Breaking the Cycle: The Transition to Motherhood with Anorexia Nervosa

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CANDIDATE DECLARATION

Title of degree programme	Doctorate in Clinical Psychology		
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	Declaration and signature of candidate					
	I confirm that the thesis submitted is the outcome of work that I have undertaken during my programme of study, and except where explicitly stated, it is all my own work.					
I confirm that	the decision to submit this thesis is n	ny own.				
I confirm that except where explicitly stated, the work has not been submitted for another academic award.						
I confirm that the work has been conducted ethically and that I have maintained the anonymity of research participants at all times within the thesis.						
Signed:	Gemma Worthington	Date:	10/08/2014			

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Thesis Abstract

For women with anorexia nervosa, control and routine are important in managing distress and maintaining a sense of self in challenging situations. The transition to motherhood is characterised by change and uncertainty. Women may struggle to integrate the demands of anorexia alongside the challenges of motherhood. The aim of this thesis was to review the literature regarding the experiences of pregnancy and motherhood for women with eating disorders and develop a grounded theory of the transition to motherhood for women with anorexia nervosa.

The literature regarding experiences of pregnancy and motherhood with an eating disorder was reviewed. The findings suggested a trend for remission of eating disorder symptoms in pregnancy followed by relapse during the postpartum period. Women with eating disorders were most likely to experience depression and anxiety during the later stages of pregnancy and postpartum. The review highlighted how eating disorders impacted on women's ability to embrace motherhood and bond with their children. There was a paucity of research exploring the lived experience of motherhood for women with specific eating difficulties, most notably anorexia. A grounded theory was informed by the experiences of eight mothers with anorexia. A core process of breaking the cycle highlighted how women were attempting to make lasting positive changes. They achieved this by protecting their children from anorexia, exploring new perspectives, setting a good example to their children and battling temptation to succumb to anorexia. This study provides a unique insight into the experiences of mothers with anorexia. In the final chapter the research process is reflected upon. It is hoped that these findings will influence clinical practice and help professionals to better understand women's experiences.

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22,116 (including abstracts, tables and figures)

How do women with eating disorders experience pregnancy and motherhood?

Abstract:195 wordsManuscript:6,506 words (excluding abstract, tables and figures)

EXPERIENCES OF MOTHERHOOD WITH AN EATING DISORDER

Journal Guidelines

The International Journal of Eating Disorders aims to advance scientific knowledge needed for understanding, treating and preventing eating disorders. The Journal accepts review articles that explore the status of a given research area and propose new directions for research and practice. Reviews should be a maximum of 7,000 words in length, excluding abstract, references, tables and figures. The Journal permits an abstract of up to 250 words and up to 100 academic references. There is no limit to the number of figures and tables but these should be appropriate to the material covered. Centred upper case headings are reserved for Methods, Results and Discussion sections of the manuscript. Subordinate headings are typed flush left and underlined in upper and lower case letters.

Referencing follows the Vancouver method of reference citation. References are numbered consecutively in the order in which they are first mentioned in the text. References are identified in text, tables and legends by Arabic numbers. All references cited are listed numerically at the end of the paper. When there are seven or more authors, the first six are listed followed by et al. after the name of the sixth author. Individuals are referred to as "people with anorexia nervosa" or "participants with eating disorders".

Abstract

Objective: This review aims to critically appraise recent literature (2008-present) regarding psychological experiences of pregnancy and motherhood for women who experience eating disorders.

Method: A literature search of Web of Knowledge, EBSCO, NHS databases and Google Scholar databases was conducted to identify relevant studies. The main findings are presented followed by clinical recommendations and research implications. Seventeen articles met the study criteria and a range of outcome measures were used to explore psychological experiences of pregnancy and motherhood.

Results: The findings revealed a general trend for remission of eating disorder symptoms in pregnancy followed by relapse during the postpartum period. Women who experienced eating disorders reported depression, anxiety and weight concerns, particularly during the later stages of pregnancy and postpartum. **Discussion:** Eating disorders impacted on the ability to embrace a new identity as a mother. Whilst the review was limited by small sample sizes and a wide range of outcome measures, it highlights the need to explore the best ways to support and engage mothers who experience eating disorders. Future research

could focus on the lived experience of becoming a mother whilst experiencing specific eating difficulties, to help design sensitive and timely support services.

MOTHERHOOD WITH AN EATING DISORDER: A REVIEW OF THE PREGNANCY AND MOTHERHOOD EXPERIENCES OF WOMEN LIVING WITH EATING DISORDERS

Eating disorders

All individuals who experience eating disorders report concerns about weight gain, although the conditions present in different ways. Some presentations involve eating too much, others eating too little, and some involve behaviours intended to rid the body of excess calories¹. Often the individual equates appearance with self-esteem, further fuelling the eating disorder as they strive harder to achieve an appearance that they believe will demonstrate their worth as a person. However as weight loss becomes a reality, eating difficulties can spiral out of control².

Eating disorders are categorised into one of four types; anorexia nervosa, bulimia nervosa, binge eating disorder and eating disorder not otherwise specified (EDNOS). There is some overlap between the categories. Anorexia nervosa is characterised by extreme fear of weight gain coupled with eating less and exercising more, which continues even when the individual reaches an unsafe weight. In bulimia nervosa individuals use binge eating and inappropriate weight control strategies such as excessive exercise to manage their weight. Binge eating disorder involves repeating cycles of dieting and binge eating¹. EDNOS accounts for eating difficulties which do not meet the above criteria. Figures suggest that 10% of individuals with eating difficulties experience anorexia nervosa, 40% bulimia nervosa and the remainder either binge eating disorder or EDNOS³.

Around 6% of adults in the UK display signs of an eating disorder⁴. Contributory factors include low self-esteem, family difficulties and abuse⁵. Eating disorders are most likely to develop during adolescence and early adulthood. 75% of those affected are female^{1, 4}. Eating disorders may persist during adult life as a means of coping with stress or restoring control in chaotic situations.

Pregnancy and early motherhood

Pregnancy and early motherhood can be challenging events in the life cycle and are connected to feelings of uncertainty^{6, 7}, decreased relationship satisfaction⁸ and reduced social contact^{9, 10}. Fatigue is common¹¹ and women may require additional support during this period⁶. Some women experience psychological difficulties^{6, 12} and a small number develop postpartum depression, which may impact negatively on maternal adjustment¹³⁻¹⁴. Past experiences of family relationships may affect how women care for their own children. For example, women who have experienced trauma or illness in their families of origin may be more anxious about the health of their own children¹⁵. Motherhood is a significant transition in the life cycle¹⁶ and the changes a family makes to accommodate a new baby should not be underestimated¹⁷.

As pregnancy progresses women experience changes to their weight and shape. During the early stages of pregnancy women are more likely to perceive a foetus as part of them. However as pregnancy progresses they begin to view their unborn child as a separate physical being^{9, 18}. Weight gain during pregnancy is a common concern¹⁹. Many women experience significant pressure to quickly lose the weight they have gained²⁰⁻²¹. Whilst many pregnant women experience anxiety related to their changing shape, some are particularly vulnerable and may attempt to lose weight using diet and exercise²². For women who experience eating disorders, weight and shape concerns are more pronounced and their strict adherence to diet and exercise regimes is likely to compromise their health²⁰. Women living with eating disorders are likely to experience additional challenges and more information about these difficulties will help professionals to support them effectively.

Pregnancy and motherhood for mothers who experience eating disorders

Discovering a pregnancy can trigger the start of a difficult period for women living with eating disorders. Women who experience eating disorders are advised to plan a pregnancy with caution⁶ due to increased risks of premature labour²³, caesarean delivery and miscarriage²⁴. Whilst it is unusual for these women to

become pregnant due to the impact of an eating disorder upon fertility²⁵⁻²⁶, around 12,000 women in the UK do become pregnant each year^{21, 27}. Some symptoms of pregnancy, such as nausea and fatigue, are similar to eating disorder symptoms, so woman may not realise they are pregnant until a much later stage²⁸.

Women who experience eating disorders respond to pregnancy in different ways. Some report that a strong desire to protect their unborn child reduces the frequency and severity of their eating disorder behaviours^{12, 23, 29} and gives their life a different purpose³⁰. However others continue to restrict, purge and exercise during pregnancy³¹⁻³². Some women experience an initial reduction in their eating disorder symptoms only for these to return later in pregnancy and postpartum^{26, 32-34} as they approach maximum pregnancy weight^{21, 35}. Women who use strict diet and exercise routines to maintain a low body weight report many concerns about the impact of their pregnancy on their body²¹. Whilst some women use this opportunity to seek treatment, others rely on these behaviours to maintain a sense of control³⁶ and manage the overwhelming changes of motherhood. Greater clarity on women's experiences of pregnancy and motherhood with eating disorders would enable professionals to support women more appropriately.

Attachment quality and the influence of the family system

Studies exploring the influence of beliefs and family relationships on eating difficulties highlight the importance of good quality attachments. The ways in which family members interact may be connected to the development and maintenance of eating difficulties¹⁵. It may be more helpful to view eating difficulties as part of a trans-generational cycle rather than attempting to locate the problem within an individual. A systemic approach might suggest that eating difficulties function as a way of controlling patterns of interaction between different members of a family^{17, 37}. Over time a cycle may form, placing younger family members at increased risk of developing eating difficulties if they witness these interactions during their formative years³⁸. Mothers who witness and are influenced by these patterns of interaction in their families of origin may develop unrealistic expectations about eating behaviours and struggle to feed their children^{15, 39}. Research suggests that children who are fed inappropriately display

a range of maladaptive behaviours including a lack of interest in interaction with their mother⁴⁰.

Attachment theory suggests that children form their first attachments to their caregivers; most often to the mother¹⁷. Within a secure attachment, a child is certain of their mother's availability in times of distress⁴¹. Insecure attachments are characterised by high levels of dependency, parental intrusiveness and difficulty expressing negative emotions^{15, 17}. Research suggests that insecure attachments are common in families who experience eating disorders^{42-43.} Mothers who experience eating difficulties may be more dismissive of their children⁴². It is possible that attachment problems precede eating difficulties rather than emerging as a consequence⁴⁴. This highlights the need to look beyond cause and effect and focus on how eating difficulties develop and are maintained over time. More information about the transition to motherhood with eating disorders, connected to existing psychological theory, may offer a greater understanding of women's experiences.

Interventions for women

Two recent literature reviews have explored pregnancy and motherhood for women who experience eating disorders⁴⁵⁻⁴⁶. One literature review summarising what it known about eating disorders during pregnancy was published in 2008⁴⁵. This review suggests that whilst women in the general population feel positive about weight and shape changes during pregnancy, women who experience eating disorders may feel differently. Some report an absence of symptoms during pregnancy followed by a relapse during the post partum period. Women with a history of eating disorders report greater use of laxatives and vomiting, higher exercise levels and greater weight concerns during pregnancy and postpartum. This review concludes that whilst evidence of the impact of eating disorders during pregnancy is currently limited, women who are at risk may benefit from screening and the offer of an appropriate intervention.

A second review published in 2008⁴⁶ focused on the impact of eating disorders during the postpartum period. Within this review, the main concerns of

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new mothers living with eating disorders were connected to feeding and forming an attachment with their baby, and adjusting to a new identity as a mother. This review suggests that as these women have greater body image concerns, they may also be more likely to experience more eating disorder symptoms and psychological difficulties during the postpartum period. Women who experience these difficulties may be less able to form a secure attachment with their baby. The authors recommend a multidisciplinary approach to supporting new mothers who experience eating disorders, including screening during pregnancy and tailored, proactive support during the postpartum period.

Together these reviews found pregnancy was an overwhelming experience⁴⁵ and that women feel guilty for compromising their child's health by using eating disorder behaviours⁴⁶. Women who influence their children's eating by limiting food may predispose children to developing their own eating difficulties⁴⁵⁻⁴⁶. Whilst health professionals are well placed to support women during pregnancy^{45-46,} women are reluctant to disclose their difficulties²⁶ and their motivation to engage in treatment fluctuates⁴⁷ resulting in high drop-out rates from services⁴⁸⁻⁴⁹.

Current public policy recommends that women who experience eating disorders are monitored throughout their pregnancies⁵⁰ and offered the opportunity of hospitalisation if their symptoms become more severe²¹. Although women are unlikely to seek help⁵¹, health professionals can still encourage positive change and reduce the likelihood of postnatal depression by signposting women to appropriate support services^{29, 52-53}. Women who experience eating disorders may be unlikely to discuss their difficulties due to fear that professional involvement might have a detrimental impact on their families. A more collaborative approach might help women to discuss their difficulties and make informed treatment decisions for themselves and their children.

Rationale for this review

Due to developments in fertility treatments, women who experience eating disorders are more likely to become pregnant and have children⁴⁵⁻⁴⁶. However

little is known about the psychological impact of pregnancy and motherhood⁴⁶. Existing research has relied on retrospective data from small clinical samples, making the findings difficult to generalise⁴⁵⁻⁴⁶. More research is needed to develop a greater understanding of women's experiences and the type of support they might need⁴⁵.

The most recent literature reviews were conducted in 2008. However this is a new area of research and studies have been published since which further explore this area. It is important to continue exploring the area in order to provide health professionals with the most accurate, up to date knowledge so they can practise effectively and keep women's experiences at the heart of new research and interventions.

Review aims

Since the publication of the 2008 reviews, further studies have been published in this area. This paper aims to provide a broad review of the research published since 2008. The review question is "what are the experiences of pregnancy and motherhood for women who experience eating disorders?" It will explore the experiences of both pregnancy and postpartum for women living with eating disorders as no previous review has collated findings from the entire period.

The studies will include women with a range of eating disorder diagnoses, as past research has been biased towards women with diagnoses of anorexia nervosa and bulimia nervosa^{1, 46}. It is hoped that this review will combine studies with larger samples and a range of methodologies. Past research has recommended greater awareness of eating disorders and motherhood. Existing research, whilst sparse, is beginning to explore the experiences of motherhood for women with eating disorders. This review will summarise findings related to this topic, identify areas for future research and make recommendations for clinical practice.

METHODS

Search strategy

This literature review involved the application of one search term to a variety of databases. Whilst the findings were not statistically analysed, the review was conducted systematically. The findings were organised and synthesised to provide an overview of the existing research findings related to this topic. A prior search of the literature indicated that this topic was relevant within the fields of psychology, medicine, social work and nursing. Two hosts, Web of Science and EBSCO were chosen to give broad access to multiple social sciences and humanities databases (CINAHL, Psych Info, Pub Med, Medline, Web of Knowledge and Proquest). A search was also conducted of NHS databases, the Cochrane Library, grey literature (including student theses, presentations and recommendations) and Google Scholar.

The search question was "what are the experiences of pregnancy and motherhood for women who experience eating disorders?" The search term based on the question was "(pregnan* OR bab* OR child* OR birth) AND ("anorexia nervosa" OR anorexi*) AND ("bulimia nervosa" OR bulimi*) AND ("binge eating") AND ("eating disorder*" OR "disordered eating") AND (mother* OR parent*)". Abstracts were screened for relevance to the research question using inclusion and exclusion criteria (see Table 1).

Inclusion criteria	Exclusion criteria				
Original article published in an English	Unrelated to the research question i.e.				
language journal	medical studies				
Publication date 2008 or later	Aged below eighteen years				
Female participants aged eighteen	Does not include women with an eating				
years and over	disorder				
Includes women with an eating disorder	Does not examine pregnancy,				
(anorexia nervosa, bulimia nervosa,	postpartum or motherhood				
binge eating disorder, EDNOS)					
Explores pregnancy, postpartum and/or					
motherhood					
Explores psychological experiences of					
pregnancy, postpartum and/or					
motherhood for women with eating					
disorders					

Table 1: Inclusion and exclusion criteria for the literature review

RESULTS

Search strategy

72 abstracts were retrieved from the Web of Science (1970-2013) out of a possible 316 generated by the search term. The remaining 244 were excluded due to not being published in English (N = 51) or publication year prior to 2008 (N = 193). Of the 72 abstracts, a further 60 were excluded due to sampling women under the age of eighteen who experience eating disorders (N = 27), not related to pregnancy, postpartum or motherhood (N = 21) or not exploring psychological experiences of this period (N = 12). 12 articles met the search criteria.

80 abstracts were retrieved from EBSCO (1970-2013) out of a possible 449 generated by the search term. The remaining 369 were excluded due to not being published in English (N = 67) or publication year prior to 2008 (N = 302). Of the 80 abstracts, a further 69 were excluded due to sampling women under the age of eighteen who experience eating disorders (N = 25), not related to pregnancy, postpartum or motherhood (N = 28) or not exploring psychological experiences of this period (N = 16). 11 articles met the search criteria.

A search of NHS databases and the Cochrane Library did not return any new results. In an attempt to eliminate publication bias, a search of Google Scholar gave 562 results, including abstracts and student dissertations. Sixteen original articles met the search criteria. Of these five had not been identified in previous database searches.

After duplicates were excluded, 17 articles met the search criteria. These were reviewed using a data extraction sheet to identify key information and findings (see Appendix A)

Research aims and design of the studies

Ten studies focused on pregnancy for women who experience eating disorders^{54-57, 27, 58-62}, five focused on motherhood for women who experience

eating disorders^{63-66, 29} and two examined both pregnancy and early motherhood for women who experience eating disorders^{19, 67}.

The studies varied in their aims but included measurements of anxiety and depression^{63, 67} attitudes to pregnancy⁵⁴, attachment difficulties⁶⁴, attitudes towards weight gain⁵⁶, disordered eating cognitions²⁷ and adaptation to motherhood^{19, 29}. A range of eating disorders were studied, most commonly binge eating disorder^{55, 62} and bulimia nervosa⁶⁵⁻⁶⁶ but also anorexia nervosa⁵⁹ and EDNOS⁵⁶.

Six studies used a prospective cohort design^{27, 54, 63-64, 66-67}, five used a questionnaire design, with some using data collected as part of a wider cohort study^{29, 55-56, 58, 62}, three used qualitative techniques^{19, 61, 65} and three used case study designs^{57, 59-60}.

Participants and settings

Table 2 provides study details. Sample size ranged from one⁵⁹⁻⁶⁰ to 41,157⁵⁸, though not all these participants had experience of eating disorders as some were drawn from large cohort studies and included control groups. Where reported, participant ages ranged from 17 years¹⁹ to 44 years⁶⁵.

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
Micali, Simonoff	N = 409 (total	Prospective cohort	CCEI (anxiety)	Women with	Findings based on
and Treasure	cohort of 10,887	study	EPDS (depression)	previous episodes	self report data
	women)		EDE-Q (eating	of depression were	
(2011)		12 weeks gestation	disorder symptoms)	at most risk of	
	Mean age not	to 8 months		eating difficulties at	
UK	reported	postpartum		eight months	
	Pregnant women				
	attending prenatal				
	clinics				
Easter, Treasure	N = 452 (cohort of	Prospective cohort	Socio-demographic	Unplanned	Data collected
and Micali	14, 663 pregnant	study	data	pregnancies more	during early 1990s
	women)		Time taken to	common in	All women were
(2011)		Self-report	conceive, feelings	anorexia nervosa	able to conceive
	Mean age not	questionnaires at 12	about pregnancy	group compared to	therefore possible

Table 2: Study samples, methods, outcome measures and main findings listed in date order

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Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
UK	reported Pregnant women attending prenatal clinics	and 18 weeks gestation		general population All eating disorder groups felt more negative about pregnancy	that eating disorders were less severe.
Tierney, Fox and Butterfield	N = 8 Age range: 17-37	Qualitative study – framework analysis	Interview data Baseline demographic data	Divided loyalties between putting child first and	Potential researcher biases could not be
(2011)	years	One interview during pregnancy or		demands of eating disorder	identified
UK	Pregnant women with eating disorder history	postpartum			
Micali, Simonoff	N = 441 (cohort of	Prospective cohort	Feeding difficulties	Pre-existing eating	Women self
and Stahl	10,902 women in	study	Child temperament	disorders impacted	identified as having

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
	general population		DDS (child	on ability to feed	an eating disorder
(2011)		Measures	developmental status)	infants and	
	Mean age of total	completed between	CCEI (anxiety)	increased the	
UK	sample: 29 years	18 weeks gestation	EPDS (depression)	likelihood of	
		and 8 months	EDE (weight and	postpartum anxiety	
	Pregnant women	postpartum	EDE (weight and	and depression	
	attending prenatal		shape concerns		
	clinics				
Berg, Torgersen	N = 1887 (cohort	Quantitative study	DSM-IV (measuring	Remission of binge	All findings based
and Von Holle	of 45, 644		eating disorder	eating disorder in	on self report
	pregnant women)	Questionnaires	symptoms)	pregnancy most	
(2011)		completed at 18	HSC, SWL, RSES	likely when women	Low response rate
	Mean age of total	weeks gestation	and RSS	placed less	
Norway	sample: 29.9 years		(psychological	emphasis on	
			difficulties)	pregnancy weight	
	Pregnant women		Adverse life events	gain	

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
	recruited to the		Health behaviours		
	MoBa cohort study		Social support		
Reba-Harrelson,	N = 749 (cohort of	Prospective cohort	DSM-IV (eating	Mothers with eating	Small sample size
Von Holle and	13,006 women)	study	disorder symptoms)	disorders reported	of women with AN
Hamer			CFQ (maternal	more restrictive	(n = 17)
	Total sample	From 17 weeks	feeding)	feeding styles and	
(2010)	range: 25 to 34	gestation to 36	CBC (child eating	children with more	
	years	months postpartum	problems and	eating problems	
Norway			psychological status)		
	Pregnant women				
	recruited to the				
	MoBa cohort study				
Swann et al.	N = 2,187 (cohort	Quantitative study	Author developed	Women with eating	Self report data
	of 35,929 pregnant		questionnaires	disorders more	
(2009)	women)	Questionnaires	measuring binge	worried about	This population has
		completed at 18	eating, purging and	pregnancy related	higher socio-

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
Norway	Mean age of total	weeks gestation	concern and weight	weight gain	economic status
	sample: 29.9 years		gain during pregnancy		than general
					population
	Pregnant women				
	recruited to the				
	MoBa cohort study				
Madsen, Horder	N = 5	Case reports	Demographic and	All women	Little detail about
and Stoving			observational data	minimised the	data collection and
	Age range: 20-32	Early pregnancy up	from obstetric	impact of their	ethical approvals
(2009)	years	to one year	appointments	eating disorder on	
		postpartum		their pregnancy	
Denmark	Women registered				
	with specialist				
	eating disorder unit				
Manzato, Zanetti	N = 1	Case study	Demographic and	Mother had	Short follow up
and Gualandi			observational data	difficulty bonding	period of one

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
	Aged 19 years	Between 33 weeks	from obstetric	with her new-born	month postpartum
(2009)		gestation and one	appointments		
	Obstetrics clinic	month postpartum			
Italy	outpatient				
Mazer-Poline and	N = 1	Case study	Demographic and	In the final	Ethical process
Fornari			observational data	trimester the	unclear and little
	Aged 29 years	Between 33 weeks	from obstetric	woman's mental	information about
(2009)		gestation and birth	appointments	health had	postpartum
	Obstetrics clinic			deteriorated with	
USA	outpatient			high risk to mother	
				and foetus	
Soares et al.	N = 123 (out of	Questionnaire study	EDE-Q (measure	Binge eating during	Findings are
	712 women in the		assess ED symptoms)	pregnancy was	specific to women
(2009)	sample)	Measures	PRIME-MD (current	associated with	attending primary
		completed during	anxiety and	binge eating before	care units in Brazil
Brazil	Mean age of total	second trimester of	depression)	pregnancy and	

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
	sample: 24.7 years	pregnancy		current feelings of	
				anxiety	
	Primary care units				
	in Southern Brazil				
Stapleton, Fielder	N = 16	Qualitative –	Interview data	Mothers'	Homogeneous
and Kirkam		thematic analysis	Baseline demographic	responsibility for	sample of
	Age range 23-44		data	modelling	Caucasian women
(2009)	years	One interview		appropriate eating	
		during pregnancy or		behaviours	
UK	Pregnant women	postpartum		conflicted with their	
	and new mothers			eating disorder	
	in Northern			Social activities	
	England				
				were stressful	
Lai and Tang	N = 91	Prospective cohort	Mother Treatment	Parenting abilities	Participants
		study	Scale (parenting	associated with	reported only mild

