occupational health & safety rules	Safety	2		x	
Follower/Prof	Follow nursing standards & guidelines	Profession	5	x		X
Learner	Attend training as per hospital's HR plans	Profession	5			X
Learner	Participate in post-grad training (continuing ed)	Profession	5			X
Learner	Present at conferences	Profession	5			X
Learner	Take part in scientific research	Profession	5			X
Learner	Take part in developing evidence-based medicine	Profession	5	x		X
Learner	Improve legal knowledge	Profession	5	x		X
Learner	Organize & attend training on health promotion	Teaching	6	x		X
Manager	Oversee assistant nurses & other nurses	Team & Mgt	4	x	X	X
Manager	Oversee nursing assistants	Team & Mgt	4		x	X

(1) Findings Code: Roles	Job Description: Extracted Activity Data Items* *(* identifies activities taken from Section #4 of the Job Descriptions)*	(2) Integrative Review Activity Codes	(3) Model of Acute Care Nursing Codes	Patient Care	Ward Function	Nurse Prof
Professional	Report to & be responsible to the ward manager	Profession	4		x	X
Professional / Follow	Follow standards & requirements	Profession	7	x	x	X
Professional / Follower	Comply with ethical rules, discipline & culture	Profession	5		x	X
Professional / Follower	Comply with anti-corruption law	Profession	5		x	X
Recorder	Documentation of patient chart	Documentation	7	x	x	
Recorder	Documentation on other relevant docs	Documentation	7	x	x	X
Recorder	Use applied computer programmes	Documentation	7		x	
Teacher	Give instructions & advice to nurses & nursing assistants	Team	4		x	X
Teacher	Give info and advice to patients & carers	Teaching	6	x		X
Teacher	Use clear, simple language to give info & advice	Teaching	6	x		X
Teacher	Provide advice on healthy lifestyle and health promotion	Teaching	6	x		X
Teacher	Help nursing assistants improve in their knowledge	Teaching	7	x	x	X
Team	*Work with ward doctors & others on client's diagnoses, treatment, & research	Team	2	x	x	
Team	*Collaborate with doctors from other hospitals	Team	2	x	X	
Team	*Work in affiliated ambulatory services as needed	Team	2	x	X	
Team	*Work with ward manager to improve workplace condition	Team	4		x	X
Team	*Work with ward manager to ensure standard requirements	Team	4		x	X
Team	*Work with ward manager regarding social issues	Team	4		x	X
Team	*Work with war manager to improve quality of nursing services & treatment	Team	4		x	X

(1) Findings Code: Roles	Job Description: Extracted Activity Data Items* *(* identifies activities taken from Section #4 of the Job Descriptions)*	(2) Integrative Review Activity Codes	(3) Model of Acute Care Nursing Codes	Patient Care	Ward Function	Nurse Prof
Team	*Work with head of nursing dept & other senior nurses: improving qual of nursing & service	Team	4		x	X
Team	*Work with head of nursing dept & other sr. nurses: duties & responsibilities	Team	4		x	X
Team	*Work with head of nursing dept & other sr. nurses: professional care & services	Team	4		x	X
Team	*Work with head of nursing dept & other sr. nurses: nurses' social issues	Team	4		x	X
Team	Participate in activities organized by the hospital	Team	4		x	X
Team	Contribute to developing & translating treatment manuals, tools, & prof. books	Profession	5		x	X
Team	*Collaborate with relevant medical & professional societies/orgs	Team	5			X
Team	*Collaborate with other public orgs/NGOs	Team	5			x
Tech + Team	Work during pandemics & disasters	Team	2	x		x
Tech: Assessment	Assessment	Assessment	1	x		
Tech: Assessment	Patient history	Assessment	1	x		
Tech: Assessment	Monitor health condition	Monitor	1	x		
Tech: Assessment	Monitor treatment results	Monitor	1	x		
Tech: Clinician	Provide emergency and surgical care & services	Specialty	1	x		
Tech: Clinician: Assessment & Monitoring	Monitor post-op	Monitor	1	x		
Tech: Infection control	Follow infection prevention rules	Safety	2	x	X	

(1) Findings Code: Roles	Job Description: Extracted Activity Data Items* *(* identifies activities taken from Section #4 of the Job Descriptions)*	(2) Integrative Review Activity Codes	(3) Model of Acute Care Nursing Codes	Patient Care	Ward Function	Nurse Prof
Tech: Procedures / Helper	Provide emergency care in life-threatening situations	Specialty	1	x	x	
Tech: Procedures + Team	As needed/requested provide emergency services in underserved areas	Specialty	7	x	x	x
Vague	Participate in public health activities	Other	5			x

Notes:

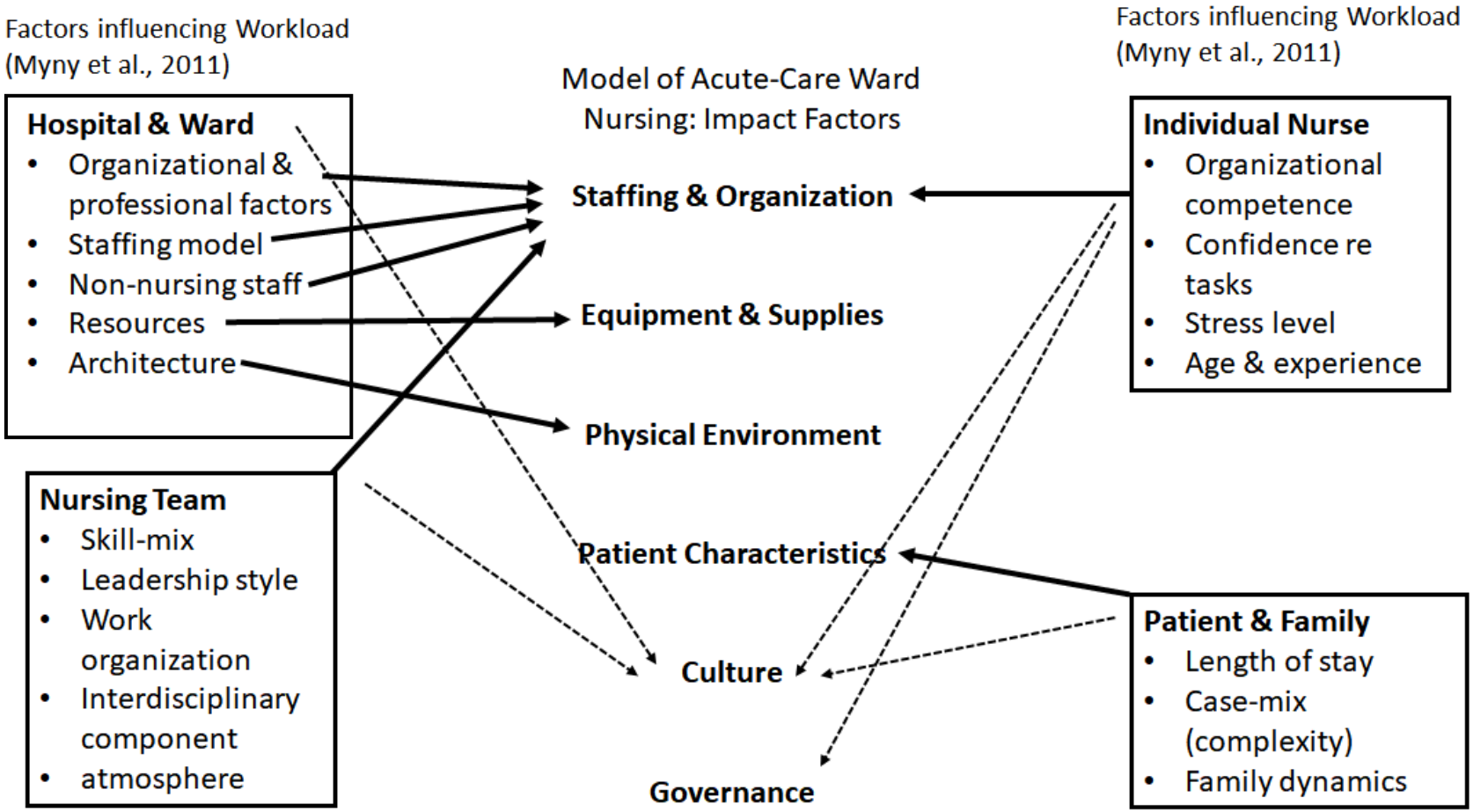
1. Some activities were allocated into different codes than in the model as first developed from the integrative literature review. This is most likely due to the lack of specificity in the job description. For example, the job description item 'follows standards & requirements' was coded as '7' because some of the Mongolian standards and requirements relate to nursing care standards (i.e. for the purpose of patient care), for ward functioning (e.g. collaboration with senior nurses for ensuring quality care and processes on the ward), and professionalism (e.g. uniform, continuing education requirements). Where there was a difference, the coding decisions for these items can be found in the original Excel worksheet.