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
(2008)	Mean age of total		behaviour)	level of maternal	bulimic symptoms
	sample: 30.9 years	One prenatal	EDI-2 (bulimic	attachment and	
Hong Kong		interview then twice	symptoms)	bulimic symptoms	
	Chinese women in	up to a year	GHQ (maternal		
	Hong Kong	postpartum	distress)		
			MPAS (affectional		
			bond with foetus		
			during pregnancy)		
Koubaa, Hallstrom	N = 44 (plus 67	Quantitative study	MAMA (body image)	Mothers with eating	No established cut
and Hirschberg	control group of		Somatic symptoms	disorder before	off points for
	women without	Questionnaires	Marital relationships	pregnancy reported	measuring
(2008)	eating disorder)	completed at 3	Attitude to pregnancy	greater postpartum	maternal
		months postpartum		adjustment	maladjustment;
Sweden	Mean age of			difficulties	defined by the
	women with eating			50% had had	authors
	disorder: 29 years				
				contact	

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
				with mental health	
	Women attending			services	
	prenatal outpatient			postpartum	
	clinics				
Crow et al.	N = 42 (out of 385	Prospective cohort	EDE (weight concern,	Restraint, shape	Self report data
	women with eating	study	shape concern and	concerns, weight	
(2008)	disorders)		restraint)	concerns, binge	
		Outcome measures		eating and purging	
USA	Mean age of total	completed over 18		diminished during	
	sample: 27.3 years	month period at 6		pregnancy but	
		month intervals		returned to	
	Pregnant women			baseline levels	
	with eating			postpartum	
	disorders attending				
	prenatal clinics				
Berg, Bulik and	N = 96 (cohort of	Quantitative study	DSM-IV (to measure	Bulimia nervosa in	Information comes

Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
Von Holle	41, 157 pregnant		eating disorder	pregnancy	from third trimester
	women)	Questionnaire	symptoms)	associated with	only
(2008)		measures, unclear	HSC, SWL, RSES,	anxiety, low mood	
	Mean age not	when these were	RSS (psychological	and low self-	
Norway	reported	completed	difficulties)	esteem	
	Pregnant women recruited to the MoBa cohort study		Adverse life events Health behaviours Social support	Remission associated with greater self-esteem and life satisfaction	
Shaffer, Hunter	N = 10	Qualitative study –	Interview data	Women ate to cope	Small sample of
and Anderson		thematic analysis	Baseline demographic	with distorted body	Caucasian women
	Age range: 26-39		data	image	
(2008) USA/Canada	years Women attending	One interview during pregnancy		Struggle to prevent loss of control	

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Author, date and	Sample size, age	Method/duration	Outcome measures	Findings	Limitations
study country	and population				
	Canadian			Fear of the	
	antenatal centre			postpartum period	

EPDS, Edinburgh Postnatal Depression Scale⁶⁸; CCEI, Crown Crisp Experiential Inventory⁶⁹; EDE, Eating Disorders Examination⁷⁰; DDS,
Denver Developmental Scale⁷¹; SWL, Satisfaction with Life scale⁷²; HSC, Hopkins Symptom Checklist⁷³; EDI-2, Eating Disorder Inventory 2⁷⁴;
GHQ, General Health Questionnaire⁷⁵; MAMA, Maternal Adjustment and Maternal Attitude Questionnaire⁷⁶; RSES, Rosenberg Self Esteem
Scale⁷⁷; PRIME-MD, Primary Care Evaluation of Mental Disorders⁷⁸; CBC, Child Behaviour Checklist⁷⁹; CFQ, Child Feeding Questionnaire⁸⁰;
MPAS, Maternal Prenatal Attachment Scale⁸¹; EDE-Q, Eating Disorders Examination Questionnaire⁸²; PID, Parental Image Differential⁸³;
RSS,RSS,Relationship

Quality assessment

A hierarchy of evidence⁸⁵ was used to review the identified literature. The highest quality studies were those which used cohort and longitudinal designs, followed by qualitative methodologies and case reports. This literature review does not rank highly using this framework because there are no randomised controlled trials and few quantitative methodologies. This was understandable given that the search question focused on the *experiences* of pregnancy and motherhood for women living with eating disorders. The studies were assessed for quality using guidance from the Critical Appraisal Skills Programme⁸⁶ and evaluative criteria for qualitative research projects⁸⁷.

All of the studies identified relevant issues for further exploration. The cohort studies all identified specific populations (pregnant women), risk factors (binging and purging), possible outcomes (depression and anxiety) and harmful effects (eating disorders in pregnancy). The longitudinal studies used a naturalistic approach to the research, which was justified as they aimed to explore the occurrence of eating disorders before, during and after pregnancy. Two qualitative studies explained the relevance of the research and the need to study subjective experiences in greater depth^{61, 65}.

The best quality studies gave enough detail about their recruitment and selection processes to justify their choice of methodology. The best examples demonstrated how the sample was demographically similar to the British population⁶⁷ and how recruitment difficulties were overcome¹⁹. Not all studies provided these details, raising questions about the appropriateness of their selection criteria. Most did not discuss consent or confidentiality. The case studies^{57, 59-60} did not detail recruitment and selection processes at all so it was impossible to tell how these participants had been identified.

Data collection methods varied depending on the chosen methodology. Exploratory studies used semi structured interview techniques, whilst larger cohort studies used standardised questionnaires. Most studies collected descriptive data including ages and length of pregnancy, although few differentiated between

different eating disorder types. The best qualitative study gave details of the topic guide⁶¹. Case studies provided large amounts of factual information but allowed the least psychological interpretation. An example of this is the case of a nineteen year old woman with anorexia nervosa⁵⁹ where the authors present observations and medical information but do not offer their hypotheses regarding the factors which might have contributed to her difficulties. Most qualitative studies provided some details about the researchers' clinical backgrounds⁶⁵. However it may have been helpful for the researchers to suggest how their experiences impacted on data interpretation⁸⁷.

The range of psychological outcome measures was extremely varied. Many findings were based on self-report data but some standardised measures were used alongside diagnostic criteria⁵⁸. Not all studies provided details of the psychometric properties of their measures. Additional psychometric detail is provided in Appendix B. The Eating Disorders Examination⁷⁰ and Eating Disorders Examination Questionnaire (EDE)⁸² were commonly used. Both have established reliability and validity amongst women who experience eating disorders. The Chinese version of the EDE had "good" internal reliability⁶⁶. There was good inter-rater reliabilities for the EDE subscales of purging, eating concerns and weight concerns (between .90 and .99), indicating that this is a stable and objective measure²⁷. Other internally reliable measures included the General Health Questionnaire (GHQ; .87 to .93⁷⁵) and the Maternal Prenatal Attachment Scale (MPAS; .82 to .84⁸¹). The Maternal Attitudes and Maternal Adjustment questionnaire (MAMA)⁷⁶ was high in test re-test reliability and compared favourably with similar measures²⁹. Whilst some studies alluded to potential confounding factors⁶³, the best examples adjusted their models to accommodate them⁵⁴⁻⁵⁵ or considered how they might be addressed in future research⁶⁶. The best qualitative examples used relevant quotations to illustrate their findings⁶¹. More information about the development of codes and categories might have been helpful⁸⁷.

Lack of follow up information made it difficult to draw long term conclusions⁵⁶⁻⁵⁷. Two studies used longer follow up periods of three and four years postpartum^{27, 64}. Two included more than one data collection point^{27, 66}

which enhances the reliability of the findings. However most studies followed women for less than twelve months postpartum⁶⁶⁻⁶⁷ providing less evidence regarding the impact of eating disorders in early motherhood, during which there may be significant changes.

Overall the findings appear plausible, particularly when confounding factors were accounted for⁵⁴⁻⁵⁵ and when data were collected at more than one time point^{27, 66} using appropriate outcome measures⁵⁸. The best studies made cautious interpretations⁶⁴, offered practical suggestions for reducing distress⁶¹ and related their findings back to policy and guidelines⁶⁵. It was easier to generalise the findings of studies which gave demographic information about their participants⁵⁴ or were conducted in the UK, where this review was based^{63, 67}. Whilst most studies attempted to connect their findings to previous research, it was common for this to be the first time that some of these issues had been explored. For the qualitative studies there was not enough information in the form of audit trails and reflexivity to determine the comprehensiveness of data collection and interpretation⁸⁷.

Assessment of eating disorder status

This review included women who experienced eating disorders even if they did not form the majority of the study samples. Most studies provided details about their eligibility criteria. Two used variants of the Eating Disorder Examination⁷⁰ to confirm an eating disorder^{62, 66} but most used self-developed questionnaire items based on DSM-IV criteria^{55-56, 58, 63-64, 67}. The qualitative studies recruited women who self defined their eating disorder; one corroborated this with a doctor's diagnosis⁶¹, another deemed women eligible if their symptoms impacted on their functioning¹⁹. Other methods included diagnostic interviews²⁹ and medical records⁵⁹⁻⁶⁰. Most studies distinguished between eating disorder subtypes and current and historic eating disorders which helped to highlight different experiences and identify gaps in the literature.

Other features of the study samples

Where data were available there were significant levels of attrition; one study experienced a 75% attrition rate in participants over twelve months⁶⁶. Whilst it is difficult to draw definitive conclusions about this, it appears retaining women with experience of eating disorders is not an easy task.

Some studies recruited women from wider cohort studies, exploring specific aspects of the sample to obtain the data they needed^{27, 54}. Where reported, women were recruited using hospital records⁶⁰ postal questionnaires¹⁹, recruitment flyers⁶⁵, via other health professionals⁶¹ and during ultrasound appointments^{56, 64}.

Most studies took place in the UK (N = 5), Norway (N = 4) and North America (N = 3). There were also studies from Brazil⁶² and Hong Kong⁶⁶ and a case study of a young Arabian woman living in Italy⁵⁹. These highlight how eating disorder beliefs may be influenced by culture, community and family upbringing.

Key findings

A large amount of information was contained in these articles. A basic content analysis was performed⁸⁸ to identify key themes. Firstly a list of key codes was generated by reading through all of the findings. This continued until no further codes could be identified. Overlapping codes were combined and broad codes were broken down into multiple categories, ensuring that all of the information was included. This resulted in five key themes. A colleague checked the analysis and agreed with the key codes and final themes. These themes and examples contributing Table 3. of codes shown in are

Theme	Weight and shape concerns	Remission and relapse	Mood/adjustment difficulties	Balancing eating disorder and child	Attachment difficulties
Contributing codes	Worrying about weight gain Afraid baby will be overweight Concerned about changing body shape	Symptoms remit in early pregnancy Unable to stop using eating disorder behaviours Improving during pregnancy but worsening postpartum	Mental battle to avoid losing control Higher levels of depression and anxiety Adjustment problems after birth	The benefits of having an eating disorder Strong desire to look after child Balancing needs of self and the child	Uncomfortable socialising with other mothers Feeding problems impacting food choices for mother and baby

Key findings were organised into themes of weight and shape concerns, patterns of remission and relapse, mood disorders and adjustment difficulties, balancing eating disorder and motherhood, and feeding and attachment difficulties, which will now be discussed in more detail.

Twelve studies explored women's feelings about weight gain during pregnancy and early motherhood. Women who experienced eating disorders had more severe concerns about weight gain which occupied more of their time. They were more likely to engage in restrictive eating patterns. Women with most concerns about pregnancy-related weight gain also reported more binge eating symptoms⁵⁵. Women with eating disorder symptoms reported that during the later stages of pregnancy they became most fearful of not losing weight they had gained⁶². In a sample of 702 women in a primary care service in Brazil, 5.6% reported excessive weight and shape concerns, and in the same sample, 31% of women with binge eating disorder reported anxiety during their pregnancy⁶². At eight months postpartum, women who experienced depression and eating disorder symptoms during pregnancy reported the most symptoms of anxiety compared to women with a history of eating disorder symptoms and depression⁶⁷.

Previous research indicated that women who experience eating disorders report a remission in their symptoms during pregnancy, followed by a relapse during postpartum. This pattern was also found in the current review and was most pronounced amongst women with anorexia nervosa²⁷ and binge eating disorder⁵⁵, indicating that amongst women who experience eating disorders, there are different pregnancy experiences. In one study²⁷ women were most vulnerable to relapse during the postpartum period, although the length of the postpartum period is not specified. This seems reasonable given that during this time women who experience eating disorders are also more vulnerable to anxiety regarding their weight and shape.

Depressive symptoms were common throughout pregnancy and early motherhood. One study found that at 18 weeks gestation there were depressive symptoms in 14-40% of women with past or current experience of eating disorders⁶⁷. Women living with eating disorders were more likely to associate

motherhood with personal sacrifice compared to women in the general population⁵⁴. This is a period of increased risk for women who experience eating disorders and warrants further attention. The nature of the relationship between low mood and eating disorders in pregnancy is unclear, although some evidence suggests that previous depressive episodes increase the risk of eating difficulties during pregnancy⁵⁵. Women who experience eating disorders reported more anxiety and depression at 32 weeks gestation compared to healthy controls⁶³ and lower self-esteem and reduced relationship satisfaction^{55, 58} suggesting that this is indeed a significant issue for women.

Women who experience eating disorders may have difficulty adjusting to motherhood. Half of these women had made contact with mental health services since the birth of their child compared to 10% of controls²⁹. One case study of a new mother with an eating disorder⁵⁹ highlighted the possible presence of significant attachment difficulties from the first month of postpartum. A sample of 91 Chinese mothers who experienced symptoms of bulimia nervosa revealed that whilst these women felt attached to their unborn child, they eventually became more restrictive in their parenting styles. It has been suggested that mothers who are preoccupied with weight loss may be unable to respond sensitively to their child's needs⁶⁶.

Women who experience eating disorders had difficulty balancing their desire to care for their child with the need to engage in eating disorder behaviours. One woman was motivated to change but unwilling to be hospitalised for treatment⁶⁰, whilst another reported concerns that her unborn child might be overweight⁵⁹. When women were unable to refrain from using eating disorder behaviours during pregnancy, they attempted to reduce the frequency with which they engaged in these behaviours⁵⁷. Others described pregnancy as a battle for control over one's body⁶¹ and whilst some were able to reduce their eating disorder behaviours during pregnancy, others could not forego this sense of control¹⁹. Many reported that pregnancy was a positive experience which offered them the opportunity to make lasting changes for themselves and their children¹⁹. Women who have lived with an eating disorder for a long time may feel more

ambivalent during pregnancy. This can be an opportunity for health professionals to help these women prepare for motherhood.

The experience of eating disorders impacted on women's ability to form attachments to children. Mothers who experienced bulimia nervosa and binge eating disorder were more restrictive in their parenting styles and reported more behavioural difficulties in their children⁶⁴. These mothers also experienced greater discomfort when they socialised with friends and fed their child in public. Some women struggled most when they were unable to leave their child alone so they could restrict and purge⁶⁵.

DISCUSSION

Main findings

The literature review aimed to explore the experiences of pregnancy and postpartum for women living with eating disorders, using research published since 2008. It was hoped that this review would update the current evidence base and direct future research. The findings suggested that eating disorders impact significantly on women's pregnancy and postpartum experiences. Women remained concerned about their changing body weight and shape throughout this period. There was a trend for eating disorder symptoms to remit during pregnancy then relapse during postpartum. Women experienced depression and anxiety throughout pregnancy and postpartum and were more likely to have sought help from mental health services.

The postpartum period in particular was associated with increased vulnerability. Women struggled to balance the demands of their eating disorder with their child's needs. This had implications for the attachments they formed with their children. The cross cultural mix of studies makes these results applicable to a wider range of women. The findings suggest that the transition to motherhood with an eating disorder is a challenging experience and women may require more support during this time. However a wide range of methodologies and incomplete psychometric details means it is difficult to draw further conclusions about the findings.

Limitations

The search term was applied to multiple databases, the grey literature and an internet search and was deemed exhaustive. Whilst seventeen articles is not particularly representative this review summarises what is currently known and directs future research accordingly. The search term and criteria were designed to capture a range of relevant literature but might have been improved using other pregnancy related words such as 'antenatal'. The decision to include only full text, English articles published in academic journals might have eliminated otherwise appropriate articles. The findings do not give any information about the later stages of motherhood when children begin to communicate verbally and are old enough to attend school. It is possible that women may then experience different challenges and anxieties. As psychological status was not established consistently across the study samples using similar outcome measures, there is an unclear baseline which impacts on the significance of any reported improvements. Most studies did not report detailed inclusion and exclusion criteria. Where details were reported, the studies recruited women whose eating difficulties did not prevent them from participating. Women with more severe eating disorders might present differently.

These findings highlight the increased incidence of psychological difficulties amongst women with eating disorders. However this may reflect a simplistic view of depression and anxiety given that they are not unitary concepts. When measuring psychological experiences of pregnancy and motherhood for women with eating disorders, future studies could be more explicit about what is being measured. The use of small sample sizes, particularly for women with anorexia nervosa, limits the extent to which these findings can be generalised. Most studies used self report measures which are practically useful but perhaps less valid and allow limited conclusions. The views of partners and other family members were not sought although these findings suggest that supportive partners may aid the transition to motherhood with an eating disorder¹⁹.

The terms 'anorexia nervosa' and 'bulimia nervosa' were used instead of 'anorexia' and 'bulimia'. The term 'anorexia nervosa' translates to 'nervous loss of appetite'⁸⁹. This highlights the fear of weight gain and poor body image that accompanies eating difficulties. 'Anorexia nervosa' offers a more complete perspective than the term 'anorexia', meaning 'loss of appetite'. Whilst both terms are commonly used amongst professionals and individuals with eating disorders, 'anorexia' can accompany other health problem including cancer⁹⁰. Whilst 'anorexia nervosa' is more reflective of the difficulties many women experience, some women may identify more closely with the shortened term of 'anorexia' as it may seem less pathologising. The decision to use 'anorexia nervosa' might have discouraged women from sharing all of their experiences.

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Theoretical links

The findings of this literature review connect to past research in the areas of attachment and systemic theory. Research suggests that insecure attachments are common within families who experience eating disorders⁴²⁻⁴³ because mothers are unable to respond sensitively to their child's needs and may hold unrealistic expectations about their children's behaviour^{15, 39, 42}. The current findings highlighted that women who experience eating disorders may indeed struggle to adjust to the demands of motherhood. Their preoccupation with weight loss may prevent them meeting their child's needs. Women reported feeling uncomfortable when they fed their children in public and struggled to strike a balance between meeting their child's needs and engaging in eating disorder behaviours. Mothers with bulimia nervosa and binge eating disorder reported more behavioural difficulties in their children. This may have implications for the attachments women form with their children, particularly if they have difficulty recognising their child's need for security and predictability. It would be helpful for professionals to have a greater appreciation of the implication of attachment difficulties for women with eating disorders and their children.

Other findings connected with literature related to motherhood and the family life cycle. The findings highlighted that these women experienced the transition to motherhood as difficult and overwhelming. They were likely to engage in restrictive eating patterns and were fearful of not losing weight they had gained during their pregnancies. In systemic theory, pregnancy and motherhood are key transitions in the family life cycle characterised by new routines and a change in role¹⁷ and moving from one stage to the next can be challenging if there are existing vulnerabilities such as eating difficulties. Depressive symptoms were frequently found throughout pregnancy and early motherhood. Some women living with eating disorders were more likely to associate motherhood with personal sacrifice, whilst others reported that motherhood was a positive experience. Perhaps even within this group of women there are individual differences. A greater understanding of the potential for differences within this

group of women might remind services to continue to provide tailored, individual support to women with eating disorders.

Recommendations

This literature review highlights the need to support women who experience eating disorders before, during and after their pregnancies. It is likely that mental health services will become involved during this period⁵⁶. These women are more likely to become pregnant unexpectedly due to their belief that they are unable to conceive⁵⁴ and may benefit from education from clinicians with experience of working with eating disorders. It might be helpful for women to be informed of the benefits of overcoming their eating disorder symptoms prior to conception, and to receive specialist practical and emotional support throughout the transition to motherhood^{19, 60}.

The findings reveal the importance of early intervention in treating women who experience eating disorders during pregnancy and early motherhood, to help them make positive changes^{27, 29}. It might be helpful for professionals to work with the ambivalence these women are more likely to experience regarding their pregnancies⁵⁴, to improve the likelihood of a positive pregnancy experience and help women to form good quality attachments with their children. Pregnancy may be an appropriate time for professionals to discuss eating behaviours with women and identify potential difficulties^{62, 65}. These women comprise a small yet highly vulnerable group and being unable to access support might result in significant negative consequences for them and their children.

Health professionals might benefit from greater awareness of the types of anxiety women who experience eating disorders report during pregnancy and motherhood, to understand and support them appropriately. One study⁶¹ found that routine weight monitoring during pregnancy was a particular source of anxiety and suggested that instead health professionals might wish to perform weight checks discreetly or eradicate the process completely. Other recommendations include the use of multidisciplinary team working to ensure that women's practical and emotional needs are accommodated. This could include bringing together

women with similar experiences together to share stories and provide mutual support⁵⁷.

The findings of this review echo the recommendations of recent public policy which state that women who experience eating disorders should be monitored during pregnancy and offered specialist antenatal care⁹¹ from a multidisciplinary team of health professionals³⁵. Recent findings have helped to improve knowledge of pregnancy and motherhood for women who experience eating disorders and the increasing amount of published research over the past five years is testament to increasing professional recognition of this issue.

The role of clinical psychology

Women who experience eating disorders may be reluctant to discuss their difficulties with health professionals. Clinical psychologists are well placed to support women during this period by gathering information about their experiences using a person centred, non-judgemental approach, and using therapeutic questioning skills to help women reflect and consider the benefits of change. These women are more likely to have experienced insecure attachments within their own families, which might impact on their ability to make a successful transition to motherhood^{29, 63, 67}. A psychological approach might encourage women to consider how their past experiences influence their current parenting style, and encourage them to move from viewing themselves as the 'problem' to a position where they can acknowledge the patterns of interaction which influence their eating difficulties¹⁵. This requires the development of a secure, therapeutic relationship within which women can discuss their difficulties without fear of judgement⁹². There may also be a role in planning practical interventions and helping women to connect with other mothers.

Areas for future research

The experience of pregnancy and motherhood for women who experience eating disorders is an emerging area of research and much is still unknown. It would be helpful to know how women who experience eating disorders manage

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change and whether their decision to change is motivated more by concern for their unborn child or because their anxieties about weight gain are less severe during pregnancy. Some women have more positive experiences of motherhood than others. It would be useful to know what contributes to this difference by exploring parenting behaviour, attachment styles, coping strategies, beliefs about motherhood and the trans-generational cycle of risk within families.

A range of eating difficulties was represented amongst the women in this literature review. Future research might recruit larger samples of women and focus more on anorexia nervosa and EDNOS as information about these two groups of women is particularly limited. It would be helpful to explore the experiences of women of a non Caucasian origin as the samples in this literature review are not particularly representative. There is little qualitative research exploring the experiences of pregnancy and motherhood for women who experience eating disorders, in particular anorexia nervosa. The qualitative research identified in the current literature review offered valuable insights into an area about which little is currently known and provides grounding for future research.

Conclusions

Research indicates that women who experience eating disorders are vulnerable throughout pregnancy and early motherhood. This review aimed to collate findings published during the past five years, update the literature and make recommendations for future research. This area is under-researched and the small number of articles identified varied in quality; whilst some offered clear aims, methodologies and implications, others offered less detail, making it difficult to generalise the findings. Key findings suggested that women living with eating disorders experience significant weight and shape concerns throughout pregnancy and motherhood, and that their eating disorder symptoms remit and relapse during this period. These women experienced a range of psychological difficulties which impacted on their transition to motherhood and ability to form attachments with their children. Some struggled to balance the needs of their child with their own, hinting at the role of attachment and family factors in the development and

maintenance of eating disorders. It seems likely that women with eating disorders will find pregnancy and motherhood challenging for a range of reasons, and will require individual support which meets their needs. Women might benefit from more practical and emotional support to help them make a transition to motherhood that is happy and healthy for them and their families.