2. Of the 16 key roles identified in Chapter 3, job description activities fit into 11 of them. Some items were appropriate for more than one category such as 'following standards and guidelines". This activity was coded as a professional responsibility; however, it also fits under 'follower' as the wording clearly states that nurses are expected to 'follow'. Similarly, activities such as going with doctors to provide emergency care as needed puts nurses in the role of a helper as well as a professional providing service. Missing from the job description were work activities that fit the description of the following roles: accountant, cleaner, courier, medications coordinator, and porter. Administration was only coded in one work activity: admission. Admission was given a code for administration as the admission process as noted in chapter 3 described nurses putting together charts for new admission. However, other aspects of administration detailed in chapter 3 such as updating files by attaching reports was not specified in the job description.

Providing nursing care and services as a work activity likely includes work as a technician-clinician, but it is sufficiently vague as to be able to include almost any of the roles and related work activities that were described in chapter 3. Within the sub-categories of the technician-clinician role, specific mention was made of emergency care, infection control, and assessment and monitoring. Nursing procedures as a work activity fits in the general category of Technician-Clinician, as well as in the sub-category of medical devices. There was no reference in the job description for specimen collection tasks such as phlebotomies or medication administration, although both of these activities are likely assumed to be a part of 'nursing care and services'. Competency in computers was a job requirement mentioned in section 3, but not included in the analysis of work activities specified in the job descriptionComparison of Activity Allocations in the Model of Acute Care Nursing Work: Integrative Review & Job Description

Appendix 31. Factors Impacting Nursing Work

Explanation: Four categories of variables identified by Myny et al (2011) as influencing nursing workloads were resorted into different categories that were incorporated into the Model of Acute Care Nursing Work. Solid arrows indicate the reallocation of items into the new categories. Dotted arrows indicate the allocation of categories into two new categories that were identified in the process of this doctoral research.



Appendix 32. Presentations of Research

Article: The Work and Skills of Medical-Surgical Nurses in Mongolian Public Hospitals

Biro, A. L. (2019). The work and skills of medical-surgical nurses in Mongolian public hospitals. *Mongolian Journal of Clinical Medicine, 12*(1).

Abstract

Key Words: medical-surgical nursing, nursing work, nursing skills, ethnography

Background
Nursing is a recognized profession around the world, yet the actual roles and responsibilities of nurses usually vary among countries. Mongolian nursing has a unique history and has undergone many changes in the past twenty years. Currently a variety of research is being done to develop a better understanding of the work of nurses.
Purpose
The purpose of this research is to provide descriptions that contribute to the understanding of the work and skills of medical-surgical nurses working in Mongolian public hospitals.
Method
A qualitative design using ethnographic methods was chosen. Data was collected through participant observation, interviews, and documents. Over 200 hours of observation was conducted on three different inpatient wards. Using content analysis techniques, transcripts of observational field notes and interviews were coded and grouped into categories and themes.
Results
The work of nurses included direct patient care, indirect care, and other tasks that were not directly related to nursing care of patients. A variety of skills were employed in order to meet the demands of medical-surgical nursing.
Conclusion
This paper presents preliminary findings of the work of medical-surgical nurses and the skills they demonstrated in the workplace. Organizational and time management skills, technical skills, communication and interpersonal skills, and critical thinking were essential for nurses working on medical-surgical wards.

The Work and Skills of Medical-Surgical Nurses in Mongolian Public Hospitals

Background

The International Council of Nurses published a global definition of nursing as carried out by qualified nurses in the areas of health promotion, illness prevention, and the care of those who are ill, disabled, or dying.[1] However, the way that nursing is structured and functions in different countries varies significantly.[2] Historical developments, culture, and socio-political views contribute to variation among different countries.[3] As Mongolia has a unique history and health system, developing a comprehensive understanding of the work of Mongolian nurses is important both for preparing future nurses and for the continuing development of the nursing profession in Mongolia.

Purpose

The purpose of this research is to develop a better understanding of the work of medical-surgical nurses working in Mongolian public hospitals. This paper presents preliminary findings of the work and skills of nurses and is part of a larger study exploring the roles and responsibilities of medical-surgical nurses working in Mongolian public hospitals.

Design

A qualitative design using ethnographic methods was used. Ethnography is appropriate when the purpose is to develop understanding of a cultural group's activities, as well as their belief and values.[4] Ethical approval was granted by the Staffordshire University Health Sciences Ethics Panel and the researcher is registered with the American Centre of Mongolian Studies in Ulaanbaatar.

Method

Three in-patient wards from two different hospitals were selected for the study. Field observations took place during 19 shifts for a total of over 200 hours. A combination of participant-observation, interviews, and document analysis was used for collecting data.

Field observations were initially recorded by hand and then transcribed by the researcher. Transcribed field notes were read line by line and coded into categories. Memos were created that recorded summaries of each category, as well as notes on ideas and questions for follow-up. The categories were synthesized into main themes.

Findings

The work of medical-surgical nurses included direct patient care, indirect patient care, and other tasks. Direct patient care occurred in the presence of the patient.[5] The process of administering injectable medications was the most common direct patient care activity. Other direct patient care included assessment, wound and catheter care, preparation for surgery, post-op care, blood transfusions, collection of blood and urine samples, assistance with transfers, and patient teaching and communication.

Indirect care included those activities that were a part of nursing care, but which didn't involve direct patient interaction. Documentation was one of the indirect tasks that required a significant amount of time. It included patient charts, forms such as lab requisitions, records, and reports.

Preparation for, and the cleaning and disposal of items related to medication administration, wound care, and catheter care was an indirect activity. Other indirect activities included shift reports and handovers, and errands such as getting pharmacy supplies, delivering lab samples, and obtaining blood products.

Nurses had responsibility for other tasks such as procurement and distribution of medications to each patient. Nurses calculated medication expenses incurred by patients. They had cleaning tasks. They compiled census information for administration and a list of diets for food services. Nurses also spent time looking for things such as medications or supplies, or trying to locate patients or doctors.

Discussion

Skills nurses needed to do their work can be grouped into four categories: organizational and time management skills, technical skills, communication skills, and critical thinking skills.

Organizational and time management skills were important to ensure that nursing care was completed. As nurses in this study had responsibility for 25-50+ patients, each medication round took +/- 2 hours. Thus, nurses needed to have supplies ready, start early, and work efficiently, including managing requests by others while still giving medications. Nurses also needed to manage procurement and distribution of medications in a timely manner so supplies were available for medication rounds.

Nurses used a variety of strategies to manage time for documentation. Signing charts during medication rounds was seldom observed, with nurses preferring to document at the nursing station. Accounting of medication expenses incurred by patients needed to be completed before patients were discharged. In addition, pre-op patients or patients going for consultations or other procedures needed to be ready on schedule. Nurses also had to manage changes such as new admissions and higher acuity patients.

Technical skills were important for giving medications, management of catheters and wounds, assessment, operating equipment such as glucometers, cardiac monitors, and infusion pumps, and assisting with procedures. Ward nurses needed to be skilled in using clean and sterile techniques. Math skills were needed for drug calculations, including setting IV infusion rates for gravity-fed systems and calculating patient medication expenses.

Communication and interpersonal skills were needed to help build good patient-nurse relationships and give clear instructions. These skills were also needed when interacting with colleagues for relaying information, making requests, and facilitating a healthy working environment.

Critical thinking is a skill that was relevant to each of the other skills sets. Critical thinking was important for recognizing when a situation required further assessment, treatment, referral, or a change in care. Critical thinking assisted with setting priorities and anticipating needs.

Limitations

The findings presented in this paper are a preliminary analysis of the first phase of a research study. Further data collection using interviews and ongoing data analysis will assist with refinement and verification. The field observations occurred on 3 hospital wards and may not be representative of all medical-surgical wards in Mongolia.