REFERENCES

- 1. Royal College of Psychiatrists. Eating disorders: key facts from the Royal College of Psychiatrists. Northampton: St Andrews Healthcare; 2009.
- Cooper M and Turner H. Underlying assumptions and core beliefs in anorexia nervosa and dieting. Br J Clin Psychol 2000;39:215-8
- B-eat. Facts and figures: How many people in the UK have an eating disorder? <u>http://www.b-eat.co.uk/about-beat/media-centre/facts-and-figures</u> (accessed 7 November 2012).
- 4. National Health Service. Adult Psychiatric Morbidity in England: Results of a household survey. Health and Social Care Information Centre; 2007.
- B-eat. Anorexia nervosa online factsheet. <u>http://www.b-eat.co.uk/get-help/about-eating-disorders/types-of-eating-disorder1/anorexia</u> (accessed 25 October 2012).
- Darvill R, Skirton H and Farrand P. Psychological factors that impact on women's experiences of first time motherhood: a qualitative study of the transition. Midwifery 2008;26:357-66.
- Oakley A. Woman Confined: Towards a Sociology of Childbirth. Oxford: Martin Robertson; 1980.
- Ekeus C, Lindberg L, Lindblad F and Hjern A. Birth outcomes and pregnancy complications in women with a history of anorexia nervosa. Int J Obstet Gynaecol 2006;113:925-9.
- Rubin R. Maternal identity and the maternal experience. Springer: New York; 1984.

- 10. Rogan F, Shmied V, Barclay L, Everitt L, and Wyllie A. Becoming a mother: developing a new theory of early motherhood. J Adv Nurs 1997;25:877-85.
- 11. Furber C, Garrod D, Maloney E, Lovell K and McGowan L. A qualitative study of mild to moderate psychological distress during pregnancy. Int J Nurs Stud 2009;46:669-77.
- Rocco P, Orbitello B, Perini L, Pera V, Ciano R and Balestrieri M. Effects of pregnancy on eating attitudes and disorders: A prospective study. J Psychosom Res 2005;59:175-9.
- Gauthier L, Guay F, Senecal C and Pierce T. Women's depressive symptoms during the transition to motherhood: the role of competence, relatedness and autonomy. J Health Psychol 2010;15:1145-56.
- Homewood E, Tweed A, Cree M and Crossley J. Becoming occluded: the transition to motherhood of women with postnatal depression. Qual Res Psychol 2009;6:313-29.
- 15. Dallos R and Denford S. A qualitative exploration of relationship and attachment themes in families with an eating disorder. Clin Child Psychol Psychiatry 2008;13:305-22.
- 16. Carter B and McGoldrick M. The Expanded Family Lifecycle: Individual Family and Social Perspectives (3rd Edition). Boston: Allyn and Bacon; 1999.
- 17. Dallos R and Draper R. An Introduction to Family Therapy: Systemic Theory and Practice (2nd ed.). Maidenhead, UK: Open University Press; 2005.
- 18. Schmied V and Lupton D. The externality of the inside: body images of pregnancy. Nurs Inq 2001;8:32-40.

- 19. Tierney S, Fox J, Butterfield C, Stringer E and Furber C. Treading the tightrope between motherhood and an eating disorder: a qualitative study. Int J Nurs Stud 2011;48:1223-33.
- 20. Boscaglia N, Skouteris H and Wertheim E. Changes in body image satisfaction during pregnancy: a comparison of high exercising and low exercising women. Aust N Z J Obstet Gynaecol 2003;43:41-5.
- 21. James D. Eating disorders, fertility and pregnancy: Relationships and complications. J Perinat Neonatal Nurs 2001;15:36-48.
- 22. Franko D and Walton B. Pregnancy and eating disorders: a review and clinical implications. Int J Eat Disord 1993;13:41-7.
- 23.Blais M, Becker A, Burwell R, Flores A, Nussbaum K, Greenwood D, Ekeblad E and Herzog D. Pregnancy: Outcome and impact on symptomatology in a cohort of eating-disordered women. Int J Eat Disord 2000:27:140-9.
- 24. Micali N, Treasure J and Simonoff E. Eating disorders symptoms in pregnancy: A longitudinal study of women with recent and past eating disorders and obesity. J Psychosom Res 2007;63:297-303.
- 25.Carter F, McIntosh V, Joyce P, Frampton C and Bulik C. Bulimia nervosa, childbirth and psychopathology. J Psychosom Res 2003;55:357-61.
- 26. Goldman R and Koren G. Anorexia nervosa during pregnancy. Can Fam Phys 2003;49:425-6.
- 27.Crow S, Agras W, Crosby R, Halmi K and Mitchell J. Eating disorder symptoms in pregnancy: A prospective study. Int J Eat Disord 2008;41:277-9.
- 28.Bonne O, Rubinoff B and Berry E. Delayed detection of pregnancy in patients with anorexia nervosa: Two case reports. Int J Eat Disord 1996;20:423-5.

- 29. Koubaa S, Hallstrom T and Linden-Hirschberg A. Early maternal adjustment in women with eating disorders. Int J Eat Disord 2008;41:405-10.
- 30. Von Soest T and Wichstrom L. The impact of becoming a mother on eating problems. Int J Eat Disord 2008;41:215-23.
- 31. Micali N, Simonoff E and Treasure J. Risk of major adverse perinatal outcomes in women with eating disorders. Br J Psychiatry 2007;190:255-9.
- 32. Fairburn C, Stein A and Jones R. Eating habits and eating disorders during pregnancy. Psychosom Med 1992;54:665-72.
- 33.Namir S. Pregnancy in restrictor-type anorexia nervosa: a study of six women. Int J Eat Disord 1986;5:837-45.
- 34. Morrills E and Nikols-Richardson H. Bulimia nervosa during pregnancy: A review. J Am Diet Assoc 2001;101:448-54.
- 35. Conrad R, Schablewski J, Schilling G and Liedtke R. Worsening of symptoms of anorexia nervosa during pregnancy. Psychosom 2003;44:76-
- 36. Reid M, Burr J, Williams S and Hammersley R. Eating disorders patients' views on their disorders and on an outpatient service: a qualitative study. J Health Psychol 2008;13:956-60.
- 37. Barker P. Basic family therapy (5th Edition). London: Blackwell; 2007.
- 38. Whitehouse P and Harris G. The intergenerational transmission of eating disorders. Eur Eat Disord Rev 1998;6:238-54.
- 39. Mazzeo S, Zucker N, Gerke C, Mitchell K and Bulik C. Parenting concerns of women with histories of eating disorders. Int J Eat Disord 2005;37:S77-9.

- 40. Ainsworth M and Bell M. Some contemporary patterns in the feeding situation.In: Ambrose A, editor. Stimulation in early infancy. London: Academic Press, 1993, p. 133-70.
- 41.Bowlby J. A secure base: Clinical implications of attachment theory. Oxford: Routledge; 2005.
- 42.Ward A, Ramsay R and Treasure J. Attachment research in eating disorders. Br J Med Psychol 2000;73:35-51.
- 43. Troisi A, Massaroni P and Cuzzolaro M. Early separation anxiety and adult attachment style in women with eating disorders. Br J Clin Psychol 2005;44:89-97.
- 44. Broberg A, Hjalmers I and Nevonen L. Eating disorders, attachment and interpersonal difficulties: a comparison between 18 and 24 year old patients and normal controls. Eur Eat Disord Rev 2001;9:381-96.
- 45. Micali N. Eating disorders and pregnancy. Psychiatry 2008;7:191-3.
- 46. Astrachan-Fletcher E, Veldhuis C, Lively N, Fowler C and Marcks B. The reciprocal effects of eating disorders and the postpartum period: a review of the literature and recommendations for clinical care. J Women's Health 2008;17:227-39.
- 47. Adshead S. Ambivalence in eating disorders. Psych Bull 2009;33:196-7.
- 48. Williams S and Reid M. Understanding the experience of ambivalence in anorexia nervosa: the maintainer's perspective. Psychol Health 2010;25:551-67.
- 49. Gusella J, Bird D and Butler G. Tipping the scales: Is decision making related to readiness to change in girls with eating disorders? Can Child Adolesc Psychiatr Rev 2003;12:110-2.

- 50. National Institute for Health and Clinical Excellence. Eating disorders: core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. London: NICE; 2004.
- 51.Leddy M, Jones C, Morgan M and Schulkin J. Eating disorders and obstetricgynaecologic care. J Women's Health 2009;18:1395-401.
- 52. Franko D, Blais M, Becker A, Delinsky S. et al. Pregnancy complications and neonatal outcomes in women with eating disorders. Am J Psychiatry 2001;158:1461-6.
- 53. Crow S, Keel P, Thuras P and Mitchell J. Bulimia symptoms and other risk behaviours during pregnancy in women with bulimia nervosa. Int J Eat Disord 2003;36:220-3.
- 54. Easter A, Treasure J and Micali N. Fertility and prenatal attitudes towards pregnancy in women with eating disorders: results from the Avon Longitudinal Study of Parents and Children. Br J Obstet Gynaecol 2011;8:1491-8.
- 55. Knoph Berg C, Torgersen L, Von Holle A, Hamer R, Bulik C and Reichborn-Kjennerued T. Factors associated with binge eating disorder in pregnancy. Int J Eat Disord 2011;44:124-33.
- 56.Swann R, Von Holle A, Torgersen L, Gendall K, Reichborn-Kjennerud T and Bulik C. Attitudes to weight gain during pregnancy: results from the Norwegian Mother and Child Cohort study (MoBa). Int J Eat Disord 2009;42:394-401.
- 57. Madsen I, Horder K and Stoving R. Remission of eating disorder during pregnancy: five cases and brief clinical review. J Psychosom Obstet Gynaecol 2009;30:122-6.
- 58.Berg C, Bulik, C and Von Holle, A. Psychosocial factors associated with broadly defined bulimia nervosa during early pregnancy: findings from the

Norweigan mother and baby cohort study. Aust N Z J Psychiatry 2008;42:396-404.

- 59. Manzato E, Zanetti T and Gualandi M. Pregnancy in severe anorexia nevosa. Int J Eat Disord 2009;42:84-6.
- 60.Mazer-Poline C and Fornari V. Anorexia nervosa and pregnancy: Having a baby when you are dying to be thin – case report and proposed treatment guidelines. Int J Eat Disord 2009;42:382-4.
- 61. Shaffer S, Hunter L and Anderson G. The experience of pregnancy for women with a history of anorexia or bulimia nervosa. Can J Mid Res Prac 2008;7:17-30.
- 62. Soares R, Nunes M, Schmidt M, Giacomello A, Manzolli P, Camey S et al. Inappropriate eating behaviours during pregnancy: Prevalence and associated factors among pregnant women attending primary care in Southern Brazil. Int J Eat Disord 2009;42:387-93.
- 63. Micali N, Simonoff E, Stahl D and Treasure J. Maternal eating disorder and infant feeding difficulties: maternal and child mediators in a longitudinal general population study. J Child Psychol and Psychiatry 2011;52:800-7.
- 64. Reba-Harrelson L, Von Holle A, Hamer R, Torgersen L, Reichborn-Kjennerud T and Bulik C. Patterns of maternal feeding and child eating associated with eating disorders in the Norwegian Mother and Child Cohort study (MoBa). Eat Behav 2010;11:54-61.
- 65. Stapleton H, Fielder A and Kirkham M. Managing infant feeding practices: the competing needs of bulimic mothers and their children. J Clin Nurs 2008;18:874-83.
- 66.Lai B and Tang C. The negative impact of maternal bulimic symptoms on parenting behaviour. J Psychosom Res 2008;65:181-9.

- 67. Micali N, Simonoff E and Treasure J. Pregnancy and postpartum depression and anxiety in a longitudinal general population cohort: the effect of eating disorders and past depression. J Affect Disord 2011;131:150-7.
- 68.Cox J, Holden J and Sagovsky R. Detection of postnatal depression: Development of the 10 item Edinburgh Postnatal Depression Scale. Br J Psychiatry 1987;150:782-6.
- 69. Crown S and Crisp A. Manual of the Crown Crisp Experiential Inventory. London: Hodder and Stoughton; 1978.
- 70. Fairburn C and Cooper Z. The Eating Disorders Examination. New York: Guildford Press; 1993.
- 71. Frankenburg W and Dobbs J. The Denver Developmental Screening Test. J Paediat 1967;71:181-91.
- 72. Diener E, Emmons R, Larsen R and Griffin S. The satisfaction with life scale. J Pers Assess 1985;49:71-5.
- 73. Tambs K and Moum T. How well can a few questionnaire items indicate anxiety and depression? Acta Psychiatr Scand 1993;87:364-7.
- 74.Garner D. Eating Disorder Inventory 2: professional manual. Odessa, FL: Psychological Assessment Resources; 1991.
- 75.Goldberg D. Manual of the General Health Questionnaire. Windsor: Nelson; 1978.
- 76.Kumar R, Robson K and Smith A. Development of a self-administered questionnaire to measure maternal adjustment and maternal attitudes during pregnancy and after delivery. J Psychosom Res 1984;28:43-51.

- 77.Rosenberg M. Society and the Adolescent Self-Image (Revised Edition). Middletown, CT: Wesleyan University Press; 1989.
- 78. Spitzer R, Williams J, Kroenke K, Linker M, DeGruy F, Hahn S et al. Utility of a new procedure for diagnosing mental disorders in primary care: the PRIME-MD 1000 study. J Am Med Assoc 1994;272:1749-56.
- 79. Achenbach T. National survey of problems and competencies among four to sixteen year olds: Parents reports for normative and clinical samples. Monogr Soc Res Child Dev 1991;56:R5-R119.
- 80. Birch L, Fisher J, Grimm-Thomas K, Markey C, Sawyer N and Johnson S. Confirmatory factor analysis of the Child Feeding Questionnaire: A measure of parental attitudes, beliefs and practices and child feeding and obesity proneness. Appetite 2001:26:201-10.
- 81.Condon J and Corkindale C. The assessment of parent to infant attachment: development of a self-report questionnaire instrument. J Reprod Inf Psychol 1998;16:57-77.
- 82. Fairburn C and Beglin S. Assessment of eating disorders: Interview or self report questionnaire? Int J Eat Disord 1994;16:363-70.
- 83. Ginsburg G, McGinn N and Harburg E. Recalled parent-child interaction of Mexican and United States males. J Cross Cult Psychol 1970;1:139-52.
- 84. Burns D. Ten days to self-esteem. New York: Harper Collins; 1993.
- 85.National Health Service. Hierarchy of evidence framework. Health and Social Care Information Centre; 2005.
- 86. Public Health Resource Unit. The Critical Skills Appraisal Programme: making sense of evidence. Public Health Resource Unit: England; 2006.

- 87. Yardley L. Dilemmas in qualitative health research. Psychol Health 2000;15:215-28.
- 88.Weber R. Basic content analysis: Quantitative Applications in the Social Sciences. London: Sage; 1990.
- 89.BUPA. Anorexia nervosa factsheet. <u>http://www.bupa.co.uk/individuals/health-information/directory/a/anorexia</u> (accessed 9 August 2014).
- 90. Cancer Research. Cancer: types of diet problems. <u>http://www.cancerresearchuk.org/cancer-help/coping-with-cancer/coping-</u> <u>physically/diet/about/types-of-diet-problems</u> (accessed 9 August 2014).
- 91.National Institute for Health and Care Excellence. Eating disorders in women planning pregnancy, during pregnancy and while breastfeeding. NICE; 2014.
- 92.Byng-Hall J. Creating a secure base: some implications of attachment theory for family therapy. Family Process 1995;34:45-58.

Breaking the Cycle: The Transition to Motherhood with Anorexia Nervosa

Abstract:248 wordsManuscript:9,174 words (excluding abstract, tables and figures)

BECOMING A MOTHER WITH ANOREXIA NERVOSA

Journal Guidelines

The International Journal of Eating Disorders aims to advance scientific knowledge needed for understanding, treating and preventing eating disorders. The Journal accepts empirical articles reporting research that is novel and definitive.

Reports should be a maximum of 7,000 words in length, excluding abstract, references, tables and figures. The Journal permits an abstract of up to 250 words, up to 40 academic references and a maximum of eight essential tables and figures. Centred upper case headings are reserved for Methods, Results and Discussion sections of the manuscript. Subordinate headings are typed flush left and underlined in upper and lower case letters.

Referencing follows the Vancouver method of reference citation. References are numbered consecutively in the order in which they are first mentioned in the text. References are identified in text, tables and legends by Arabic numbers. All references cited are listed numerically at the end of the paper. When there are seven or more authors, the first six are listed followed by et al. after the name of the sixth author. Individuals are referred to as "people with anorexia nervosa" or "participants with eating disorders".

For the purposes of thesis submission, the word and reference limit for this journal was not achieved but this paper will be amended accordingly for publication.

Abstract

Objective: This study aimed to explore the experiences of pregnancy and motherhood for women living with anorexia nervosa.

Method: Eight women were interviewed once using a semi structured interview schedule focusing on their experiences of pregnancy, motherhood and anorexia nervosa. Each had a diagnosis of anorexia nervosa and at least one child aged up to five years. Responses were analysed using a grounded theory methodology, resulting in a theory which attempted to explain how these women managed the transition to motherhood with anorexia nervosa.

Results: A core category of "breaking the cycle" emerged. This was supported by four sub processes; "keeping the baby safe", "making a new start", "trying to be the best mum I can be" and "fighting the voice". Women attempted to break the cycle of anorexia nervosa and find ways to manage anorexia nervosa differently.

Discussion: Whilst there is little prior research in this area, these findings suggest that the transition to motherhood with anorexia nervosa is different from the experiences of other mothers. It might be helpful to prepare women for this transition using educational materials and access to support groups for women with similar eating difficulties. Professionals need enhanced awareness of the challenges faced by mothers living with anorexia nervosa. Clinical psychologists might help women to explore their difficulties and find new ways to navigate the ongoing challenges of motherhood which do not involve binging and purging. Future research should continue to encourage women to discuss their experiences without fear of judgement.

BREAKING THE CYCLE: THE TRANSITION TO MOTHERHOOD WITH ANOREXIA NERVOSA

Introduction

Anorexia nervosa is characterised primarily by significantly reduced calorie intake and weight concern. Individuals who experience anorexia nervosa intentionally moderate their food intake and some engage in weight loss behaviours such as excessive exercise. Anorexia nervosa usually develops during adolescence and early adulthood. Whilst there is no identified single cause for anorexia nervosa, contributory factors may include low self-esteem, difficult family relationships and traumatic life experiences¹.

A number of factors may underpin the presence of anorexia nervosa during pregnancy and motherhood. These include beliefs about body image and negative family dynamics. Body image is defined as 'a person's perceptions, thoughts and feelings about his or her body'². In Western culture the notion of 'slim youthfulness' is associated with success and self-control^{3, 4}. For women with anorexia nervosa, who may connect weight loss with feelings of self-worth¹, the physical changes of pregnancy may be especially difficult to manage.

A growing body of literature connects the development of anorexia nervosa with negative family dynamics⁵. Women with anorexia nervosa are more likely to have experienced attachment difficulties and unresolved childhood traumas compared to women who experience other forms of eating difficulty⁵⁻⁷. Within their families they recall a greater emphasis on individual responsibility and isolation from their peers⁷. Anorexia nervosa may replace the consistency of a secure attachment to another person, or help women to manage the feelings of confusion and rejection which frequently accompany insecure attachments.

Women who experience poor childhood attachments and later develop eating difficulties may risk exposing their own children to similar problems. Eating difficulties are most likely to be transmitted between generations when there is poor communication within the family⁸⁻⁹. However there is insufficient evidence to

determine the direction of causality between insecure attachments and eating disorders. Other factors such as stressful life events may be equally influential.

In the UK approximately 12,000 women who experience eating disorders become pregnant every year¹⁰. Around 10% of women with eating disorders meet the diagnostic criteria for anorexia nervosa¹¹. Research suggests that fertility rates amongst women with anorexia nervosa do not differ significantly from the general population¹². Past research has included mothers with experience of anorexia nervosa¹³ indicating that these women do have children, perhaps more often than commonly thought.

Women who experience anorexia nervosa may feel that they have less control over their bodies during pregnancy¹⁰. Whilst some women report that a strong desire to protect their unborn child helps them reduce the frequency and severity of their eating disorder behaviours¹⁴⁻¹⁵, others continue to binge and purge as they approach maximum pregnancy weight¹⁶.

In the general population, pregnancy and early motherhood are associated with psychological distress and body dissatisfaction¹³⁻¹⁴. Parenthood is a significant event in the family life cycle and there are significant changes in accommodating a new member within a family system¹⁵. Whilst many mothers feel overwhelmed by the demands of parenthood¹⁶, women with anorexia nervosa may find this transition more challenging, potentially experiencing complications such as post-natal depression¹⁷. Whilst motherhood can be a positive experience for these women, they may find themselves unprepared for this transition¹⁸. It is unclear how women with manage the transition to motherhood. Without this information women and their families cannot be fully supported.

Rationale for the current research

Whilst there is growing interest in the experience of pregnancy and motherhood with anorexia nervosa, women's experiences warrant further exploration. Research suggests that pregnancies are likely to be unplanned and eating disorder symptoms may remit and relapse throughout pregnancy¹⁷. Further

exploration of this pattern might help clinicians to support women throughout pregnancy and postpartum, since this period may be particularly challenging. Women may experience significant feelings of body dissatisfaction and struggle to meet their child's needs¹⁸. They may benefit from intensive support during pregnancy and postpartum. However the nature of this support remains unclear. More information about how women manage their transition to motherhood, including the strategies they use, might help to design tailored, supportive services.

Women's experiences have not been explored qualitatively and existing findings are based on retrospective data from small clinical samples of women who experience different types of eating difficulties. These findings suggest that motherhood leads women to experience greater ambivalence about their eating disorder behaviours and question their parenting abilities¹⁸. The longest period for which women have been examined post-natally is three years¹⁹. This excludes women with older children who are unlikely to have regular contact with perinatal or eating disorder services.

Women who experience anorexia nervosa should be monitored throughout pregnancy and offered specialist treatment if their symptoms become life threatening¹⁰. Unfortunately women rarely seek help pro-actively²⁰. Health professionals may play an important role in monitoring these women and making referrals for more intensive psychological interventions²¹.

Study aims

This study aims to explore the transition through pregnancy and early motherhood (up to five years postpartum) for women with anorexia nervosa, using grounded theory methodology. The research question is: "how do women manage the transition through pregnancy and early motherhood with anorexia nervosa?" This approach has been used previously to explore experiences of bulimia nervosa in pregnancy²².

METHODS

Participants

The sample was recruited between July 2013 and March 2014. Six women were registered with eating disorder and perinatal services within a large county in the UK. Two women were recruited from eating disorder charities. Within grounded theory methodology there are few recommendations for sample size. A similar grounded theory study²² sampled 16 women with bulimia nervosa. It was hoped that a similar sized sample might be recruited for this study. However the recruitment process was challenging and it was difficult to find eligible participants.

The researcher had planned to recruit from one eating disorder team. As only four women were recruited in this way, the search was widened to include six additional statutory and voluntary services across the county. It is recommended that qualitative research is based on a sample of eight or more participants²³. During a twelve month recruitment period, eight women were recruited to participate in this study. As this was an academic research project with time constraints for study completion and submission, it was not possible to recruit a larger sample.

A smaller than expected sample size meant that saturation was not fully achieved. However there was evidence that the sub processes within the grounded theory contained sufficient amounts of data. The core process of 'breaking the cycle' was represented within the responses of all women across the sample. The sub processes were less sufficient but did connect to the findings of previous research. For example, the conflict that women experienced when they attempted to protect their baby from the influence of anorexia nervosa has been discussed previously²².

<u>Design</u>

Semi structured interview techniques were used. Eight women were each interviewed once using an interview schedule exploring the transition to motherhood with anorexia nervosa (see Appendix C).

Procedure

The study was approved by a number of University and NHS ethical committees. Copies of all approval documents can be found in Appendix D. The researcher received supervision from a clinical psychologist working in an eating disorder service, support from clinical leads of perinatal mental health services to identify and recruit participants and academic supervision from a clinical psychologist in a University context.

Participants recruited from NHS services

The eligibility criteria are provided in Table 1. Potential participants were identified by the clinical supervisor or service lead and sent an invitation letter on behalf of the researcher (see Appendix E). Women were contacted as they became known to professionals working within the teams. To register their interest, women were asked to return the reply slip attached to their invitation letter.

Participants recruited from eating disorder charities

Participants recruited from eating disorder charities responded to information about the study which was circulated online (see Appendix F). Women recruited via this route were screened for eligibility by the researcher (see Appendix G).

Table 1: Inclusion and exclusion criteria for recruitment			
Inclusion criteria	Exclusion criteria		
English speaking/able to participate	Aged under 18 years		
using an interpreter			
Give informed consent independently	No primary diagnosis of anorexia		
	nervosa		
Primary diagnosis of anorexia nervosa	Severe psychiatric difficulties (severe		
given by a psychiatrist (secondary	depression, acute psychosis, high risk)		
diagnoses such as bulimia nervosa also	which require intensive support		
permitted)			
Had a child within the last five years			
Aged 18 years or over			
If participant has psychological			
difficulties they are actively engaged			
with a treatment plan			

Table 1: Inclusion and exclusion criteria for recruitment

Women recruited via NHS services were interviewed locally at the service they usually attended. Women recruited through eating disorder charities were interviewed at a local community venue.

The researcher provided information before each interview began using an information sheet (see Appendix H) and consent form (see Appendix I). Seven women were interviewed in a quiet room at one of the available venues. One woman who interviewed by telephone was encouraged to complete the interview in a place where she would not be disturbed. Interviews ranged in length from 37 to 55 minutes.

Development of the interview schedule

The topic guide was based on the research question and gaps in the research literature. Example questions include 'were you worried about becoming a mother with anorexia nervosa?' and 'have your eating patterns changed since you had a child?' Women were encouraged to discuss their experiences in a way

which felt most comfortable for them. The researcher sought more information where appropriate by asking for specific examples. All interviews were audio recorded. The researcher monitored how women were feeling regularly throughout the interviews. Women described their eating difficulties using different language. 'Eating disorder' and 'anorexia nervosa' were used interchangeably, reflecting how women constructed their eating difficulties.

GPs were made aware of the women who participated (see Appendix J). Women received a written debrief with information about local support agencies after their interview (see Appendix K) and a summary of the findings after the study ended (see Appendix L). Identifiable information was anonymised and women chose a pseudonym to represent their responses. A flowchart of the procedure is presented in Appendix M.

Epistemological position

Grounded theory offers a means of exploring lived experiences by explaining how a group of individuals experience a social process. Critical realist approaches acknowledge that whilst scientific investigations require real 'objects', our understanding of these objects is an ongoing, changing process influenced by our experiences and beliefs²⁴. A critical realist approach to grounded theory suggests that there are 'truths' to be discovered, but that these are dependent on the personal and professional experiences of the researcher²⁵⁻²⁶.

This position best reflects the thoughts of the researcher, whose personal experiences of living with an eating disorder have led to the conclusion that whilst there is an element of truth to the concept of anorexia nervosa, individuals will describe the reality of anorexia nervosa in different ways. The ways in which the researcher made sense of women's stories was influenced by personal and professional experiences. These stimulated her interest in this topic and influenced decisions made with regards to data analysis. For example, the tendency for women to conceptualise anorexia nervosa as an external presence was similar to the researcher's personal experience of anorexia nervosa.

Consequently, stories of 'battling' and 'fighting' the influence of anorexia nervosa featured prominently in the final grounded theory.

The term 'anorexia nervosa' is used throughout. The researcher has experienced the use of 'anorexia nervosa' and 'anorexia' amongst professionals and individuals with eating disorders, in reference to loss of appetite. 'Anorexia nervosa' offers a more complete definition, combining reduced appetite with fear of weight gain and poor body image²⁷. In line with a critical realist position, this definition suggests that there is a 'truth' to anorexia nervosa, which is filtered through the experiences of individuals who experience eating disorders and the professionals who work with them.

Grounded theory

A grounded theory methodology was considered the most appropriate type of analysis. Grounded theory has sociological foundations and focuses on social processes, including life transitions, rather than specific phenomena or internalised processes, which might be explored using other qualitative methods such as narrative approaches²⁵. This study focused on how a group of women managed a social process. The aim was to build a tentative theory explaining how women make a successful transition into motherhood, rather than describe their lived experiences, as might be the focus of an interpretative phenomenological analysis. Whilst all the women have a diagnosis of anorexia nervosa, their experiences were heterogeneous; there were a range of experiences from choking phobia to co-morbid diagnoses of bulimia nervosa. Grounded theory is well suited to exploring social processes experienced by heterogeneous groups of individuals²⁵.

Within a grounded theory there is also space for consideration of context and culture. As this study explored how women manage the transition to motherhood in the face of societal pressure to maintain a low weight, and dominant narratives around successful motherhood, a methodology which focuses on culture and context seemed appropriate²⁶.

The process of data analysis is summarised in Table 2. Data analysis began after the first interview. The researcher kept a reflective diary and summarised each interview after it had taken place. Each transcript was coded manually, focusing on single lines and segments of data. A large number of descriptive codes emerged which were recorded in the reflective diary. The researcher used memos to record her thoughts about the interviewing process and any words or phrases which seemed particularly significant. An example of a memo is presented in Appendix N.

As interviewing progressed, the researcher used the constant comparative method to compare earlier interviews with later interviews and identify similarities and differences between participants. An example of this is presented in Appendix O. Memo writing allowed the researcher to speculate on which codes might develop into more significant categories. An example of a code is presented in Appendix P. The interview schedule became more focused as the researcher concentrated on topics which fitted the emergent categories. For example, the concept of 'fighting the voice' of anorexia nervosa quickly emerged. In later interviews when this was mentioned, the researcher explored this further by asking for clarification and specific examples.

The findings were analysed using critical realist grounded theory techniques²⁶. A critical realist grounded theory approach to data analysis advocates moving from descriptive coding up to more interpretive processes²⁶. When interviewing was complete, the researcher examined all the codes that had been produced and looked for similarities between them. Similar codes were grouped together, forming provisional categories. Through a process of comparing earlier codes with later codes, six categories emerged from the data. These were developed using axial coding²⁸, exploring the conditions under which each category emerged, the strategies used and the context in which they operated. An example of a category is presented in Appendix Q.

The six categories were collapsed into four sub processes to ensure each sub process contained a sufficient amount of data. An example of a sub process is presented in Appendix R. The researcher identified a core category which

connected all of the sub processes and provided an overarching framework for the grounded theory.

The emerging theory comprised a core category and four sub processes with conditions under which the processes operated. This is one interpretation of how a group of women manage the transition to motherhood with anorexia nervosa. It is possible that this interpretation is influenced by the personal and professional experiences of the researcher²⁴.

Stage of analysis	Process of analysis	Example
Open coding	Transcripts were	Natasha discussed
	coded by hand using	discovering her
	brief action codes to	pregnancy, saying
	describe what was	that she thought it
	happening in each	would "probably take
	section of data.	at least a year to get
		pregnant erm it was
		three weeks and the
		shock that, I didn't
		feel prepared".
		This was coded as
		"feeling
		unprepared"
Focused coding	As more women were	The code "feeling
	interviewed, line by	unprepared" was
	line codes were	linked with other
	revisited and links	codes from other
	made between	participants, including
	participants'	"feeling unsure" and
	responses. The	"trying new things".
	researcher used the	
	constant comparative	A new category wa
	method to compare	created calle
	later interviews with	"coping wit
	earlier codes and	uncertainty"
	categories. This	
	resulted in 34	
	categories.	
Axial coding	The 34 categories	The category "coping
Axial coding	The 34 categories were collapsed into six	The category "coping with uncertainty" was

Table 2: Stages of data analysis with example codes and categories

BREAKING THE CYCLE

	categories. These	other categories,
	were developed using	including
	axial coding to	"acceptance" and
	determine the causal,	"making changes".
	contextual and	
	intervening conditions	A new higher order
	for each higher order	category was
	category.	created called
		"Doing things
		differently"
Selective coding	To ensure that all data	The higher order
	were accounted for	category "doing
	without replication, the	things differently" was
	six higher order	combined with
	categories were	another, "changing
	collapsed further to	priorities".
	create four sub	
	processes	A new sub process
		was created called
		"Making a new
		start"
Development of the	The four sub	The sub process
core category	processes were	"making a new start"
	revisited. A core	was linked to the core
	category emerged	category.
	which linked the four	
	sub processes	A core category was
	together	created, called
		"Breaking the
		cycle"

Quality control

It is important for qualitative research to demonstrate transparency with regards to data analysis and interpretation²⁹. The researcher sought regular supervision with an academic supervisor, where ideas were discussed for resonance as they developed. As the grounded theory developed, a section of transcript was coded by a colleague who was unfamiliar with this clinical area. When the sections of transcripts were compared there were similarities between the two sets of codes. For example, a paragraph which was originally coded as "coping with uncertainty" was coded by the colleague as "managing change".

Further credibility checks

To enhance the credibility of the findings, a brief summary of the emergent results was sent to two women who did not meet the full study criteria. These women had received information about the study when it was circulated online by a local eating disorder chair and had expressed an interest in participating. Both women had a current diagnosis of anorexia nervosa but their children were adolescents, therefore they were ineligible to participate. However their input into the study was welcomed and instead they were asked to provide feedback on the grounded theory as it developed. Both women offered their thoughts and comments by email.

They agreed that the goal of their transition to motherhood was not the elimination of anorexia nervosa, but finding ways of managing it differently. They echoed the participants' feelings that motherhood had afforded them the strength they needed to make the transition, despite continuing to struggle with the demands of anorexia nervosa. Both women highlighted that strong feelings of low self-esteem and worthlessness frequently accompanied their eating difficulties. In addition to the existing findings, they emphasised that whilst motherhood could be demanding, it offered a new purpose for life and a valuable opportunity to make positive changes. The researcher attempted to weave these accounts into the grounded theory by paying attention to stories of personal growth and change as well as conflict and struggles.

Ethical issues

The inclusion and exclusion criteria of this study were designed to ensure that the sample was consistent and fulfilled the requirements of the research question. It was felt that the experiences of women with other eating difficulties were beyond the scope of this study. Despite this, the women who participated reported a range of symptoms, some of which were more consistent with the diagnostic criteria for anorexia nervosa than others.

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RESULTS

Demographics

Women's ages, number and age of children are shown in Table 3.

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Participant	Age	Number of	Ages of children	Age of onset of
name		children		anorexia nervosa
Elise	29	1	14 months	19
Becky	30	2	4 and 8 years	8
Emma	23	1	10 months	16
Natasha	33	2	4 and 6 years	14
Chan	24	2	2 and 5 years	20
Lacey	30	2	4 months and 4 years	16
Sophie	18	1	4 months	7
Rachel	33	1	2 years	31

Table 3: Demographic details

Data analysis

Line by line coding produced 34 themes which were developed in axial coding to determine causal conditions, resulting in six categories. During selective coding the categories were further refined, resulting in a core category and four sub processes.

The core process guiding the transition to motherhood involved breaking the cycle of anorexia nervosa. Women who made a successful transition found new ways to accommodate anorexia nervosa in their lives. "Breaking the cycle" comprised four sub processes – "keeping the baby safe", "making a new start", "trying to be the best mum I can be" and "fighting the voice". The use of in vivo codes was considered more representative of women's experiences. For example, most women referred to themselves as "mums" rather than "mothers", therefore the term "mum" is used in the grounded theory. These sub processes are illustrated in Figure 1.

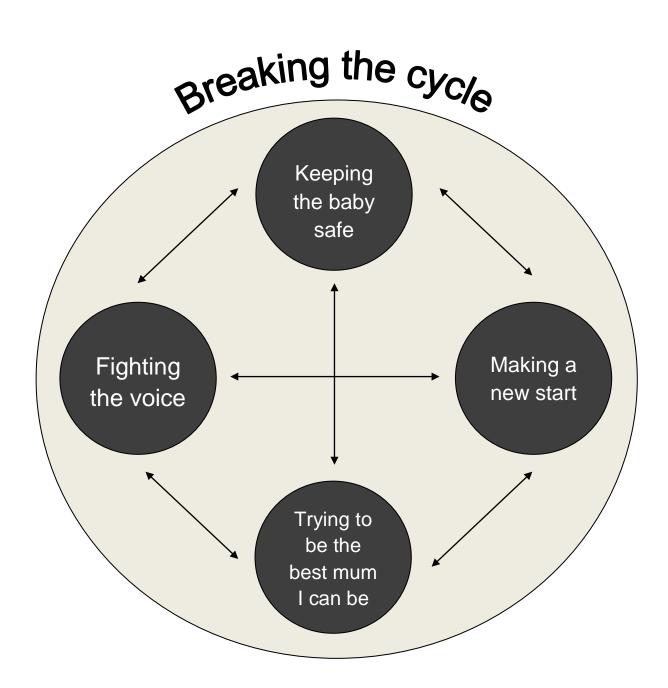
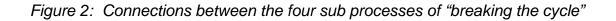
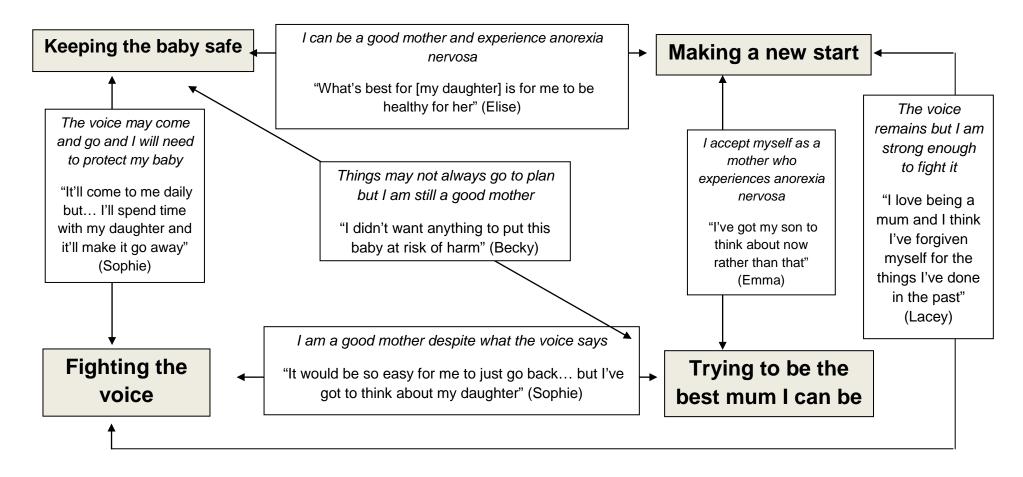


Figure 1: Core category and four sub processes linked together

Generally women conceptualised anorexia nervosa as a separate entity which remained in their lives despite their efforts to leave it behind. During the transition to motherhood, women embraced new perspectives and considered ways of managing anorexia nervosa differently. The four sub processes are illustrated further in Figure 2.





Keeping the baby safe

During pregnancy women recognised that they were now responsible for protecting their children from anorexia nervosa. Sophie described her desire to maintain a healthy body weight during her pregnancy in order to "fuel" her baby as she developed:

"I know that I'm helping her survive... it kind of feels like when I was pregnant because I was helping her to survive then." (Sophie)

As women prepared for birth the regimes of anorexia nervosa were gradually replaced with new child focused routines. However Rachel remained concerned that despite making these changes, she still might not be able to adequately protect her daughter:

"I remember reading that mums with eating disorders can inadvertently underfeed their children... because they're unconsciously influenced by their own eating difficulties... I was terrified by that... you start to realise that there's a lot of things you don't notice about yourself and about what you do." (Rachel)

Lacey explained how accommodating anorexia nervosa within motherhood was "the hardest time with the eating disorder that I've had... you've got this feeling of you want to keep your baby safe". Motherhood was unpredictable and women were less able to manage their anxieties using eating disorder behaviours. Whilst they readily accepted their new roles, frequent exposure to distress with few opportunities to use eating disorder behaviours was difficult to manage.

Throughout pregnancy women found ways to create space in their lives, physically and emotionally, for their children. Elise spoke about realistically accommodating anorexia nervosa whilst trying to maintain a healthy diet. Natasha spoke powerfully about the feeling of being "invaded" by her baby during her pregnancy. She felt she had "no choice over what [her] body was doing". Natasha's pregnancy was a physically difficult and emotionally uncertain time and

she became concerned that her negative pregnancy experiences might have affected her relationship with her daughter:

"I guess I thought I saw her as punishment?... I didn't really like being pregnant with her... We've always had a very strange relationship me and [eldest daughter] it's very up and down we clash a lot." (Natasha)

The process of making room for a baby continued after children were born. Becky described how usual routines went "out of the window" after her sons were born. Elise summarised her difficulties as "having the actual physical time, I can't just put her down and go and make myself sick before you know she'll be there". Rachel did not experience anorexia nervosa until after the birth of her daughter, although she too had a difficult pregnancy experience. She explained how she decided to manage anorexia nervosa differently as her daughter developed:

"It's an absolute... not to impact on the life of another person it's dependent on me and all I could do was to just you know put my own needs and desires to one side." (Rachel)

Unfortunately anorexia nervosa was so powerful that it overshadowed the space women had created for their children. Women acknowledged that their children might become aware of their eating difficulties despite attempts to limit their exposure by hiding these behaviours. Lacey described the internal battle that ensued when she tried to ignore anorexia nervosa and concentrate on her daughter:

"At the back of your head you're trying to suppress these thoughts of you're too fat you're eating too much... block[ing] them out makes it worse so when I had [my daughter] I was like, it all hit me." (Lacey)

The battle to make room for the baby intensified as women became overwhelmed by the responsibility of making decisions which impacted on their child's development. Elise recalled a sense of failure when she was unable to continue breastfeeding. Emma suggested that during these times, anorexia nervosa offered the opportunity to restore a sense of control within her life, explaining that by "limit[ing] the amount I was eating... it just made me feel stable".

As the transition to motherhood continued, women discussed their hopes that they might be remembered positively by their children. They were concerned that their eating disorder experiences had already impacted negatively on relationships with their children. Chan wondered whether her attachment to her eldest daughter was undermined by the difficulty she experienced in making space for her in her life alongside anorexia nervosa. She felt she had "pushed [her] older [daughter] away".

The process of making room for children was most apparent during early motherhood when women were forced to accommodate their child's needs alongside the demands of anorexia nervosa.

Making a new start

Elise spoke of "making a new start" during her pregnancy. Motherhood provided women with valuable opportunities to explore new ways of managing anorexia nervosa. They began to reveal their vulnerabilities and accept help from family, friends and professionals. However motherhood was also unsettling and anorexia nervosa provided familiarity and comfort within an unpredictable environment. Natasha spoke of her shock when she discovered that she was pregnant. Fear of failure and uncertainty about the future prevented women from making positive changes during pregnancy.

During the post-partum period women made significant changes. Elise discussed her search for "other methods that are out there to actually deal with [anxiety] and that takes so much more effort than just giving in [to anorexia nervosa]". Chan reflected on the improvements she had already made since giving birth, Emma reconnected with her family and friends and Lacey described how she forgave herself for decisions she had made in the past. Making changes was most difficult when women doubted their parenting abilities and compared themselves negatively to other mothers. Chan described the "constant worry" which accompanied her desire to be a good mother. Whilst change exposed some women to the possibility of failure, others felt that this process had offered them space to reflect on their progress. As women completed the transition to motherhood they acknowledged their ability to make lasting positive changes which would benefit them and their families. Emma described how motherhood had allowed her to "see what's important". From early pregnancy through to birth and beyond, motherhood offered new perspectives and possibilities.

From the earliest stages of pregnancy, women identified that their priorities were changing. Unfortunately, whilst anorexia nervosa was generally perceived as a negative influence it also provided structure and routine. Natasha tried to look forward to the birth of her daughter, but a life without anorexia nervosa felt overwhelming. Becky was concerned that she might not cope with the demands of motherhood. Lacey struggled to envisage life without the security of anorexia nervosa and wondered "how do you cope with being pregnant with these thoughts and the eating disorder what if it kicks in".

As women began to envisage a new life as a mother, they realised new hopes and aspirations. Emma experienced a desire to distance herself from anorexia nervosa after the birth of her son and explained that "I've got my son to think about now rather than [anorexia nervosa]". Becky hoped to introduce more fun into family life whilst both Rachel and Sophie discussed their desire to be "role models" for their daughters. Chan was reminded of her children whenever she felt compelled to use eating disorder behaviours to manage her distress, explaining that "you can't cause you've got kids". Women began to experience a greater sense of belonging and contentment. Lacey described feeling "loads happier" as a mother. Pregnancy and motherhood posed many obstacles but as women completed their transition they were able to explore a new life with different priorities.

Trying to be the best mum I can be

Lacey spoke of "trying to just be the best mum I can and it seems to be working cause [my daughter] is doing great". Women found it difficult to explain their experiences to others. They felt that family and friends did not appreciate how much negative thinking and low self-worth accompanied anorexia nervosa. Chan spoke with frustration as she described other people's misunderstanding of her difficulties:

"Because I look normal and act normal they think oh you're alright well no actually that puts pressure on you and gets you down." (Chan)

For Emma, anorexia nervosa was "my only way of... showing how I feel". Women felt they were judged harshly for continuing to engage in eating disorder behaviours during pregnancy, which led them to minimise or hide these experiences. Lacey described "the anorexic mindset" as a way of thinking which was different to mothers without experience of eating disorders. Natasha felt isolated by her own pregnancy experiences and spoke of how she "felt very much like I shouldn't be feeling like this so... don't say it out loud".

During pregnancy women were able to limit their exposure to negative comments but as new mothers they were frequently exposed to judgment from others. Rachel described a feeling of "awkwardness" when she spent time with other mothers and felt it was "difficult to carry on socialising with other mums because it's all tea and cake [and] lunch dates". Emma's experiences of feeling misunderstood led her to react defensively to perceived criticism. Elise summarised the true experience of living with anorexia nervosa:

"People think it's about like what you put in your mouth and I'd say to me it's what's going on in my head and everything else is a symptom of that." (Elise)

This made women feel isolated and unable to relate to other mothers. Rachel highlighted the importance of feeling accepted by others: "You judge yourself quite harshly anyway... so it's quite helpful if others don't do that too." (Rachel)

Women who felt understood were more able to accept themselves and acknowledge the continuing presence of anorexia nervosa in their lives.

Fighting the voice

Anorexia nervosa was conceptualised as an external force which controlled women's thoughts and cast a shadow over their achievements. Lacey described anorexia nervosa as a "dark and consuming and self-perpetuating negative horrible thing". Elise explained how anorexia nervosa attempted to draw her back into old routines and undermine her parenting abilities. She described how "it builds up to a point where [you] have to do something". Rachel recalled her shock at how quickly her health had deteriorated before she was referred to her local eating disorder service. Sometimes anorexia nervosa was so powerful that it prevented women from looking forward to the future.

Throughout the transition to motherhood, women experienced a strong desire to make lasting positive changes. Lacey described a "turning point" where she realised she had to make changes. Rachel was reluctant to accommodate anorexia nervosa within her family as she had "never invited it in". Sophie accepted that anorexia nervosa might continue to "niggle at me now and again... it'll always be there".

All of the women were determined to create a happy environment within which their children could thrive. Emma was concerned that her son might compare her negatively with other mothers:

"I never want him to see me like that and think it's normal and then see other people like other children's mums and think why can't my mum be like that." (Emma) Becky and Chan were concerned that they were not disciplining their children correctly. Natasha was fearful that her eating difficulties might influence her daughters' body image and eating patterns. She expressed sadness at the possibility that she had unintentionally "taken the enjoyment of eating away from them". This led women to feel inadequate as mothers.