Summary

The work of medical-surgical ward nurses involves direct nursing care of patients, indirect care, and a variety of other tasks. Organization and time management skills, technical skills, communication and interpersonal skills, and critical thinking were used by nurses to meet the demands and expectations of their work.

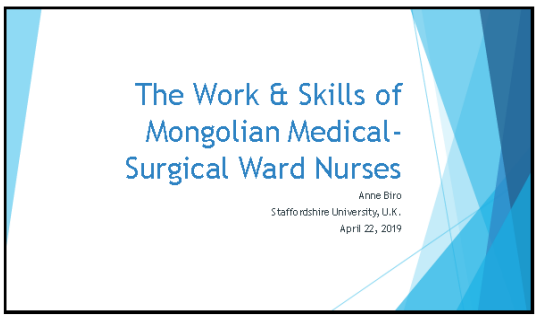
References

1. International Council of Nurses [Internet]. Geneva: ICN; 2019. Nursing Definitions; 2002 [cited 2019 Apr 14] Available from: https://www.icn.ch/nursing-policy/nursing-definitions
2. Henderson V. The concept of nursing. J Adv Nurs [Internet]. 2006 [cited 2019 Apr 14]; 53(1):21-34. Available from: https://doi.org/10.1111/j.1365-2648.2006.03660.x

3. Fealy GM. ‘The good nurse’: visions and values in images of the nurse. J Adv Nurs [Internet]. 2004 [cited 2019 Apr 14];46(6):649-656. Available from: https://doi.org/10.1111/j.1365-2648.2004.03056.x
4. Morse JM, Field PA. Qualitative Research Methods for Health Professionals. 2nd ed. Thousand Oaks, CA: SAGE Publications; 1995. p23-27.
5. Swiger PA, Vance DE, Patrician PA. Nursing workload in the acute-care setting: A concept analysis of nursing workload. Nurs Outlook. 2016 [cited 2019 Apr 14] 64:244-254. Available from: https://doi.org/10.1016/j.outlook.2016.01.003

Presentation: The Work and Skills of Medical-Surgical Nurses in Mongolian Public Hospitals

The Work and Skills of Medical-Surgical Nurses in Mongolian Public Hospitals [Mongolian]. Presented at the First Central Hospital, 14th Annual Nursing Research Day, April 22, 2019.



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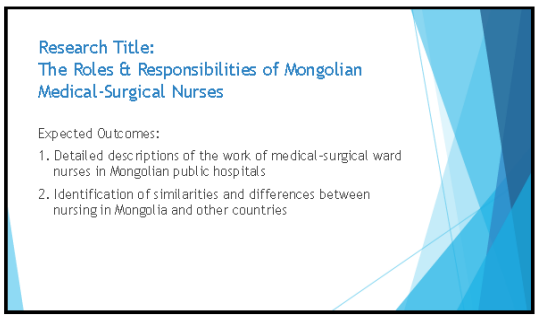

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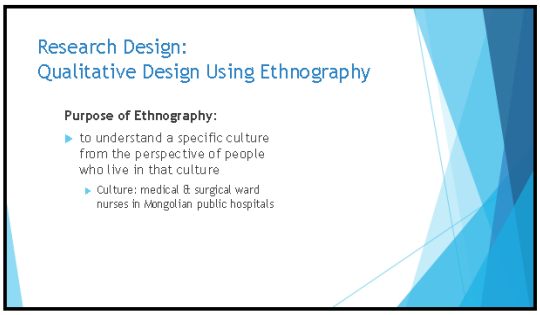

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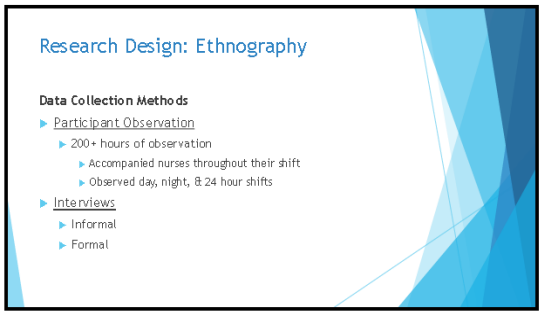