Elise spoke of the importance of "set[ting] a good example". All of the women had similar hopes and achieved this in various ways. Natasha and Becky provided healthy meals and celebrated when their children ate them. Rachel discovered that other mothers baked with their children and resolved to bake with her own daughter every week. Sophie planned to encourage her daughter to "eat with her and eat in front of her". Chan ensured her daughter always ate enough food, even when she was unable to eat herself. Whilst she clearly intended to encourage her daughter to eat healthily, her approach was perhaps less helpful compared to other women:

"I have to force her... she keeps putting food in her mouth and taking it out... I have to bribe her with like Santa won't come to you if you don't eat." (Chan)

Women struggled to set a good example whilst simultaneously battling anorexia nervosa. Chan's experiences of feeling blamed for her children's eating difficulties reinforced her own sense of inadequacy. Rachel felt that her daughter noticed anorexia nervosa more now compared to a year ago. She feared that time was "running out" for her to resolve these difficulties without impacting on her daughter, explaining that "you can blag it to a toddler but not to a grown child". Lacey wondered whether her own fear of eating in public places might impact negatively on her daughter:

"When you've got a little girl and you're going out and she's like mummy can we eat something and you'd have to eat in public... I'd sit there with a drink and obviously as she was getting older she was starting to recognise these patterns." (Lacey) The desire to set a good example to their children meant that women questioned their parenting abilities and their ability to cope with the demands of motherhood. However the possibility of breaking the cycle of anorexia nervosa and creating a happy family life helped women to navigate the challenges of pregnancy and motherhood.

Battling temptation

"It would be so easy for me to just go back... given a choice I probably would but like I said I've got to think about my daughter." (Sophie)

At times women felt they had little choice but to use anorexia nervosa to manage the challenges of weight gain, unfamiliar routines and new responsibilities. This was particularly true when women felt lonely and overwhelmed. Emma likened anorexia nervosa to an addiction:

"It controls the way you think... your thoughts aren't really yours anymore, they belong to the disorder... you lose sight of your family then... all you keep thinking about is [AN]." (Emma)

Natasha found that as the battle became more difficult to fight, she felt "losing weight [was] as important as the girls". This was a lonely battle; women could not be certain of the consequences of discussing their concerns with other people and frequently felt isolated. All continued to build new lives for themselves and their children. Both Emma and Elise had discussed their difficulties with family, friends and professionals and received an unexpectedly positive response, providing them with much needed support and reassurance.

DISCUSSION

Summary of main findings

The aim of this study was to explore the transition to motherhood for women who experience anorexia nervosa. The findings informed a grounded theory which focused on how women managed this transition. The grounded theory centred on a core process of breaking a cycle of certainty and control ('breaking the cycle'). Within this cycle there were four sub processes. Women shielded their children from influence of anorexia nervosa ('keeping the baby safe'). They continued to fight anorexia nervosa even when it exerted an influence on their lives and tempted them to succumb to old routines ('fighting the voice'). They worked hard to prove themselves as good mothers and justify their decision to continue engaging in eating disorder behaviours despite their new role as mothers ('trying to be the best mum I can be'). They viewed motherhood as an opportunity to make a new start and do things differently ('making a new start'). Women's experiences of the transition to motherhood involved all of these sub processes.

Whilst this transition offered a valuable opportunity to make lasting positive changes, women struggled to accommodate anorexia nervosa within motherhood. These findings connect with past research and attachment, systemic and feminist theories of motherhood and anorexia nervosa.

Core process: Breaking the cycle

This core process relates to how women leave behind the routine and rigidity of their previous lives to make way for their transition to motherhood. Systemic theory suggests that an individual's behaviour is best understood in the context of the transitions they make through stages in the family life cycle. Parenthood is one of the most significant stages³⁰. Embarking on the transition to motherhood, Natasha was increasingly reluctant to engage in anorexia nervosa. Lacey identified motherhood as a "turning point" where she began to make changes to protect her children from anorexia nervosa.

The transition to motherhood is one of the greatest changes that women experience⁹ and can expose women's anxieties about their bodies, children and the future. Pregnancy and post-partum are associated with higher levels of body dissatisfaction³¹. Indeed, Natasha felt her pregnancy experiences might have been different had she not been concerned with her changing body shape. After her daughter was born, Sophie managed her feelings of body dissatisfaction by exercising daily. Women with eating disorders experience more self-doubt and self criticism compared to women in the general population³². In the present study women questioned their parenting abilities. Whilst partners, family members, friends and health professionals all provided support, being monitored by other people could also make women feel inadequate.

Keeping the baby safe

Women expressed guilt when they considered the possible repercussions of their eating disorder behaviours for their children. Previous research suggests that mothers with eating disorders remain anxious that their children might develop eating difficulties³³. Within attachment theory is the notion that feeding offers comfort to a distressed child and helps them to develop the ability to self soothe³⁴. Eating difficulties may develop when mothers misread their child's signals for comfort during feeding times³⁵. Children may then place greater emphasis on their own weight and shape³⁶. Natasha wondered whether her strict behaviour during mealtimes had had a negative and counterproductive effect on her daughters. Chan described how she "bribed" her daughter to ensure she ate enough food. Despite their desire to shield their children from their difficulties, women with negative childhood memories of mealtimes may struggle to provide positive feeding experiences for their own children⁹.

This grounded theory connects to other experiences of pregnancy and motherhood, including women who experience postnatal depression. In the current study, women expressed a strong desire to shield their children from anorexia. For women who experience postnatal depression, early motherhood may also be a hazardous period. Throughout pregnancy and early motherhood there are opportunities to form a physical and emotional bond with the baby³⁷ like Sophie, who was pleased that she was able to attend regular ultrasound scans as these allowed her to develop an attachment with her unborn daughter. Feeling protective of the baby is an experience that is likely to be common amongst women with and without experience of anorexia nervosa.

Making a new start

The transition to motherhood presented the opportunity for women to make a new start and consider the possibility of positive change. Women living with anorexia nervosa are more likely to have experienced loss, unresolved trauma and insecure attachments⁵⁻⁶ compared to women who experience other eating difficulties. Research suggests that as a consequence, women living with anorexia nervosa are more likely to be dismissive when they interact with their children⁵. However the present findings suggest that motherhood helped women to change existing patterns of behaviour and try new things. They discussed how they engaged their children in enjoyable activities such as baking and visiting friends, and associated motherhood with greater contentment and belonging. One hypothesis is that these women are working hard to avoid replicating the troubled relationships they experienced within their own families^{9, 33}.

Making a new start was not without difficulty and some women struggled to manage the ongoing influence of anorexia nervosa in their lives. Anorexia nervosa may replicate the feelings of comfort usually found within a secure attachment to another person. Pregnancy and early motherhood are characterised by physical and emotional uncertainty⁹. When the opportunity to engage in eating disorder behaviours is limited, women may be exposed to unmanageable emotions. Despite their desire to make positive changes, a difficult transition may have implications for the attachments women form with their children. A recent study³⁸ exploring experiences of first time mothers in the early weeks of motherhood echoed these findings, suggesting that women experience feelings of 'losing touch' and 'restoring balance' as they establish a new identity as a mother.

Women recognised that the decision to make a new start was part of an ongoing transition to motherhood, within which they also identified new perspectives and began to feel 'good enough'³⁹. Many felt that motherhood had made their struggle worthwhile. By tolerating the uncertainty of change, women were able to make a successful transition to motherhood.

There are parallels with women who do not experience anorexia, who also have difficulty accommodating a baby in their lives whilst exhausted and dealing with changes to their weight and shape. Women may feel ambivalent about entering a new life stage³⁷. Perhaps if women were given space to grieve for the loss of autonomy, appearance and identity, they might be more able to make a successful transition to motherhood⁴⁰.

Trying to be the best mum I can be

Women in the present study frequently felt misunderstood by family and friends, whose narrow definitions of anorexia nervosa did not reflect their experiences. Similarly in past research⁴¹ women with anorexia nervosa reported that they were often labelled as 'attention seeking'. Through the lens of a medical discourse, anorexia nervosa is viewed as preoccupation with weight and use of behaviours intended to rid the body of excess calories. In reality anorexia nervosa is more complex; women experience lower self-esteem and a greater need for control compared to women who diet to lose weight⁴²⁻⁴³.

Most misconceptions were based on how mothers *should* think, feel and behave. Within Western society some roles for women, including wives and mothers, are privileged at the expense of others. Dominant discourses for motherhood highlight feelings of happiness and fulfilment. Women deviating from these discourses may struggle to gain acceptance of peers⁴⁴⁻⁴⁶. In the present study women were frequently challenged by the demands of motherhood like Elise, who reported feeling rejected by her daughter when she was no longer able to breastfeed. It seems there are few alternative discourses to help women make sense of their experiences.

Women are generally allocated the role of primary caregiver for their children⁴⁵. Women may be expected to sacrifice any non-family interests not directly related to their new roles as mothers⁴⁷⁻⁴⁸. Perhaps this explains the pressure women felt to set a good example to their children. Natasha's feeling of "not knowing who the hell [she] was" highlights the disconnection some women feel during the post-partum period⁴⁴.

Women are expected to love their children unconditionally and allow them to flourish. Those who do not embrace motherhood may be exposed to judgement from peers⁴⁷⁻⁴⁹. In the present study women frequently felt isolated during their pregnancies and compared themselves unfavourably to friends. A more realistic discourse of motherhood might highlight loss of freedom and exhaustion as well as new opportunities⁵⁰⁻⁵¹.

In the present study women met with judgement from other people as they worked hard to prove themselves yet fell short of expectations. This was not an experience unique to mothers with anorexia. Women who experience postnatal depression are also subject to comments from strangers and bombarded by images of pregnancy and motherhood in the media³⁷. Motherhood may be experienced in various ways. The images espoused by the media are not necessarily a reality. Many new mothers experience depression, stress and anxiety, perhaps partly triggered by the sense of duty and responsibility that accompany pregnancy and motherhood⁴⁰.

Fighting the voice

Women used different narratives to describe anorexia nervosa. Most women described a battle in which they fought anorexia nervosa. This connects to previous research in which women described a voice in their heads which dictated their eating disorder behaviours⁵². Elsewhere, Sophie described pregnancy as an opportunity to "fuel" her baby with the necessary nutrients to develop, and Natasha described a feeling of being physically and emotionally heavy during pregnancy. Similar metaphors equating lightness with feelings of success and happiness have been identified in past research⁵³. The medical narratives which dominate health

services may not adequately encompass the reality of women's experiences, leading them to reject professional support when it is most needed.

Some women described how the addictive, compulsive qualities of anorexia nervosa made it difficult to fight. Elise described the intense anxiety that accompanied her compulsions, whilst Emma discussed how anorexia nervosa controlled her thoughts. These characteristics of anorexia nervosa have been described previously with comparisons drawn between anorexia nervosa and obsessive compulsive disorder⁵⁴. The current findings suggest that whilst women with anorexia nervosa might present differently, they may experience similar thoughts and compulsions. As new mothers exposed to unfamiliar situations, despite their desire to fight anorexia nervosa, they may at times feel they have little choice but to resort to anorexia nervosa as a means of managing their anxiety.

Perhaps the transition to motherhood with anorexia nervosa is best understood as a process of struggling for control, developing supportive relationships and tolerating uncertainty⁵⁰⁻⁵¹. This connects to the core category of "breaking the cycle" within which women reject familiarity and embrace an uncertain future. Women who make a successful transition are able to accept themselves and acknowledge the ongoing presence of anorexia nervosa in their lives.

Connections between the sub processes

Each of the four sub processes were considered equally important and together they provided a range of ways in which women made a successful transition to motherhood. The four sub processes linked with one another. Many women discussed their desire to protect their children from anorexia nervosa ('keeping the baby safe') and acknowledged that this was the first time they had considered doing things differently ('making a new start'). Some women spoke of making positive changes ('making a new start') by choosing to fight anorexia nervosa rather than allowing it to influence them ('fighting the voice'). Other women demonstrated their worth as mothers ('trying to be the best mum I can be') by hiding their eating disorder behaviours from their children ('keeping the baby safe').

Methodological and ethical issues

There are limitations to a grounded theory approach. The constant comparative method is designed to encourage researchers to ground findings in the data and reach a point of saturation. This is dependent on the amount of time available for data analysis and the researcher's abilities. The recruitment process was challenging and whilst the sample was an appropriate size for qualitative research, it is unlikely that the sub processes were sufficiently saturated. Critical realist grounded theory provides specific instructions and guidance for novice researchers²⁵, perhaps at the expense of the creativity of other grounded theory approaches.

Criteria for evaluating the impact of grounded theory studies include credibility, resonance and usefulness²⁵. Whilst effort was made to collect enough observations to support the grounded theory, the findings are subject to individual interpretation. As data analysis developed, feedback on the preliminary findings was sought from two women who did not meet the study criteria. For example, they agreed with the concept of a 'voice' of anorexia nervosa and that this encompasses more than appearance concern.

As all of the women were White Caucasian, it is not possible to conclude that the experiences of other women would be the same. Perhaps the transition to motherhood with anorexia nervosa is different for women who have been exposed to different cultural norms and alternative definitions of the family. The semi structured interview schedule was designed to give women the opportunity to share their experiences in ways which made most sense to them. However they may have felt restricted by the questions. A narrative methodological approach may have been more liberating. The interview schedule made reference to 'anorexia nervosa' but some women referred to 'eating problems' or 'eating difficulties' instead. Perhaps 'anorexia nervosa' was less reflective of their experiences. Women were aware that should issues of risk arise during the interviews, the researcher was obliged to disclose these to relevant health professionals. It is possible that the presence of the researcher prevented women from speaking openly or abstaining from participating.

The study criteria were designed to be unrestrictive. However using an anorexia nervosa diagnosis as a criterion for inclusion adheres to a medical discourse and perhaps disregards different narratives of eating difficulties. Excluding women on the basis of severe psychological difficulties was subjective as the decision about whether women could participate was made by the professionals involved in their care. This potentially limits the validity of this grounded theory. It might have been helpful to triangulate these findings with other standardised measures.

Reflexive analysis

The author's experience of living with an eating disorder strengthened her connection to these women. Whilst this meant the author was less fearful of asking difficult questions, it is possible that personal curiosity makes it more difficult to adhere to a semi structured interview schedule. Prior to meeting women, eight similar stories were expected, characterised by struggles and conflicts. Whilst conflict did feature in data analysis, higher order categories of new priorities, recovery and acceptance suggest a different discourse of motherhood and anorexia nervosa.

Recommendations

It is hoped that the recommendations arising from these findings will help refine current professional practices for mothers living with anorexia nervosa.

Natasha had never met another mother who experienced anorexia nervosa. Women with eating disorders frequently feel misunderstood by others, leading them to seek support from other women with similar difficulties. Whilst this might offer comfort, it may also encourage women to conceal their difficulties and resist professional involvement. Women might experience a renewed desire to engage in anorexia nervosa if their peers share stories of similar difficulties⁴³. Existing recommendations include providing new parents with educational materials and opportunities to discuss their experiences⁵¹. It might be helpful for women with anorexia nervosa to share experiences of the transition to motherhood, perhaps through service user led support groups, monitored by professionals who can promote healthy weight control practices.

Women experienced difficulty acclimatising to new routines and frequently felt out of control. Research recommends that health professionals work with new mothers to instil self-confidence^{51, 55}. Health professionals would benefit from information and training about the common misunderstandings of eating disorders and the language women use to describe their difficulties. This could be delivered in collaboration with mothers with anorexia nervosa, who could advise on how their needs might be best met.

Practical and emotional support to help women manage the uncertainty of motherhood would be beneficial. Educational materials containing practical ideas for managing the challenges of motherhood with anorexia nervosa could include how to ask for support and finding time for self-care. Professionals should be mindful that reassuring women of their abilities might not be sufficient, and it might be more useful to spend time exploring women's anxieties and helping them to develop insight into their difficulties. Rachel spoke of the benefits of having "structure" within recovery. She highlighted the need for professionals to offer women a "safety net" with resources in place to support them during acute phases of anorexia nervosa when they might not recognise the severity of their difficulties. When professionals are equipped with information about the strategies women use to manage the transition to motherhood, they can provide more enhanced support when it is needed.

Natasha was surprised that no one had asked about her experiences of motherhood and anorexia nervosa before this study and felt it would have been helpful to have been asked these types of questions at an earlier stage. Elise recalled her concern that her newborn would be removed from her if she had requested more support. The most helpful professionals in Rachel's support network were compassionate and willing to learn from her experiences. Health professionals could consider how to engage women sensitively, acknowledging concerns about safeguarding their children and why they might struggle to give up behaviours central to their functioning⁹. Elise, Becky and Sophie described the crucial role of family and friends throughout their transition to motherhood. Systemic therapy, involving the wider system, may help families to navigate through this transition.

The women who participated in this research breathed life into the experience of anorexia nervosa in ways that diagnostic criteria cannot. NHS services must strike a difficult balance between meeting the needs of a local population and providing tailored, person-centred interventions. There were many examples of positive practice. Natasha and Becky were both supported by their local eating disorders teams. However both Rachel and Elise struggled to obtain support as their body mass index (BMI) did not permit referral to local eating disorder services. Elise was eventually admitted as an inpatient to a general hospital ward, whilst Rachel's GP supported a referral to an outpatient treatment programme. The use of BMI as criteria for admission to services does not fully encapsulate the lived experience of anorexia nervosa and the processes women engage in to manage the transition to motherhood. It is hoped that this will help to create supportive, inclusive services for women and their families.

Women spoke about the realities of living with anorexia nervosa and hoped that their participation in this study might help others to understand their commitment to creating a better life for themselves and their families. The transition to motherhood with anorexia nervosa involves fear and uncertainty as well as joy and contentment. Education on myths around anorexia nervosa might prompt professionals to explore issues of self-esteem and negative thinking as well as weight and shape concerns. Within the present findings there is an acknowledgement that the transition to motherhood involves more than simply resolving weight and shape concerns. To make a successful transition, women must overcome various anxieties and concerns, some dating back to childhood and adolescence. By tolerating difficult and overwhelming feelings, clinicians can create a safe, containing environment for therapeutic work. Clinical psychologists working with mothers who experience anorexia nervosa might find it helpful to spend time building a secure base by engaging women in conversations about how previous support has been helpful and exploring more sensitive topics when the therapeutic relationship strengthens. This could replicate the consistency of a secure attachment³⁴ and help to overcome the difficult attachment experiences women may have been exposed to in childhood, which may have contributed to and maintained their eating difficulties⁸.

Women in this study constructed their experiences in distinctive ways. They described anorexia nervosa as a separate entity from which they protected their children. This connects to narrative approaches which help individuals to resist the influence of problems in their lives⁵². To further separate women from their experiences of anorexia nervosa, current medical practices must be challenged and more power given to women's stories. It might be helpful to challenge the discourses of motherhood which cause women to feel unworthy and isolated⁴⁵ by facilitating discussions between health professionals about the heterogeneity of mothering experiences and acknowledging the strengths of women who overcome adverse life experiences to successfully embrace motherhood.

Future research

The experience of motherhood with anorexia nervosa is a topic about which little is known. Further research might include larger samples of women from different backgrounds, with a greater range of psychological difficulties. It might also be helpful to include family members, including partners, to obtain a wider perspective of parenthood and anorexia nervosa.

A key finding of this study was that women appreciated the opportunity to share their stories. A narrative approach might allow women to explore the ways in which they make sense of their experiences. Women discussed how hard they worked to manage the impact of anorexia nervosa on their lives. Greater understanding of the perceived addictive qualities of anorexia nervosa might help to inform more tailored, person-centred interventions. The findings should be made accessible for eating disorder and perinatal services and disseminated to help services meet the needs of the local population.

Conclusions

Throughout the transition to motherhood, women employed various strategies to break the cycle of anorexia nervosa. They shielded their children from anorexia nervosa, attempted to make a fresh start, tried to be the best mothers they could be and fought temptation to succumb to anorexia nervosa. Specific strategies included exploring different perspectives, making use of social support and accepting the uncertainty of motherhood. It would be helpful to consider these factors when designing interventions to help women manage the transition to motherhood with anorexia nervosa, as their ability to engage in these processes impacts directly on their health and the wellbeing of their families.

REFERENCES

- Royal College of Psychiatrists. Eating disorders online factsheet. <u>http://www.rcpsych.ac.uk/mentalhealthinfoforall/problems/eatingdisorders/eatingdisorders/eatingdisorders.aspx</u> (accessed 17 February 2012).
- Grogan S. Body image: Understanding body dissatisfaction in men, women and children (2nd edition). London: Routledge; 2008 (p 3).
- Dallos R. Attachment narrative therapy: integrating ideas from narrative and attachment theory in systemic family therapy with eating disorders. J of Fam Ther 2004;26:40-65.
- 4. Bordo S. Unbearable weight: Feminism, western culture and the body. Berkeley: University of California Press; 2003.
- Ward A, Ramsay R and Treasure J. Attachment research in eating disorders. Br J of Med Psychol 2000;73:35-51.
- Troisi A, Massaroni P and Cuzzolaro M. Early separation anxiety and adult attachment style in women with eating disorders. Br J Clin Psychol 2005;44:89-97.
- 7. O'Shaughnessy R and Dallos R. Attachment research and eating disorders: a review of the literature. Clin Child Psychol Psychiatry 2009;14:559-74.
- 8. Whitehouse P and Harris G. The intergenerational transmission of eating disorders. Eur Eat Disord Rev 1998;6:238-54.
- Dallos R and Denford S. A qualitative exploration of relationship and attachment themes in families with an eating disorder. Clin Child Psychol Psychiatry 2008;13:305-22.

- 10. James D. Eating disorders, fertility and pregnancy: Relationships and complications. J Perinat Neonatal Nurs 2001;15:36-48.
- 11.B-eat. Facts and figures: How many people in the UK have an eating disorder? <u>http://www.b-eat.co.uk/about-beat/media-centre/facts-and-figures</u> (accessed 7 November 2012).
- 12. Bulik C, Sullivan P, Fear J, Pickering A, Dawn A and McCullin M. Fertility and reproduction in women with a history of anorexia nervosa: a controlled study. J Clin Psychiatry 1999;60:130-5.
- 13. Mazer-Poline C and Fornari V. Anorexia nervosa and pregnancy: Having a baby when you are dying to be thin – case report and proposed treatment guidelines. Int J Eat Disord 2009;42:382-4.
- 14. Rocco P, Orbitello B, Perini L, Pera V, Ciano R and Balestrieri M. Effects of pregnancy on eating attitudes and disorders: A prospective study. J Psychosom Res 2005;59:175-9.
- 15. Koubaa S, Hallstrom T and Linden-Hirschberg A. Early maternal adjustment in women with eating disorders. Int J Eat Disor 2008;41:405-10.
- 16. Fairburn C, Stein A and Jones R. Eating habits and eating disorders during pregnancy. Psychosom Med 1992;54:665-72.
- 17. Astrachan-Fletcher E, Veldhuis C, Lively N, Fowler C and Marcks B. The reciprocal effects of eating disorders and the postpartum period: a review of the literature and recommendations for clinical care. J Women Health 2008;17:227-39.
- Tierney S, Fox J, Butterfield C, Stringer E and Furber C. Treading the tightrope between motherhood and an eating disorder: A qualitative study. Int J Nurs Stud 2011;48:1223-33.

- 19. Reba-Harrelson L, Von Holle A, Hamer R, Torgersen L, Reichborn-Kjennerud T and Bulik C. Patterns of maternal feeding and child eating associated with eating disorders in the Norwegian Mother and Child Cohort study (MoBa). Eat Behav 2010;11:54-61.
- 20.Goldman R and Koren G. Anorexia nervosa during pregnancy. Can Fam Physician 2003;49:425-6.
- 21. Franko D, Blais M, Becker A, Delinsky S et al. Pregnancy complications and neonatal outcomes in women with eating disorders. Am J Psychiatry 2001;158:1461-6.
- 22. Stapleton H. "I'm not pregnant, I'm fat": The experiences of some eating disordered childbearing women and mothers. University of Sheffield: GRiP (Getting Research into Practice); 2007.
- 23. Turpin G, Barley V, Beaill N, Scaife J, Slade P, Smih J et al. Standards for research projects and thesis involving qualitative methods: suggested guidelines for trainees and courses. Clin Psychol For 1997;108:3-7.
- 24. Bhaskar R and Callinicos A. Marxism and critical realism: a debate. J Crit Real 2003;1:89-114.
- 25. Charmaz K. Constructing grounded theory: a practical guide through qualitative analysis. London: Sage; 2006.
- 26.Madill A, Jordan A and Shirley C. Objectivity and reliability in qualitative analysis: realist, contextualist and radical constructionist epistemologies. Br J Psychol 2000;91:1-20.
- 27.BUPA. Anorexia nervosa factsheet. <u>http://www.bupa.co.uk/individuals/health-information/directory/a/anorexia</u> (accessed 9 August 2014).

- 28. Strauss L and Corbin J. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. London: Sage; 1990.
- 29. Yardley L. Dilemmas in Qualitative Health Research. Psychol Health 2000;15:215-228.
- 30. Dallos R and Draper R. An Introduction to Family Therapy: Systemic Theory and Practice (2nd Edition). Maidenhead, UK: Open University Press; 2005.
- 31.Clark A, Skouteris H and Wertheim E. My baby body: A qualitative insight into women's body related experiences and mood during pregnancy and the postpartum. J Reprod Inf Psychol 2009;27:330-45.
- 32. Wade T and Tiggerman M. The role of perfectionism in body dissatisfaction. J Eat Disord 2013;1:2-6.
- Ringer F and Crittenden P. Eating disorders and attachment: The effects of hidden family processes on eating disorders. Eur Eat Disord Rev 2007;15:119-30.
- 34. Ainsworth M. The development of infant-mother attachment (p. 1-94). In Cardwell B and Ricciuti H (Eds.) Review of Child Development Research. Chicago: University of Chicago Press; 1973.
- 35. Chatoor I, Egan J, Getson P, Menvielle E and O'Donnell R. Mother infant interactions in infantile anorexia nervosa. J Am Acad Child Adolesc Psychiatry 1987;27:535-40.
- 36. Stein A, Woolley H, Cooper S, Winterbottom J, Fairburn C and Cortina-Boria M. Eating habits and attitudes among ten year old children of mothers with eating disorders. Br J Psychiatry 2006;189:324-9.
- 37.Nicolson P. What is 'psychological' about 'normal' pregnancy? The Psychol 2010;23:190-3.

- 38. Wilkins C. A qualitative study exploring the support needs of first time mothers on their journey towards intuitive parenting. Midwifery 2006;22:169-80.
- 39. Darvill R, Skirton H and Farrand P. Psychological factors that impact on women's experiences of first time motherhood: a qualitative study of the transition. Midwifery 2008;26:357-66.
- 40. Nicolson P. Loss, happiness and postpartum depression: the ultimate paradox. Can Psychol 1999;40:162-78.
- 41.Rich E. Anorexic (dis)connection: managing anorexia as an illness and an identity. Sociol Health Illn 2006;28:284-305.
- 42. Heatherton T and Polivy J. Chronic dieting and eating disorders: A spiral model. (pp 133-55). In Crowther J, Tennenbaum D, Hobfoll S and Stephens M (Eds.). The etiology of bulimia nervosa: The individual and familial context. Washington DC US: Hemisphere; 1992.
- 43. D'Abundo M and Chally P. Struggling with recovery: patient perspectives on battling an eating disorder. Qual Health Res 2004;14:1094-106.
- 44. Collett J. What kind of mother am I? Impression management and the social construction of motherhood. Symbol Interact 2005;28:327-47.
- 45.Choi P, Henshaw C, Baker S and Tree J. Supermum, superwife, supereverything: performing femininity in the transition to motherhood. J Reprod Inf Psychol 2005;23:167-80.
- 46.Rogan F, Shmied V, Barclay L, Everitt L, and Wyllie A. Becoming a mother: developing a new theory of early motherhood. J Adv Nurs 1997;25:877-85.
- 47.Oakley A. Woman Confined: Towards a Sociology of Childbirth. Oxford: Martin Robertson; 1980.

- 48. Chodorow, N. The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender. USA: University of California Press; 1978.
- 49. Sevon E. Timing motherhood: Experiencing and narrating the choice to become a mother. Fem and Psychol 2005;15:461-82.
- 50.Bondas T and Eriksson K. Women's lived experiences of pregnancy: A tapestry of joy and suffering. Qual Health Res 2001;11:824-40.
- 51.Deave T, Johnson D and Ingram J. Transition to parenthood: the needs of parents in pregnancy and early parenthood. BMC Preg Childbirth 2008;8:30-41.
- 52. Lock A, Epston D, Maisel R and De Faria N. Resisting anorexia/bulimia: Foucauldian perspectives in narrative therapy. Br J Guid Counsel 2005;33:315-32.
- 53. Skarderud F. Eating one's words, part 1: 'Concretised metaphors' and reflective function in anorexia nervosa: an interview study. Eur Eat Disord Rev 2007;15:163-74.
- 54. Altman S and Shankman S. What is the association between obsessivecompulsive disorder and eating disorders? Clin Psychol Rev 2009;29:638-46.
- 55. National Institute for Health and Clinical Excellence. Eating disorders: core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. London: NICE; 2004.

Curiosity, Unicorns and a Cheshire Cat: Adventures through the Research Process

Manuscript: 4,110 words

CURIOSITY, UNICORNS AND A CHESHIRE CAT: ADVENTURES THROUGH THE RESEARCH PROCESS

Introduction

"What is the use of a book', thought Alice, 'without pictures or conversation?"¹ (p. 1-2)

This paper will explore my personal and professional reflections on the research process, covering issues of recruitment, engagement and data analysis, followed by ethical and methodological issues and learning points. I have chosen to tell the story of my research in the same way that I asked my participants to share their stories with me. My interest in creativity led me to liken my experiences to Alice and her adventures in Wonderland^{1, 2}. Alice lives in a world of logical rules and consistent routines. These are challenged when she undertakes a journey through the fantasy world of Wonderland. This begins soon after she falls down the rabbit hole:

"The rabbit hole went straight on like a tunnel for some time, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well" ¹ (p. 2-3)

Journeying down my own rabbit hole of clinical training I was exposed to new ways of thinking and different perspectives. This was part of a transformative journey for me as a researcher and a clinician.

A brief story of my research

Shortly after Alice lands at the bottom of the rabbit hole, she realises she is lost. Surrounded by locked doors and with no apparent way out, she quickly becomes overwhelmed:

"There were doors all around the hall, but they were all locked; and when Alice had been all the way down one side and up the other, trying every door, she walked sadly down the middle, wondering how she was ever to get out again" 1 (p. 5)

The process of recruitment was similarly uncertain and it was hard to remain positive when months passed without any potential participants. Women who experience anorexia are unlikely to conceive due to amenorrhea; the absence of menstruation for at least three months³. Consequently, recruiting women who were eligible to participate in the study was challenging and I had not anticipated how long the recruitment process would take. Happily, after some searching Alice finds a key to fit one of the locked doors and a way out of the rabbit hole:

"Behind [the curtain] was a little door about fifteen inches high; [Alice] tried the little golden key in the lock, and to her great delight it fitted!" ¹ (p. 5)

When I began to recruit women to participate in the study I felt a comparable sense of relief. My metaphorical 'golden keys' were the ways in which I worked to overcome the resistance I experienced from health professionals and my efforts to be realistic about how much I could achieve in the time available. Equipped with my golden keys I found doors in which they fitted; these were new services and health professionals who were passionate about helping women who experience eating disorders.

The White Rabbit guides Alice through Wonderland¹. He is cautious, punctual and provides Alice with the logic she needs to make sense of confusing situations. Likewise my academic supervisor guided me through difficult decisions as my research developed. When the university ethics panel suggested that I offer telephone interviews, we concluded that whilst this might compromise data quality, it might allow more women to participate. We discussed my original plan to recruit fifteen women and agreed that given the recruitment difficulties I had experienced, eight women might be more manageable in the time available⁴. When I was contacted by women who did not meet all of my study criteria, we wondered whether I could ask these women to review my findings and comment

on the reliability and validity of my interpretations. This was in keeping with my desire to give more women the opportunity to share their experiences.

Engagement: journeying through Wonderland

As Alice travels through Wonderland she encounters lots of different characters. She is dismayed to find that some are more reluctant to engage in conversation:

"'Please come back and finish your story!' Alice called after [the Mouse]; and the others all joined in chorus, 'Yes please do!' but the Mouse only shook its head impatiently, and walked a little quicker."¹ (p. 29)

Women who experience anorexia may be more reluctant to engage with research because of previous negative experiences of health services⁵. I wondered how I might help women to share their experiences in a positive and meaningful way. When Alice approaches the Mouse she reassures him that she merely wants to hear his story:

"So [Alice] called softly after it, 'Mouse dear! Do come back again, and we won't talk about cats or dogs either, if you don't like them!' When the Mouse heard this, it turned round and... said in a low trembling voice, 'Let us get to the shore, and then I'll tell you my history, and you'll understand why it is I hate cats and dogs'"¹ (p. 20-21)

A key finding of this study was that many women choose to keep their eating disorder experiences secret from family and friends. Perhaps this is preferable to feeling judged and blamed by people who misunderstand their difficulties⁶. I recognised women's previous negative experiences and worked hard to remain curious to their stories. As Alice continues to meet new characters she too finds that a sense of curiosity helps her to understand unfamiliar surroundings, exclaiming "curiouser and curiouser!... now I'm opening out like the largest telescope that ever was!" (p.11)¹:

I encouraged women to share their stories with me by using appropriate language and taking time to build rapport and trust⁷. Some women felt that the term 'anorexia' was not reflective of their difficulties. They preferred to use other terms, such as 'eating problems' instead. Equipped with a greater understanding of Wonderland and a healthy sense of curiosity, Alice learns to approach new characters more cautiously:

"This here young lady', said the Gryphon, 'she wants for to know your history, she do'. 'I'll tell it her', said the Mock Turtle in a deep, hollow tone: 'sit down, both of you, and don't speak a word till I've finished."¹ (p. 104)

Like Alice, I appreciated how these women took the time to share their stories with me. I found it was helpful to take a 'one down' position⁷ and allow women the opportunity to discuss their experiences in a way which made most sense for them. For example, as data collection continued I adjusted my interview schedule to give women time to speak and tried not to move through my questions too quickly. Women told me that my initial questions were daunting so following discussions with my academic supervisor I broke my questions down and responded to feedback from the women I met. It was more difficult to ascertain how the woman who was interviewed by telephone responded to my questions. I realised the importance of non-verbal behaviours such as eye contact and smiling in the process of telling and understanding stories.

Analysis: finding a way back home

After some time spent exploring Wonderland, Alice decides she wants to go home. However she finds herself lost and any attempts to help her find a way out are quickly swept away. She is relieved to finally find a path out of the woods:

"Oh dear, it's getting dreadfully dark, and nothing looks familiar... it would be so nice if something would make sense for a change... A path! Oh thank goodness! I just knew I'd find one sooner or later..."⁸ The process of data analysis was similarly overwhelming. Over time I began to make connections between codes and sort them into categories. I started to see how all the data I had collected fitted together. Grounded theories are designed to be supported by quotations taken directly from the data, enhancing the validity of the theory rather than relying on predetermined hypotheses⁹. However my interpretations may be different to other researchers, making the findings difficult to generalise. I attempted to overcome this by asking another trainee to code my transcripts and comparing the results, and asked women with experience of anorexia to check my findings. A larger sample might have enhanced the reliability of the findings and increased the likelihood of data saturation.

Power: Questioning the Queen's authority

When Alice encounters the Red Queen, she finds she is a controlling character whose rules are followed without question by her subjects. Alice's newfound curiosity and attempts to question the dominant narratives of Wonderland are quickly challenged:

"Red Queen: 'Now, where do you come from?' Alice: 'Well, I'm trying to find my way home...' Red Queen: 'Your way? All ways here are my ways!' Alice: 'Yes, I know, but I was just thinking...' Red Queen: 'Curtsy while you're thinking. It saves time.""² (p. 95)

The Red Queen is strong, commanding and discourages original thinking. I wondered about the power of the medical discourse in eating disorders and how it too is frequently unchallenged. Many of the studies contained in my literature review frequently referred to the diagnostic criteria for anorexia. Perhaps these discourses force women into an 'anorexic' role by focusing exclusively on the diagnostic characteristics of an eating disorder, including low body weight and the behaviours women use to rid their bodies of excess calories¹⁰. The women I met did not align themselves with this definition despite acknowledging that they experienced significant eating difficulties. I wondered how useful the medical

definition of anorexia was for these women, and whether there was an alternative perspective which might help them to communicate their difficulties.

Making space for new stories: Believing in the impossible

Alice's time in Wonderland allows her the space to question the things she thought were certain. However for Alice, who is accustomed to following rules, the opportunity to challenge and question authority is unfamiliar and takes time to develop:

"Alice laughed. 'There's no use trying', she said, 'one *can't* believe impossible things'. 'I daresay you haven't had much practice', said the Queen. 'When I was your age, I always did it for half an hour a day. Why, sometimes I've believed as many as six impossible things before breakfast...'"² (p. 72)

With practice, Alice learns to open her mind to new, equally valid perspectives. I hoped that my research might give power to new stories and challenge the dominant narratives around eating disorders. For example, I noticed that the process of recovery meant different things to different women. Whilst some women hoped to eliminate anorexia from their lives, others accepted that it might continue to influence them despite their new role as mothers. I hoped that by sharing these stories I could help to create a new narrative of what it is like to be a mother living with anorexia, emphasising determination and resilience.

In Western society many women report greater pressure to remain thin in order to be perceived as successful and in control¹¹. I wondered whether women who experience eating disorders feel under pressure to embrace typical feminine roles of affection and nurturance when they have children. This is likely to be incompatible with the rigidity of eating disorder routines¹². I reflected on my position as a female researcher exploring a topic which has been socially constructed and reported as a major health problem amongst women, with the majority of research focused on women's experiences¹³ and gave thought to whether women responded differently to me as a female researcher. It is possible

that a female researcher interviewing female participants about experiences of anorexia reinforces the notion that this is difficulty is only experienced by women.

Language: Same words, new meanings

Alice is confused by the language of Wonderland. She soon realises that she is not the only person who has difficulty making sense of what she hears:

"Speak English!' said the Eaglet. 'I don't know the meaning of half those long words, and what's more, I don't believe you do either!"¹ (p. 24)

The characters of Wonderland chastise one another for using incomprehensible language. I connected this to the diagnostic language of eating disorders and wondered how relevant this language is for women who experience eating difficulties. The term 'anorexia nervosa', meaning "nervous loss of appetite", doesn't seem to adequately acknowledge the uniqueness of women's experiences. By virtue of becoming pregnant, my participants defied the diagnostic criteria of anorexia¹⁴. Indeed, the women I met with rarely referred to feelings of hunger; rather they explained how negative thinking and low self-esteem contributed to the development and maintenance of their eating difficulties.

A diagnosis of anorexia was one of the inclusion criteria for my sample. I found that using a medical diagnosis helped me more in my conversations with health professionals than with the women I met. I wondered if this diagnosis ignores the context in which eating difficulties develop¹³. The term 'anorexia' implies a homogeneous group of women who share a set of characteristics. However there seemed to be as many differences as similarities between the women I met. Whilst using a medical diagnosis helped bring consistency to my sample and enabled me to communicate effectively with health professionals, I feel it also reinforces the medical discourse around anorexia at the expense of other explanations.

Methodological critique

As Alice travels further into Wonderland she becomes less clear of her own identity. Before she fell down the rabbit hole she was certain of who she was and what she knew. Now as she prepares to leave Wonderland, she finds that her role is changing:

"Who are *you*?' said the Caterpillar... Alice replied, rather shyly, 'I- I hardly know, sir, just at present – at least I know who I *was* when I got up this morning, but I think I must have changed several times since then'. 'What do you mean by that?' said the Caterpillar sternly. 'I'm afraid I can't put it more clearly', Alice replied very politely... 'being so many different sizes in a day is very confusing.'"¹ (p. 45)

My roles as a researcher and clinician frequently conflicted. As a researcher I wanted to collect interesting data, but as a clinician I saw the women I met as individuals in various stages of recovery. My researcher role helped me to plan my research and design my interview schedule, but my clinical skills were most important in engaging women, supporting them through their distress and recognising when to raise concerns with the professionals involved in their care. I wondered whether my decision to interview the majority of my sample in a traditional therapeutic setting impacted on the women I met, whether this placed me in a powerful position, and whether women might have concerns about confidentiality. I was mindful of this as I continued to meet women in various NHS and community settings.

The teams I worked with suggested that I should recruit women who would give a positive account of their experience of services. We discussed the ethical implications of this and decided that women should be offered the opportunity to participate regardless of their experiences but that care co-ordinators would be consulted if there were any concerns about risk. Women were not permitted to participate in the study if they had current psychiatric difficulties such as severe depression or suicidal ideation. Whilst these experiences were considered equally valuable, it was felt that it might be inappropriate for these women to participate without access to more intensive support. Psychologists should make every effort to ensure that individuals do not participate in research that might expose them to harm¹⁵. For a time limited piece of academic research, the risks of including women with more severe psychological difficulties appeared to outweigh any potential benefits. Whilst I took care to debrief women and discussed any concerns with my clinical supervisor, I valued all the stories I heard and wanted to give women the opportunity to share them.

A key characteristic of grounded theory studies is that the literature review is delayed until the grounded theory has developed, to allow the researcher to remain grounded in the data and not be influenced by prior literature or their own preconceptions¹⁶. Unfortunately the need to present information about the study for peer and ethical approval, coupled with the time limited nature of this research, meant that it was necessary to complete a literature review prior to commencing the study. A reflexive journal was maintained as a means of managing the researcher's assumptions, and any preconceptions were discussed in supervision.

Qualitative vs. quantitative research

Alice meets the White Queen, who quickly exposes her lack of mathematical prowess:

"'Can you do addition?' the White Queen asked. 'What's one and one?' 'I don't know', said Alice. 'I lost count.'"² (p. 26)

I have a preference for qualitative research and am interested in the language people use to describe their experiences. Grounded theories aim to describe and explain a process experienced by a specific group of people. I felt this approach matched my desire to focus on the lived experience of the transition to motherhood⁹. I aimed to take a position of reflective observer and allow the women I met to be the experts in their own stories¹⁷. I felt that this fitted with a critical realist approach to grounded theory¹⁸ as I aimed for saturation but could not determine conclusively in the time available that I had achieved this.

I considered the benefits of other methodological approaches. A narrative methodology might consider how women construct their experiences of living with an eating disorder. It would be helpful to compare these stories with mothers without experience of eating disorders. It might be useful to include standardised questionnaires exploring eating disorder types and experiences of motherhood to enhance the reliability and validity of the findings. Whilst this contradicts my earlier thoughts about the helpfulness of the term 'anorexia', I appreciate that to influence services and health professionals, it might be necessary to use standardised measures and terms.

Reflexivity: through the looking glass

Throughout her time in Wonderland Alice is forced to challenge her beliefs about the world. As she is exposed to experiences that she previously thought were impossible, the Unicorn reminds her to always remain open to new opportunities, saying "well, now that we have seen each other... if you'll believe in me, I'll believe in you'" (p. 86)²:

My personal experience of living with an eating disorder helped me to identify with some of the concerns women highlighted. I shared their belief that recovery is a process of change and managing uncertainty. I wanted to use my position as a trainee clinical psychologist to share women's stories and make a positive difference by helping health professionals to understand their experiences. I was reminded of how much I could still learn from these women, like Alice, who is reminded by the Duchess that she too knows less than she thinks:

"I didn't know Cheshire cats always grinned; in fact, I didn't know that cats *could* grin.' 'They all can', said the Duchess; 'and most of 'em do.' 'I don't know of any that do,' Alice said very politely... 'You don't know very much', said the Duchess, 'and that's a fact."¹ (p. 61-62)

In Wonderland, Alice's encounters remind her not to make assumptions. In order to become more aware of my own assumptions, I used supervision and maintained a reflective journal. This helped me to consider how my personal and professional experiences might impact on data interpretation. Whilst the research process was frequently challenging, these experiences helped me to become a more reflective practitioner and have shaped the clinician I have become.

After some time in Wonderland, Alice begins to question her identity and wonders if she has irreversibly changed:

"Yesterday things went on just as usual. I wonder if I've been changed in the night? Let me think; was I the same when I got up this morning?... But if I'm not the same, the next question is, Who in the world am I? Ah, *that's* the great puzzle!"¹ (p. 14)

Throughout clinical training I have learned to challenge my beliefs and embrace a new position of uncertainty. My specialist systemic placement helped me to be more considerate of the role of family, attachment and the life cycle in the development of eating disorders. When Alice meets the Caterpillar she is uncertain about who she is and what she needs to do to continue through Wonderland. The Caterpillar wonders who Alice would like to become and offers her the opportunity to grow. He uses difficult questions to challenge Alice's assumptions and help her to see that change can be positive and rewarding. Similarly my supervisor on placement helped me to become more curious and exposed me to new ways of working which influenced my interviewing style and the questions I asked of the women I met.

Learning points

"I give myself very good advice, but I very seldom follow it. That explains the trouble that I'm always in ... Be patient, is very good advice, but the waiting makes me curious. And I'd love the change, should something strange begin"⁸ I found the uncertainty of the research process challenging and uncomfortable. My usual proactive, organised approach was well suited to reviewing literature and designing my study. However I could not commence data analysis until I had begun to recruit participants. My anxiety around this was so difficult to manage that I avoided the problem rather than acknowledge that I might have to make significant changes. When I was unable to find eligible participants, my research seemed to grind to a halt. Alice experiences similar difficulties in Wonderland when she is unable to make sense of her surroundings. During this period she meets the Cheshire Cat in the woods. He helps her to understand the rules of Wonderland and accept her unfamiliar surroundings:

"Would you tell me, please, which way I ought to go from here?' said Alice. 'That depends a good deal on where you want to get to,' said the Cat. 'I don't much care where-' said Alice. 'Then it doesn't matter which way you go,' said the Cat. '-so long as I get somewhere,' Alice added as an explanation. 'Oh, you're sure to do that,' said the Cat, 'if you only walk long enough.'"¹ (p. 66-67)

The Cheshire Cat is honest yet optimistic. Alice continues to meet him throughout her journey despite him not providing her with the certainty she initially desires. Similarly my personal tutor helped me to consider more realistic ways to manage my anxiety and encouraged me to consult with clinicians from different services to overcome recruitment difficulties. Interestingly this was a parallel process as the women I met with spoke about managing the change and uncertainty of motherhood. I gradually learnt to accept the uncertainty of the research process and now try to seek support and supervision as soon as I encounter difficulties.

Conclusions

I have been privileged to be able to share the stories of these women. Elise discussed the challenges of motherhood honestly. Becky gave important context to her difficulties. Emma and her young son shared a warm, positive bond. Natasha showed courage when she described feeling "invaded" by her pregnancy. Chan spoke candidly about the attachments she formed with her children. Lacey demonstrated capacity to forgive herself. Sophie described how motherhood had offered new perspectives. Rachel's experiences of practical support helped guide the recommendations of paper 2. The women I met with reassured me of how important it is for other health professionals to understand these experiences. Their stories have changed the way I view the world and the beliefs I hold¹:

Alice laments: "It's no use going back to yesterday... because I was a different person then" (p. 115)¹. This research has been part of a transformative journey within which I have found an approach which is most comfortable for me. I have been exposed to new ways of working and have developed my skills as a clinician and a researcher. The personal and professional challenges I have overcome during my research journey represent some of the most important aspects of my clinical training.

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"Oh, I've had such a curious dream!' said Alice, and she told her sister, as well as she could remember them, all these strange Adventures of hers that you have just been reading about; and when she had finished, her sister kissed her, and said, 'It *was* a curious dream, dear, certainly: but now run in to your tea; it's getting late."¹ (p. 139)

References

- 1. Carroll L. Alice's Adventures in Wonderland. London: Puffin Classics; 2008.
- Carroll L. Through the Looking Glass and What Alice Found There. London: Puffin Classics; 2011.
- 3. NHS (2012). Anorexia nervosa: factsheet. Accessed on 11.11.2013 from http://www.nhs.uk/Conditions/Anorexia-nervosa/Pages/symptoms.aspx
- Turpin G, Barley V, Bealli N, Scaife J, Slade P, Smith J et al. Standards for research projects and thesis involving qualitative methods: suggested guidelines for trainees and courses. Clin Psych Forum 1997;108:3-7.
- Leavey G, Vallianatou C, Johnson-Sabine E, Rae S and Gunputh V. Psychosocial barriers to engagement with an eating disorder service: A qualitative analysis of failure to attend. Eat Disord 2011;9:425-40.
- Haley M. The prevalence of secrecy in eating disorders. Student dissertation [Online] Available from: http://www2.uwstout.edu/content/lib/thesis/2005/2005haleym.pdf [Accessed 6th November 2013].
- Walker, Cordery and Corstorphine. Tips to aid engagement with young people with eating disorders and their families. [Online factsheet]. Available from: https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved= 0CDwQFjAA&url=https%3A%2F%2Fwww.westsussex.gov.uk%2Fidoc.ashx%3 Fdocid%3Db8d6cd05-7568-4715-bff7-cb612445524a%26version%3D-1&ei=wbN6UsXILePy7AbxnIGACA&usg=AFQjCNHRYujI0Bwj5nFJBqEYB-7UNIsyDQ [Accessed 6th November 2013].
- Geronimi C, Jackson W and Luske H. Alice in Wonderland [Film]. USA: Walt Disney Productions; 1951.