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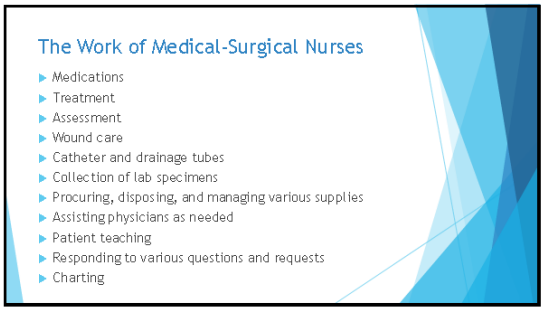

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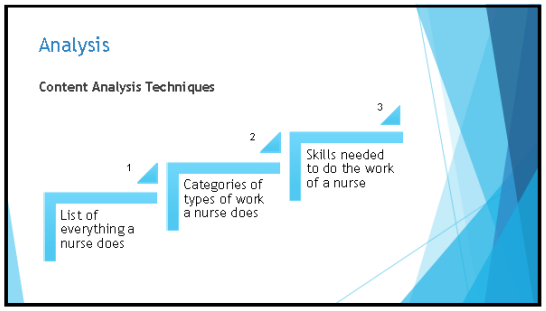

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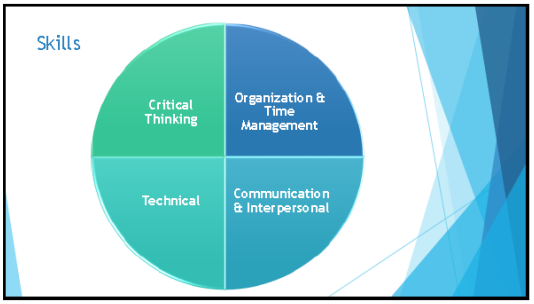
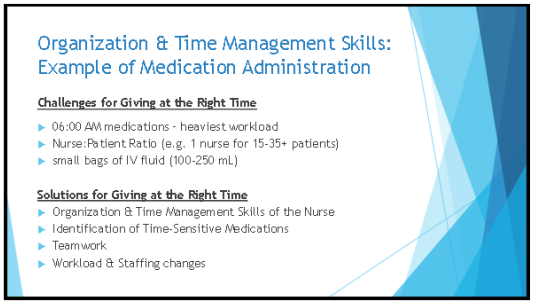

Skills
Critical Thinking
Organization & Time Management
Technical
Communication & Interpersonal

7


Organization & Time Management Skills: Example of Medication Administration
Challenges for Giving at the Right Time
06:00 AM medications - heaviest workload
Nurse:Patient Ratio (e.g. 1 nurse for 15-35+ patients)
small bags of IV fluid (100-250 mL)
Solutions for Giving at the Right Time
Organization & Time Management Skills of the Nurse
Identification of Time-Sensitive Medications
Teamwork
Workload & Staffing changes

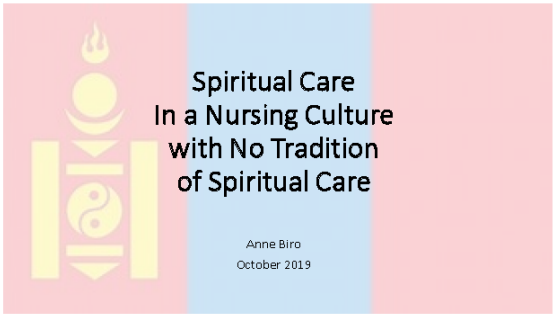
8


Thank you!

9

Presentation: Spiritual Care in Nursing Culture with No Tradition of Spiritual Care

Spiritual Care in a Nursing Culture with No Tradition of Spiritual Care. Presented at the conference 'Spiritual Care – The State of the Art and International Perspectives', Bergen, Norway, October 18, 2019.



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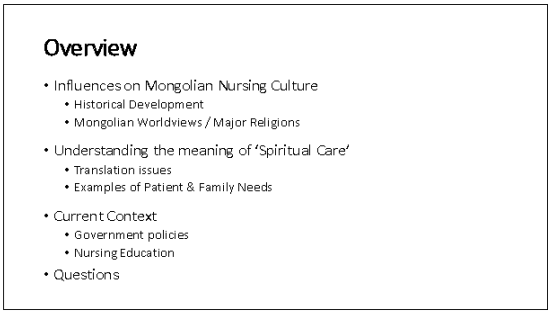

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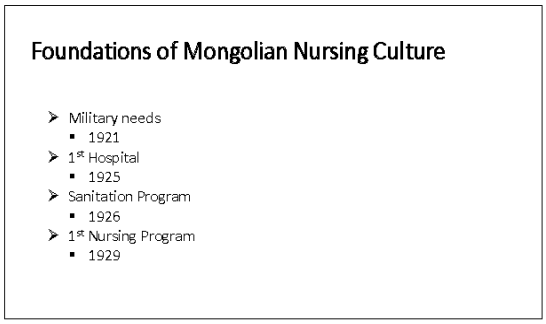

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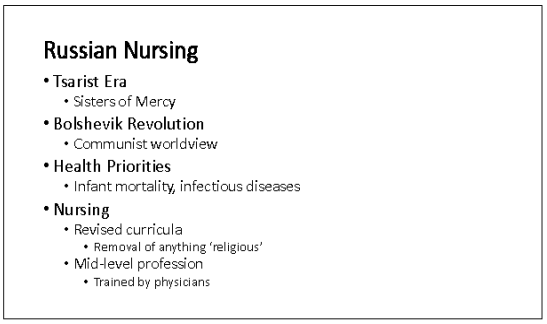

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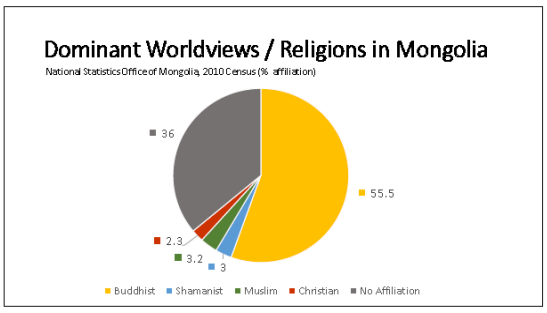

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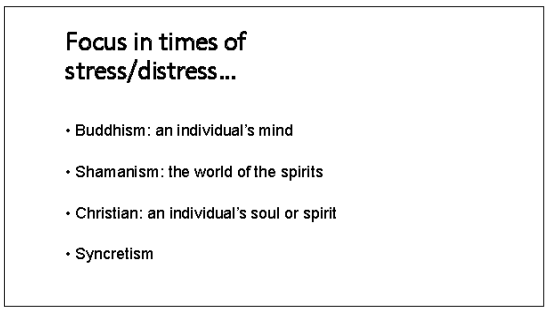

6

The problem of translation

- "Spiritual" as a western concept/term
  - Judeo-Christian Roots

Various Mongolian translations of 'spirit'

- *сүнс*
  (spirit, ghost)
- *зүрх сэтгэл*
  (heart mind)
- *сүнстэг байдал*
  (spiritual state of being)
- *оюуны сэтгэл*
  (mind feelings)

7

"Spiritual" Practices

- Visible Accessories
  - Prayer beads, amulets, string necklace or bracelet
  - Books & literature
- Prayer
  - Mantras, prayer wheels & flags (Buddhist)
  - Prayer (Christian)
- Intermediary
  - Entering the world of the spirits (Shaman)
  - Intercession (Christian)
  - Advice as to what is auspicious, appropriate mantras & actions (Buddhist)
- Action
  - Good deeds 'буян' (merit), offerings

8

Patient and Family Needs

Considerations for hospitals, other patients, and nurses

9

Alone on a traumatic night…

A story of a patient & a nurse

10

Current Context

- Public Policy
  - Separation of religion and state
- Strengthening the health system
  - International standards
    - JCI (private hospitals)
  - Human Resources (Nursing)
    - Education
    - Job Description & Workload

11

Conclusions

- Spiritual care is neither a role nor a responsibility of Mongolian hospital nurses
- Nurses are expected to maintain a good attitude towards their patients, and depending on one's definition of 'spiritual care', one could argue that they provide some degree of 'spiritual care'

12

Questions for further study & discussion

Is spiritual care possible when there isn't a cultural concept or linguistic term for 'spiritual care'?

Is showing compassion 'spiritual care'? How does this differ from emotional care?

How does history and public policy influence the provision of spiritual care?
- Is it ethical to teach spiritual care in different political & cultural contexts?
- Is it unethical not to?

13