- 9. Charmaz K. Constructing grounded theory: A practical guide through qualitative analysis. London: Sage; 2006.
- Eckermann L. Foucault, embodiment and gendered subjectivities: The case of voluntary self-starvation. In: Petersen A and Bunton R. (eds.) *Foucault, Health and Medicine*. London: Routledge; 1997. p. X-Y.
- 11.Bordo S. The body and the reproduction of femininity. In: Bordo, S. (ed.) *Unbearable weight: feminism, western culture and the body.* USA: University of California Press; 1993. p. X-Y.
- 12. Ravaldi C, Vannacci A, Bolognesi E, Mancini E, Faravelli C and Ricca V. Gender role, eating disorder symptoms and body image concern in ballet dancers. J Psychosom Res 2006;61:529-35.
- Botha D. Anorexia nervosa the female phenomenon: repositioning the males.
 Coun Psych and Health 2010;6:1-20.
- 14.O'Connor R and Esterik P. De-medicalising anorexia: a new cultural brokering. Anthro Today 2008;24:6-9.
- 15. British Psychological Society (2009). Ethical principles for conducting research with human participants. Retrieved from <u>http://dcp.bps.org.uk/documentdownload-area/document-download\$.cfm?file_uuid=F1C8E142-E935-EC00-75FD-519F1FDDEA5D</u>
- 16. Dunne C. The place of the literature review in grounded theory research. Int J Soc Res Method 2011;14:111-24.
- 17.Boston P. Systemic family therapy and the influence of post-modernism. Adv in Psych Treat 2000;6:450-7.
- 18. Strauss L and Corbin J. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. London: Sage; 1990.

Appendix A Data extraction sheet

Date of extraction: Title: Authors: Publication details: Reviewer name:

Background to the study:

Aims and objectives:

Sample characteristics:

Population

Setting

Method/design

Sample size

Age and ethnicity

Rate of attrition

Recruitment methods:

Procedure/interventions:

Results/findings:

Follow ups:

Commentary/notes:

Strengths and/or limitations

APPENDIX B

Internal consistency, test reliability and validity statistics for psychological outcome measures

Author(s) and year	Outcome measures	Measure details	Internal	Test retest	Validity
of publication			consistency	reliability	
Micali, Simonoff and	Denver	Self report measure	Not reported	Not reported	Not reported
Stahl	Development Scale	of child development			
	(DDS)	status			
(2011)	Crown Crisp		Not reported	Not reported	Not reported
	Experiential				
	Inventory (CCEI)				

	Edinburgh Postnatal		Not reported	Not reported	Not reported
	Depression Scale				
	(EPDS)				
	Eating Disorders		Not reported	Not reported	Not reported
	Examination				
	Questionnaire (EDE-				
	Q)				
Berg, Torgersen and	Hopkins Symptom	5 item version	Not reported	Considerable	Correlates highly
Von Holle	Checklist - 25 (HSC)	measuring anxiety		temporal stability	with the original
		and depression			scale (.92)

(2011)	Satisfaction with Life	5 item measure of	Reported "reliable"	Reported "valid"	Not reported
	Scale	life satisfaction			
		(cognitive			
		component)			
	Rosenberg Self	4 item version used	Not reported	Not reported	Not reported
	Esteem Scale	in eating disorder			
		research			

	Relationship	10 item scale of	Not reported	Not reported	Correlates highly
	Satisfaction Scale	satisfaction with			with the original 10
		partner relationship			item scale (.95)
					Correlates highly
					with Quality of
					Marriage Index
Reba-Harrelson,	Child Feeding	Measure parental	Not reported	Not reported	Not reported
Von Holle and	Questionnaire (CFQ	control in child			
Hamer	- restriction and	feeding			
	pressure to eat				
(2010)	subscales)				
	Child Behaviour	Child eating	Not reported	Not reported	Not reported
	Checklist (CBC)	problems and			
		psychological status			

Lai and Tang	Parental Image	Self report 15 item	Cronbach's alpha =	Reported	Predictive of child's
	Differential (Mother	measure of maternal	.78 to .88	"satisfactory"	life satisfaction and
(2008)	Treatment Scale)	concern,			academic
		restrictiveness and			competence
		warmth			
	Eating Disorders	Self report measure	Reported "good"	Not reported	Not reported
	Inventory 2 (EDI-2 –	of eating disturbance			
	Chinese version –				
	bulimia subscale)				
	General Health	A self report	Cronbach's alpha =	Not reported	Not reported
	Questionnaire	measure of maternal	.87 to .93		
	(GHQ)	distress			

Maternal Prenatal	Measures affectional	Cronbach's alpha =	Not reported	Predictive of
Attachment Scale	bond with foetus	.82 to .84		adjustment after
(MPAS)	during pregnancy			miscarriage
Maternal Adjustment	60 item self-report	.86	.84	Good comparisons
and Maternal	questionnaire			between the MAMA,
Attitude (MAMA)	measuring body			semi structured
questionnaire	image, somatic			interview and the
	symptoms, marital			Neonatal Perception
	relationships,			Inventory = good
	attitude to sex and			criterion validity
	attitude to pregnancy			
	and baby			
	Attachment Scale (MPAS) Maternal Adjustment and Maternal Attitude (MAMA)	Attachment Scale (MPAS)bond with foetus during pregnancyMaternal Adjustment60 item self-reportand MaternalquestionnaireAttitude (MAMA)measuring bodyquestionnaireimage, somaticsymptoms, maritalrelationships,attitude to sex andattitude to pregnancy	Attachment Scale (MPAS)bond with foetus during pregnancy.82 to .84Maternal Adjustment60 item self-report.86and Maternalquestionnaire.86Attitude (MAMA)measuring body.41questionnaireimage, somatic.41relationships, attitude to sex and.41attitude to pregnancyattitude to pregnancy	Attachment Scale (MPAS)bond with foetus during pregnancy.82 to .84Maternal Adjustment60 item self-report.86.84and Maternalquestionnaire.86.84Attitude (MAMA)measuring body.41.41questionnaireimage, somatic.41.41symptoms, maritalrelationships, attitude to sex and attitude to pregnancy.41

Crow et al.	Eating Disorders	Semi structured	Not reported	Not reported	Not reported
	Examination (EDE)	interview measure:			
(2008)		this study utilised	Interrater reliabilities:		
		EDE weight concern,	purging .99, eating		
		shape concern and	concerns .98,		
		restraint	restrained eating		
			.99, weight concerns		
			.90		
Berg, Bulik and Von	Hopkins Symptom	Short form 5 item	Not reported	Reported	Not reported
Holle	Checklist - 25 (HSC)	self report version of		considerable	
		anxiety and		temporal stability	
(2008)		depression			

Satisfaction with Life	5 item cognitive	Reported "reliable"	Reported "reliable"	Reported "valid
Scale	component of			measure of life
	subjective well-being			satisfaction"
Rosenberg Self	Short version 4	Not reported	Not reported	Correlates well with
Esteem Scale	items, widely used in			the original item
	ED research			scale (.95)
Relationship	10 item scale	Not reported	Not reported	Correlates highly
Satisfaction Scale				with Quality
				Marriage Index

Soares et al.	Eating Disorders	Self report version of	Not reported	Not reported	Validated in a
	Examination	the EDE			Portuguese sample
(2009)	Questionnaire (EDE-				in a previous study
	Q – Portuguese				
	version)				
	Primary Care	Assesses diagnoses	Not reported	Not reported	Not reported
	Evaluation of Mental	of lifetime mood			
	Disorders (PRIME-	disorders based on			
	MD)	DSM-IV criteria			
Micali, Simonoff and	Crown Crisp		Not reported	Not reported	Widely used
Treasure	Experiential				measure of anxiety
	Inventory (CCEI)				

Edinburgh Postnatal	Not reported	Not reported	Widely used self
Depression Scale			report measure of
(EPDS)			post natal
			depression
			Not reported
Eating Disorders	Not reported	Not reported	
Examination			
Questionnaire (EDE-			
Q – shape and			
weight concern			
subscales)			
	Depression Scale (EPDS) Eating Disorders Examination Questionnaire (EDE- Q – shape and weight concern	Depression Scale (EPDS) Eating Disorders Not reported Examination Questionnaire (EDE- Q – shape and Image: Concern	Depression Scale

EPDS, Edinburgh Postnatal Depression Scale⁶⁸; CCEI, Crown Crisp Experiential Inventory⁶⁹; EDE, Eating Disorders Examination⁷⁰; DDS, Denver Developmental Scale⁷¹; SWL, Satisfaction with Life scale⁷²; HSC, Hopkins Symptom Checklist⁷³; EDI-2, Eating Disorder Inventory 2⁷⁴; GHQ, General Health Questionnaire⁷⁵; MAMA, Maternal Adjustment and Maternal Attitude Questionnaire⁷⁶; RSES, Rosenberg Self Esteem

Scale⁷⁷; PRIME-MD, Primary Care Evaluation of Mental Disorders⁷⁸; CBC, Child Behaviour Checklist⁷⁹; CFQ, Child Feeding Questionnaire⁸⁰; MPAS, Maternal Prenatal Attachment Scale⁸¹; EDE-Q, Eating Disorders Examination Questionnaire⁸²; PID, Parental Image Differential⁸³; RSS, Relationship Satisfaction Scale⁸⁴ Interview schedule



South Staffordshire and Shropshire Healthcare NHS

NHS Foundation Trust

A Keele University Teaching Trust

Interview schedule

Time: 0-10 minutes

- Introducing researcher and the purpose of the interview ensuring the participant is comfortable, understands and signs consent form.
- Asking general questions about the participant (family, hobbies, etc)

Time: 10-50 minutes

I would like you to tell me a little about your eating disorder – how long have you had an eating disorder and what kind of symptoms do you experience?

I would like you to tell me how many children you have and how old they are?

What do you think/how do you feel about becoming a mother?

I would like you to tell me about your day to day life now as a mother?

Has that changed much over the past [five] years?

How does your life now compare to how life was before you were a mother?

Do you think becoming a mother was different because you have an eating disorder – if so how?

I would like you to tell me how you have managed your eating disorder since you had a child/children?

Were you worried about being a mother with anorexia?

Did you have any other concerns about motherhood and if so what were they?

How did you adjust to becoming a mother particularly with anorexia?

Have your eating patterns changed since you had a child?

What is the best thing about motherhood for you? What is the worst thing?

Has your life changed since you became a mother – if yes then how?

Time: 50-60 minutes

• Debriefing the participant on the nature of the study, asking for feedback on the interview, is the participant happy with the interview, answer any other questions they may have.

Probes	Eliciting further information
How did you feel about that? Can you tell me more about that? Do you have an example of when that happened? When did that happen? Where were you during that time? Where did it happen? What was your involvement in that situation?	Could you elaborate further on that? Could you give me some more detail about that? That's helpful. I'd appreciate if you could give me more detail. I'm beginning to get the picture: but some more examples might help. You said "xxxxx" – could you tell me what you meant by "xxxxx"? What you're saying now is very useful, and I want to make sure I understand it correctly, could you explain it further? What happened next?

APPENDIX D

Copies of approval documents



National Research Ethics Service

NRES Committee West Midlands - The Black Country

HRA NRES Centre Manchester 3rd Floor, Barlow House 4 Minshull Street Manchester M1 3DZ

Telephone: 0161 625 7821

17 April 2013

Miss Gemma O'Leary Trainee Clinical Psychologist South Staffordshire and Shropshire Healthcare NHS Foundation Trust School of Psychology (Faculty of Health Sciences) Leek Road Stoke on Trent, Staffordshire ST4 2DF

Dear Miss O'Leary

Study title:

REC reference: Protocol number: IRAS project ID: How do women experience and manage motherhood when they have a pre-existing diagnosis of anorexia nervosa? 13/WM/0119 N/A 107553

The Research Ethics Committee reviewed the above application at the meeting held on 08 April 2013. Thank you for attending to discuss the application.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the Co-ordinator Miss Shehnaz Ishaq via email at nrescommittee.westmidlands-blackcountry@nhs.net.

Ethical opinion

1. The Committee asked to explain the choice of the research topic. You explained that the

choice was based on your interest in the eating disorders and was linked to your previous experience of working in behavioural psychology.

2. The Committee asked to describe a recruitment process to be used in the study. You clarified that you will recruit mainly via eating disorder services in South Staffordshire and Shropshire (inpatients and outpatients). The recruitment packs will be distributed to inpatients by the clinical supervisor who will be approaching own work case patients. Other clinicians will get involved in the recruitment process by discussing the research with the outpatients who, if interested, will receive an information pack by post. Same process will apply with regard to participants recruited via the North and South Staffordshire perinatal health services where interested patients will receive a pack in a post.

Additionally, posters will be displayed in the baby units to facilitate the recruitment. All staff taking part in the recruitment process will receive the study training covering the protocol requirements including the inclusion and exclusion criteria. This training will be provided by yourself and will be delivered in a form of the power point presentations.

- 3. The Committee queried whether the sample size of fifteen participants will fulfil the requirements for a doctorate project. You explained that the sample size had been consulted with the university. You clarified that the minimum number of participants required by the grounded theory would be between three and four but assured the Committee that the final sample size would be adjusted in order to achieve data saturation point which may take more than fifteen participants to be recruited. The Committee advised to send out as many information packs as possible to see what the response rate would be and then to adjust the decisions on sample size.
- The Committee asked to explain the data storage arrangements. You confirmed that the study data will be encrypted and stored on a password protected laptop. You will ensure that the interviews' transcripts will not contain any identifiable data.
- The Committee noted that the interview schedule contains closed questions and that it would be advisable to change 'Could you tell me' questions into 'I would like you to tell me'. You thanked for the advice.
- The Committee noted that approaching the eating disorder population of patients might cause distress and asked if you had thought of that. You confirmed that you will anticipate anxiety around information disclosure issues.

The Committee advised using a reflective diary as a good way of addressing any arising issues which would add value to the data analysis and which content should be consulted with the supervisor. You agreed with the advice.

You was thanked for attending and left the meeting room.

The Committee considered your responses.

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, <u>subject to</u> <u>the conditions specified below</u>.

Ethical review of research sites

NHS Sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

- Please consider revising the Interview Schedule and change 'Could you tell me' questions into 'I would like you to tell me'.
- 2. You may wish to shorten the PILs to remove any repetition.

You must notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which can be made available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <u>http://www.rdforum.nhs.uk</u>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations

It is responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Covering Letter from Gemma O'Leary		06 March 2013
REC application		04 March 2013
Protocol	2	01 February 2013
Summary/Synopsis: Flowchart		01 January 2013
Investigator CV: Gemma O'Leary		01 January 2013
Investigator CV: Dr Alison Tweed		
Letter of invitation to participant	1	01 January 2013
Participant Information Sheet	2	01 January 2013
Participant Consent Form	1	01 January 2013
Information sheet and debrief	2	01 January 2013
GP/Consultant Information Sheets	1	01 January 2013
Interview Schedules/Topic Guides	1	01 January 2013
Covering letter summary findings for participants	1	01 January 2013
Advertisement: Poster for recruitment		01 January 2013
Advertisement: Beat recruitment screening questionnaire		01 January 2013
Advertisement: Beat recruitment information		01 January 2013
Letter from Sponsor from Dr Elizabeth Boath		21 January 2013
Evidence of insurance or indemnity		15 August 2012

Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document "After ethical review - guidance for researchers" gives detailed guidance

on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <u>http://www.hra.nhs.uk/hra-training/</u>

With the Committee's best wishes for the success of this project.

Yours sincerely

11 Emistore

On behalf of Dr Jeff Neilson Chair

Email: nrescommittee.westmidlands-blackcountry@nhs.net

Enclosures:

List of names and professions of members who were present at the meeting and those who submitted written comments

"After ethical review – guidance for researchers"

Ms Audrey Bright, South Staffordshire and Shropshire Healthcare NHS Foundation Trust Research and Development Block 7 St George's Hospital Corporation Street Stafford ST16 3AG Vish Unnithan School of Psychology Brindley Building Leek Road Stoke on Trent ST4 2DF

Copy to:

NRES Committee West Midlands - The Black Country

Attendance at Committee meeting on 08 April 2013

Committee Members:

Name	Profession	Present	Notes
Dr Joseph Arumainayagam	Consultant and Honorary Senior Clinical Lecturer in HIV and GUM	No	
Dr Nicola Erb	Consultant Rheumatologist	No	
Mrs Chris Bell	Lay Member	Yes	
Dr Jeff Neilson	Consultant Haematologist	Yes	
Dr Hilary Paniagua	Chair of the research ethics committee, School of Health and Wellbeing	Yes	
Mr Nanak Singh Sarhadi	Consultant Plastic Surgeon	Yes	
Dr Julian Sonksen	Consultant in Anaesthesia and Critical Care	No	
Reverend Mark Stobert	Hospital Chaplin	Yes	
Dr David Vallance	Clinical Biochemist	Yes	
Mrs Jennifer Walton	Retired Research Nurse	No	
Mrs Veronica A Wells	Lay Member	No	
Dr Tony Zalin	Expert Member	Yes	

Also in attendance:

Name	Position (or reason for attending)	
Ms Anna Sekula	Senior Co-ordinator	



National Research Ethics Service

NRES Committee West Midlands - The Black Country

HRA NRES Centre Manchester 3rd Floor, Barlow House 4 Minshull Street Manchester M1 3DZ

> Telephone: 0161 625 7821 Facsimile: 0161 625 7299

01 May 2013

Miss Gemma O'Leary Trainee Clinical Psychologist South Staffordshire and Shropshire Healthcare NHS Foundation Trust School of Psychology (Faculty of Health Sciences) Leek Road Stoke on Trent, Staffordshire ST4 2DF

Dear Miss O'Leary

REC reference:

Protocol number:

IRAS project ID:

Study title:

How do women experience and manage motherhood when they have a pre-existing diagnosis of anorexia nervosa? 13/WM/0119 N/A 107553

Thank you for your email of 30 April 2013. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 17 April 2013

Documents received

The documents received were as follows:

Document	Version	Date
Covering Letter		29 April 2013
Interview Schedules/Topic Guides	2	29 April 2013
Letter of invitation to participant	2	29 April 2013
Participant Information Sheet	3	29 April 2013

Approved documents

The final list of approved documentation for the study is therefore as follows:

Document	Version	Date
Advertisement	Poster for recruitment	01 January 2013
	Beat recruitment screening questionnaire	01 January 2013

A Research Ethics Committee established by the Health Research Authority

Advertisement	Beat recruitment Information	01 January 2013
Covering Letter	from Gemma O'Leary	06 March 2013
Covering Letter		29 April 2013
Evidence of insurance or indemnity		15 August 2012
GP/Consultant Information Sheets	1	01 January 2013
Interview Schedules/Topic Guides	2	29 April 2013
Investigator CV	Gemma O'Leary	01 January 2013
Investigator CV	Dr Allson Tweed	
Letter from Sponsor	from Dr Elizabeth Boath	21 January 2013
Letter of Invitation to participant	2	29 April 2013
Other: Covering letter summary findings for participants	1	01 January 2013
Other: Information sheet and debrief	2	01 January 2013
Participant Consent Form	1	01 January 2013
Participant Information Sheet	3	29 April 2013
Protocol	2	01 February 2013
REC application		04 March 2013
Summary/Synopsis	Flowchart	01 January 2013

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

13/WM/0119

Please quote this number on all correspondence

Yours sincerely

Miss Shehnaz Ishaq Committee Co-ordinator

E-mail: nrescommittee.westmidlands-blackcountry@nhs.net

Copy to: Ms Audrey Bright, South Staffordshire and Shropshire Healthcare NHS Foundation Trust Research and Development Block 7 St George's Hospital Corporation Street Stafford ST16 3AG

> Vish Unnithan School of Psychology Brindley Building Leek Road Stoke on Trent ST4 2DF

> > A Research Ethics Committee established by the Health Research Authority



Our Ref: AB/R239

12 June 2013

Research and Development Block 7 St George's Hospital Corporation Street STAFFORD ST16 3AG

Tel: (01785) 221168 Email: audrey.bright@sssft.nhs. uk

Mrs Gemma Worthington



Dear Gemma

Study title: The experience of being a mother with anorexia

We have considered your application for access to patients and staff from within this Trust in connection with the above study.

On behalf of the Trust the Lead Officer for Research Governance (Eleanor Bradley), and the Responsible Care Professionals within the Directorate have now satisfied themselves that the requirements for Research Governance, both Nationally and Locally, have been met and are happy to give approval for this study to take place in the Trust, with the following provisos:

- That all researchers coming into the Trust have been issued with either a letter of access or honorary contract by ourselves
- That you conform to the requirements laid out in the letters from the REC dated 1 May 2013 which prohibits any changes to the agreed protocol
- That you keep the Trust informed about the progress of the project at 6 monthly intervals
- If at any time details relating to the research project or researcher change, the R&D department must be informed.

Your research has been entered into the Trust database and will appear on the Trust website.

As part of the Research Governance framework it is important that the Trust are notified as to the outcome of your research and as such we will request feedback once the research has finished along with details of dissemination of your findings. You will be asked to provide a copy of the final report and receive an invitation to present final feedback via our research seminar series. To aid dissemination of findings, copies of final reports are placed on our Trust Website. To this end, please contact me towards the completion of the project to discuss the dissemination of findings across the Trust and a possible implementation plan. If I can help in any other way please do not hesitate to contact me.

Yours sincerely

Kim Thompson R&D Manager Cc Dr Felix Davies, Director of Psychological Services North Staffordshire Combined Healthcare NHS

NHS Trust

RESEARCH AND DEVELOPMENT DEPARTMENT Trust Headquarters Bellringer Road Trentham Stoke-on-Trent ST4 8HH Telephone: 01782 441687/651 Fax: 01782 441637

Email: r&d@northstaffs.nhs.uk

14 June 2013

Gemma O'Leary (now Worthington) South Staffordshire & Shropshire Healthcare NHSFT St George's Hospital Corporation Street Stafford ST16 34G

Dear Gemma

NHS-NHS Letter of Access for Research

This letter confirms your right of access to conduct the research project "How do women experience and manage motherhood when they have a pre-existing diagnosis of anorexia nervosa?" through North Staffordshire Combined Healthcare for the purpose, and on the terms and conditions set out below. This right of access commences on 14/06/2013 and ends on 01/04/2014 unless terminated earlier in accordance with the clauses below.

You have a right of access to conduct the above named research project as confirmed in writing in the letter of permission for research from this NHS organisation. Please note that you cannot start the research until the Principal Investigator for the research project has received a letter from us giving permission to conduct the project.

As an existing NHS employee you do not require an additional honorary research contract with this NHS organisation. We are satisfied that the research activities you will undertake in this NHS organisation are commensurate with the activities you undertake for your employer. Your employer is fully responsible for ensuring such checks as are necessary have been carried out, and as such have confirmed in writing to this NHS organisation that the necessary pre-engagement checks are in place in accordance with the role you plan to carry out in this organisation.

You are considered to be a legal visitor to North Staffordshire Combined Healthcare premises. You are not entitled to any form of payment or access to other benefits provided by this NHS organisation to employees and this letter does not give rise to any other relationship between you and this NHS organisation, in particular that of an employee.

Chairman: Mr. K. Jarrold Chief Executive: Ms. F. Myers Working to improve the health and welfare of local communities



R&D-CD-AD-006 Version 2.0 (31/03/2011) Page 1 of 3

North Staffordshire Combined Healthcare

NHS Trust

While undertaking research through North Staffordshire Combined Healthcare, you will remain accountable to your employer, South Staffordshire & Shropshire Healthcare NHSFT, but you are required to follow the reasonable instructions of Laurie Wrench, Research & Development Manager in this NHS organisation or those given on her behalf in relation to the terms of this right of access.

Where any third party claim is made, whether or not legal proceedings are issued, arising out of or in connection with your right of access, you are required to co-operate fully with any investigation by this NHS organisation in connection with any such claim and to give all such assistance as may reasonably be required regarding the conduct of any legal proceedings.

You must act in accordance with North Staffordshire Combined Healthcare policies and procedures, which are available to you upon request, and the Research Governance Framework.

You are required to co-operate with North Staffordshire Combined Healthcare in discharging its duties under the Health and Safety at Work Act 1974 and other health and safety legislation and to take reasonable care for the health and safety of yourself and others while on North Staffordshire Combined Healthcare premises. You must observe the same standards of care and propriety in dealing with patients, staff, visitors, equipment and premises as is expected of any other contract holder and you must act appropriately, responsibly and professionally at all times.

You are required to ensure that all information regarding patients or staff remains secure and strictly confidential at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice

(<u>http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf</u>) and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

You should ensure that, where you are issued with an identity or security card, a bleep number, email or library account, keys or protective clothing, these are returned upon termination of this arrangement. Please also ensure that while on the premises you wear an ID badge at all times, or are able to prove your identity if challenged. Please note that this NHS organisation accepts no responsibility for damage to or loss of personal property.

We may terminate your right to attend at any time either by giving seven days' written notice to you or immediately without any notice if you are in breach of any of the terms or conditions described in this letter or if you commit any act that we reasonably consider to amount to serious misconduct or to be disruptive and/or prejudicial to the interests and/or business of this NHS organisation or if you are convicted of any criminal offence. Your substantive employer is responsible for your conduct during this research project and may in the circumstances described above instigate disciplinary action against you.

Chairman: Mr. K. Jarrold Chief Executive: Ms. F. Myers Working to improve the health and welfare of local communities

R&D-CD-AD-006 Version 2.0 (31/03/2011) Page 2 of 3



North Staffordshire Combined Healthcare NHS

NHS Trust

North Staffordshire Combined Healthcare will not indemnify you against any liability incurred as a result of any breach of confidentiality or breach of the Data Protection Act 1998. Any breach of the Data Protection Act 1998 may result in legal action against you and/or your substantive employer.

If your current role or involvement in research changes, or if your circumstances change in relation to your health, criminal record, professional registration or any other aspect that may impact on your suitability to conduct research, you must inform your employer through their normal procedures. You must also inform your nominated manager in this NHS organisation.

Yours sincerely

L. Wrench

Laurie Wrench Clinical Audit/R&D Manager

> cc: HR Directorate at North Staffordshire Combined Healthcare NHS Trust Sue Garvey, HR Manager, Bucknall Hospital, Eaves Lane, Bucknall, Stoke-on-Trent ST2 8LD

HR Department of the Substantive Employer: Audrey Bright, RGF, SSSFT, St George's Hospital, Stafford, ST16 3AG

Chairman: Mr. K. Jarrold Chief Executive: Ms. F. Myers Working to improve the health and welfare of local communities



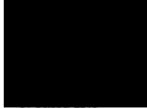
R&D-CD-AD-006 Version 2.0 (31/03/2011) Page 3 of 3



Research & Innovation Suite O Radclyffe House 66/68 Hagley Road Edgbaston Birmingham B16 8PF

Tel: 0121 301 4327 Fax: 0121 301 4340

Miss Gemma Worthington



Dear Gemma

The experience of being a mother with anorexia nervosa

Letter of access for research

As an existing NHS employee you do not require an additional honorary research contract with this NHS organisation. We are satisfied that the research activities that you will undertake in this NHS organisation are commensurate with the activities you undertake for your employer. Your employer is fully responsible for ensuring such checks as are necessary have been carried out. Your employer has comfirmed in writing to this NHS organisation that the necessary pre-engagement check are in place in accordance with the role you plan to carry out in this organisation. This letter confirms your right of access to conduct research through **Birmingham & Solihuil Mental Health Foundation Trust** for the purpose and on the terms and conditions set out below. This right of access commences on 31 **October 2013** and ends on 30 **April 2014** unless terminated earlier in accordance with the clauses below.

You have a right of access to conduct such research as confirmed in writing in the letter of permission for research from this NHS organisation. Please note that you cannot start the research until the Principal Investigator for the research project has received a letter from us giving permission to conduct the project.

You are considered to be a legal visitor to Birmingham & Solihuli Mental Health Foundation Trust premises. You are not entitled to any form of payment or access to other benefits provided by this organisation to employees and this letter does not give rise to any other relationship between you and this NHS organisation, in particular that of an employee.

While undertaking research through Birmingham & Solihuli Mental Health Foundation Trust, you will remain accountable to your employer, but you are required to follow the reasonable instructions of your nominated manager Dr Paul McDonald, Research & Innovation Manager In this NHS organisation or those given on her/his behalf in relation to the terms of this right of access.

NHS to NHS letter of access: for NHS researchers who have a substantive NHS contract of employment or clinical academics with an honorary clinical contract with an NHS organisation Version 2.1, September 2010 Research in the NHS: HR Good Practice Resource Pack Page

Page 1 of 3



Birmingham and Solihull

Mental Health NHS Foundation Trust

Where any third party claim is made, whether or not legal proceedings are issued, arising out of or in connection with your right of access, you are required to co-operate fully with any investigation by this NHS organisation in connection with any such claim and to give all such assistance as may reasonably be required regarding the conduct of any legal proceedings.

You must act in accordance with Birmingham & Solihuli Mental Health Foundation Trust policies and procedures, which are available to you upon request, and the Research Governance Framework.

You are required to co-operate with Birmingham & Solihuli Mental Health Foundation Trust in discharging its duties under the Health and Safety at Work etc Act 1974 and other health and safety legislation and to take reasonable care for the health and safety of yourself and others while on Birmingham & Solihuli Mental Health Foundation Trust premises. Although you are not a contract holder, you must observe the same standards of care and propriety in dealing with patients, staff, visitors, equipment and premises as is expected of a contract holder and you must act appropriately, responsibly and professionally at all times.

You are required to ensure that all information regarding patients or staff remains secure and strictly confident/al at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (<u>http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf</u>) and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

Birmingham & Solihuli Mental Health Foundation Trust will not indemnify you against any liability incurred as a result of any breach of conidentiality or breach of the Data Protection Act 1998. Any breach of the Data Protection Act 1998 may result in legal action against you and/or your substantive employer.

You should ensure that, where you are issued with an identity or security card, a bleep number, email or library account, keys or protective clothing, these are returned upon termination of this arrangement. Please also ensure that while on the premises you wear your ID badge at all times, or are able to prove your identity if challenged. Please note that this NHS organisation accepts no responsibility for damage to or loss of personal property.

We may terminate your right to attend at any time either by giving seven days' written notice to you or immediately without any notice if you are in breach of any of the terms or conditions described in this letter or if you commit any act that we reasonably consider to amount to serious misconduct or to be disruptive and/or prejudicial to the interests and/or business of this NHS organisation or if you are convicted of any oriminal offence. Where applicable, your substantive employer will initiate your independent Safeguarding Authority (ISA) registration in-line with the phasing strategy adopted within the NHS and the applicable legislation. Once you are ISA-registered, your employer will continue to monitor your ISA registration status via the on-line ISA service. Should you cease to be ISA-registered, this letter of access is immediately terminated. Your substantive employer will immediately withdraw you from undertaking this or any other regulated activity and you MUST stop undertaking any regulated activity.

Your substantive employer is responsible for your conduct during this research project and may in the circumstances described above instigate disciplinary action against you.

NHS to NHS letter of access: for NHS researchers who have a substantive NHS contract of employment or clinical academics with an honorary clinical contract with an NHS organisation Version 2.1, September 2010 Research in the NHS: HR Good Practice Resource Pack Pa

Page 2 of 3



If your circumstances change in relation to your health, criminal record, professional registration or ISA registration, or any other aspect that may impact on your suitability to conduct research, or your role in research changes, you must inform the NHS organisation that employs you through its normal procedures. You must also inform your nominated manager in this NHS organisation.

Yours sincerely

Dr Paul McDonald Research & Innovation Manager

NHS to NHS letter of access: for NHS researchers who have a substantive NHS contract of employment or clinical academics with an honorary clinical contract with an NHS organisation Version 2.1, September 2010 Research in the NHS: HR Good Practice Resource Pack Pag



31 July 2013

Dr Elizabeth Boath School of Social Work and Public Health Brindley Building Staffordshire University Leek Road Stoke on Trent ST4 2DF

Dear Liz,

I write to formally make you aware of an amendment to my research project, which was originally given favourable ethical approval by Staffordshire University Independent Peer Review in January 2013 and by Black Country Research Ethics Committee in April 2013. I have added a new recruitment site to my project, a Derbyshire based eating disorders charity called First Steps. My contact at this site, Catherine Cleary, is CEO of the charity and has agreed to circulate information about my study to service users. The procedure I will follow at this site will be the same as other non NHS sites as already detailed in my research proposal. I have contacted the Black Country Research Ethics Committee who advised that I do not need to inform them of any additional NHS or non NHS recruitment sites, but that I do need to make the sponsor aware of the changes.

Thank you for signing my amended Research and Development form on behalf of the University.

If you have any queries or concerns please do not hesitate to contact me.

Best wishes

Gemma O'Leary Trainee Clinical Psychologist Staffordshire University

CC Audrey Bright, Research Governance Facilitator, South Staffordshire and Shropshire NHS Healthcare Foundation Trust

31 October 2013

Dr Elizabeth Boath School of Social Work and Public Health Brindley Building Staffordshire University Leek Road Stoke on Trent ST4 2DF

Dear Liz,

I write to formally make you aware of some amendments to my research project, which was originally given favourable ethical approval by Staffordshire University Independent Peer Review in January 2013 and by Black Country Research Ethics Committee in April 2013.

I have added several new recruitment sites to my project:

- Beat: Beat, the national eating disorder charity has already been assisting me with recruitment by advertising my study on the 'research' section of their website. However my contact at Beat, Jonathan Kelly (Research Officer) has since given permission for me to share the link to this website via social media.
- Somerset and Wessex Eating Disorder Association (SWEDA): SWEDA do not directly link service users and researchers but their Client Services Manager, Anita Worcester has agreed to advertise my study on the 'research' section of their website.
- SEED Eating Disorder Support Services: SEED is based in Hull. My contact Marg Oates, Secretary and Co-Founder of SEED has agreed to circulate information about my study to service users who can contact me directly if they are interested in taking part.

The procedure I will follow at these sites will be the same as other non NHS sites as already detailed in my research proposal. I have contacted the Black Country Research Ethics Committee who advised that I do not need to inform them of any additional NHS or non NHS recruitment sites, but that I do need to make the sponsor aware of the changes.

Thank you for signing my amended Research and Development form on behalf of the University.

If you have any queries or concerns please do not hesitate to contact me.

Best wishes

Gemma O'Leary Trainee Clinical Psychologist Staffordshire University

CC Audrey Bright, Research Governance Facilitator, South Staffordshire and Shropshire NHS Healthcare Foundation Trust

APPENDIX E

Invitation letter to participants



South Staffordshire and Shropshire Healthcare

NHS Foundation Trust

A Keele University Teaching Trust

NHS address Line 1 Line 2 Postcode

Our ref: GO'L NHS Number: 123 456 7890 Date

In Confidence

Name Address line 1 Address line 2 Town Postcode

Dear

You are invited to participate in research taking place at [place here]. We are making contact with women with anorexia nervosa who have had a child within the past five years to find out more about their experiences. Participation in the study will involve an informal interview, approximately one hour in length, conducted by a trainee clinical psychologist. Participation is entirely voluntary and will not impact on other aspects of your care. If you may be interested in participating, please fill in the reply slip below, detach and return to [place here] using the stamped addressed envelope provided. You will be contacted by the researcher, Gemma O'Leary, by telephone to arrange a convenient time, date and venue for your interview.

Kind regards

[Name here] [Position and location]

Please detach and return the reply slip below using the stamped addressed envelope provided

Name (print) Telephone number

(*Please tick to indicate your preference*) I **may be** interested in taking part in the research

I am not interested in taking part in the research

Signature

APPENDIX F

Online recruitment information



South Staffordshire and Shropshire Healthcare

A Keele University Teaching Trust

The experience of being a mother with anorexia

My name is Gemma O'Leary and I am a trainee clinical psychologist at Staffordshire University. I am currently conducting a study looking at the experiences of motherhood for women with anorexia nervosa. In order to carry out this study I would like to interview women with a pre-existing diagnosis of anorexia nervosa who have young children.

By taking part in this research you will be providing useful and valuable information and the experience of having anorexia and being a mother. This evidence will help researchers and health professionals to better understand your experiences and improve the way they work with women who have experienced anorexia nervosa and now have young children of their own.

To be eligible to take part you must:

- Be aged over 18 years
- Have been given a diagnosis of anorexia nervosa by a psychiatrist in the past
- Have had a child within the past five years
- Be currently engaged in treatment if you experience any other psychological difficulties such as low mood or anxiety

This study involves a semi-structured interview which will last approximately 1 hour. The interview will be one to one and focus on your experiences of having anorexia nervosa and being a mother. If you live locally (in South Staffordshire, North Staffordshire or Shropshire) you have the option of being interviewed at a local community venue, such as a library or health centre, or you can complete your interview over the telephone if you prefer. If you do not live locally your interview will be completed over the telephone.

If you are interested in taking part and would like some further information please contact the researcher at <u>ow002426@student.staffs.ac.uk</u>.

This study has been approved by Staffordshire University Ethics Committee and by the Black Country NHS Research Ethics Committee.

Thank you for reading this information. Without you, this type of research would not be possible.

APPENDIX G

Online recruitment screening questionnaire



South Staffordshire and Shropshire Healthcare

NHS Foundation Trust

A Keele University Teaching Trust

Screening questionnaire for participants recruited online

		Yes	No
•	Is English your first language or would you require the assistance of an interpreter in order to complete the interview?		
•	Have you been diagnosed with anorexia nervosa by a psychiatrist?		
•	Have you had a child within the past five years?		
•	Are you aged over 18?		
•	Are you currently experiencing any psychological difficulties (i.e. low mood, anxiety)? Are you receiving support or treatment in relation to these difficulties?		
•	Are you currently experiencing severe psychiatric difficulties such as suicidal ideation or hallucinations?		

Information sheet



South Staffordshire and Shropshire Healthcare NHS Foundation Trust

A Keele University Teaching Trust

The experience of being a mother with anorexia nervosa

Participant information sheet

Part 1: Purpose of the study

Why have I been chosen to participate in this study?

My name is Gemma O'Leary and I am a trainee clinical psychologist. I am studying at Staffordshire University and completing a piece of research as part of my doctorate. I am interesting in finding out more about the experience of motherhood for women with anorexia nervosa. I am focusing specifically on women who have had a child within the past five years.

What will participation involve?

You will complete a face to face interview. The interview will be informal, allowing us to discuss your experiences at length if you are happy to do so (although there is no obligation to do this). There is a list of core topics to be covered which are related to your experiences of motherhood.

You will complete <u>one</u> interview at a venue convenient to you.

It is up to you whether you would like to take part in the study. Participation is entirely voluntary and your decision will not impact on any aspect of your usual health care. You are free to withdraw at any time during the study.

Interviews will be tape recorded. Only myself, my project supervisor Dr Kierron Worley (Clinical Psychologist, Staffordshire and Shropshire Eating Disorders service) and academic supervisor Dr Alison Tweed (Clinical Psychologist, Staffordshire University), will listen to the tape recording of the interview. You can review a copy of your interview in written form before the data is analysed.

How long will participation take?

The whole interview usually lasts no longer than one hour.

Confidentiality

Yes. All information about you will be handled in confidence.

However your responses are anonymous but <u>not</u> confidential. This means whilst no identifiable information (e.g. names) will be used anywhere in the study, any response you do give during your interview will be read by my clinical and academic supervisors, and if the study is published in an academic journal, other people will also be able to read your responses. This may include direct quotes. You will be assigned a number which will be used in place of your real identity for the remainder of the study. Any identifying information about you (such as family names) will be changed.

An audio recorder will be used to record the interview. Afterwards a written transcript will be produced. This is a written record of what was said during the interview, produced using the audio recording. After the study has been completed, the audio recording of the interview will be deleted and no other copy will remain. The written transcript will not include information which could be used to identify you.

Risks and benefits

It is possible that discussing your experiences may cause you to feel upset. If any questions make you feel uncomfortable or upset you do not have to answer them. Please let me know and we will move on to the next question.

Your GP or consultant will be made aware of your participation in this study. However they will not be informed of specific responses you give during the interview. If you are concerned about this please let me know. If you become distressed I may contact a member of the health care team for assistance. I will discuss this with you if this situation arises.

If you disclose information which indicates to me that you or someone else might be at risk of harm, I will need to contact a member of the health care team for assistance. I will need to inform your GP about any disclosures related to risk.

Although there are no guarantees that the study will help you, the information you provide will help health professionals to understand the experience of motherhood for women with anorexia.

If the information in Part 1 has interested you and you are considering participating, please read the additional information in Part 2 before making any decision.

Part 2: Information about the conduct of the study

What happens if I wish to withdraw from the study?

It is up to you whether you would like to take part in the study. Participation is entirely voluntary and your decision will not impact on any aspect of your usual health care. If you wish to withdraw from the study at any point during your interview you can do so immediately by telling me you no longer wish to take part. If you wish to withdraw from the study after you have completed your interview you can do so by contacting me by email at ow002426@student.staffs.ac.uk or by contacting my clinical supervisor Dr Kierron Worley on 01785 221 331 (South Staffordshire Eating Disorders Service). You are free to withdraw at any time

during the study. However unless you state otherwise, any responses you have already given will be used in the study, anonymously.

What if I have concerns about the study or would like to make a complaint?

If you have any concerns about any aspect of the study, you should ask to speak to Dr Alison Tweed, Academic Supervisor on 01782 294007. If you remain unhappy and wish to complain formally, you can do this by contacting the Patient Advice and Liaison Service on 01785 783028.

In the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against South Staffordshire and Shropshire Healthcare NHS Foundation Trust but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you (if appropriate).

How will my participation remain confidential?

Identifiable information is not necessary and therefore will not be used. Data will be stored in a locked cabinet in the offices of South Staffordshire and Shropshire Eating Disorers Service when it is not in use. Only I, Dr Kierron Worley (Clinical Psychologist, South Staffordshire and Shropshire Eating Disorders service) and Dr Alison Tweed (Clinical Psychologist, Staffordshire University) will have access to the data. Audio records will be deleted after the study is completed in July 2014. Paper transcripts must be kept for a minimum of ten years on the premises of Staffordshire University, in a locked cabinet, but will contain no identifiable information.

What will happen to the results of the study?

It is hoped that the results of the study will help health professionals to support women with anorexia who have children.

A report will be prepared based on the findings of this study which will be submitted to Staffordshire University as part of my doctoral thesis. A summary of the overall findings will be prepared and sent by post to each participant after the study is complete.

The results of the study may be published and will be shared amongst other health professionals. Direct quotes will be included, although identifiable information will not be used – participant numbers will be used in place of names. If you are concerned about this please let me know.

Who is organising the research?

I am completing this research as part of a doctorate course at Staffordshire University. The study is sponsored by Staffordshire University.

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Black Country Research Ethics Committee.

Further information and contact details:

If you would like general information about research please feel free to speak with me at any time during the study. I am available at ow002426@student.staffs.ac.uk. If you would like specific information about this study, please feel free to speak with me at any time.

For advice as to whether or not you should participate, please feel free to speak to others, including your health professionals, alternatively you can speak to Dr Kierron Worley, Clinical Supervisor by calling 01785 221 331. If you would like an independent source of advice you can also contact the Patient Advice and Liaison Service on 01785 783028.

If you are unhappy with the study please approach Dr Alison Tweed by calling 01782 294007.

APPENDIX I

Consent form



South Staffordshire and Shropshire Healthcare NHS Foundation Trust

A Keele University Teaching Trust

Patient identification number: Title of project: Becoming a mother with anorexia nervosa Name of researcher: Gemma O'Leary

CONSENT FORM

Please initial box

- 1. I confirm that I have read and understand the information sheet dated (version 3/April 2013) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- 1.
- 2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.
- I understand that relevant sections of the data collected during the study may be looked at by Gemma O'Leary, Dr Kierron Worley (Clinical Supervisor) and Dr Alison Tweed (Academic Supervisor). I give my permission for these individuals to have access to my data.
- 4. Interviews will be recorded and I can request a copy of my interview in written form to review before the data is analysed (see below)
- 5. I understand that data collected during the study may be looked at by individuals from regulatory authorities or from the NHS trust where it is relevant to my taking part in this research. My GP/consultant will be made aware of my participation and will be informed if I become distressed during the interview. I give permission for these individuals to access my data.
- 6. I understand that any data I give, including direct quotations, may be used in any publications which arise from this study, and that the data will be used anonymously
- 7. I agree to take part in the above study



L			

Name of person taking DateSignatureconsentWhen completed: 1 for participant; 1 for researcher site file; 1 (original) to be kept

in medical notes.

APPENDIX J

GP information letter



South Staffordshire and Shropshire Healthcare NHS

NHS Foundation Trust

A Keele University Teaching Trust

NHS address Line 1 Line 2 Postcode

Our ref: GO'L NHS Number: 123 456 7890

Date

In Confidence

GP/Consultant name Address line 1 Address line 2 Town Postcode

Dear

Re: Participant name

Participant DOB Participant address

The above patient has been recruited to participate in a piece of research entitled "The experience of being a mother with anorexia nervosa" for which they will complete a one to one semi structured interview with a researcher registered with Staffordshire University. This study is taking place following NHS ethical approval by [name here] Research Ethics Committee and the Research and Development department of [name here]. South Staffordshire and Shropshire eating disorders team and perinatal mental health teams in North and South Staffordshire have ongoing input into the study. The interview will be tape recorded and analysed by the researcher.

A copy of the Participant Information Sheet is enclosed for your reference.

If you have any queries or concerns please do not hesitate to contact me using my email address: gemma.o'leary@sssft.nhs.uk.

Kind regards Gemma O'Leary Researcher – Staffordshire University APPENDIX K

Participant debrief



South Staffordshire and Shropshire Healthcare

NHS Foundation Trust

A Keele University Teaching Trust

Debrief and useful contacts

Thank you for taking part in this study. Your responses are much appreciated and will help to increase health professionals' understanding of the experiences of women with anorexia nervosa.

The purpose of this study is to gather information about the experiences of motherhood for women who have anorexia nervosa. Currently little is known about the experiences of this group of women; we don't know what their perspective is on parenting young children as well as managing an eating disorder, and consequently we don't know whether there is anything health professionals could do to support them. It is expected that around fifteen women will take part in the study, each completing an interview during which they will be asked questions about their experiences. After analysing the responses given, the researcher will attempt to make links between them and try to highlight common experiences which are unique to mothers with anorexia nervosa and young children.

What happens if I wish to withdraw from the study?

You are free to withdraw from this study at any point until the study is completed, even if you have already completed your interview. Should you wish to withdraw from the study you can do this either by contacting me directly using my email address, <u>ow002426@student.staffs.ac.uk</u> or by contacting my clinical supervisor Dr Kierron Worley on 01785 221 331 (South Staffordshire Eating Disorders Service).

How can I access the findings of this study?

A report will be prepared based on the findings of this study which will be submitted to Staffordshire University as part of my doctoral thesis. A summary of the overall findings will be prepared and sent by post to each participant after the study is complete. The summary of findings will be sent no later than April 2014.

Further information and support

You may have found the interview process upsetting. This is understandable given the issues you have discussed with me. If you feel further support is necessary details are provided below. You can also access advice, support and information from your GP surgery.

National charity supporting people with eating disorders Access to information, helpline, online community and local support groups 0845 634 1414 help@b-eat.co.uk

Rethink

National charity supporting people with a variety of difficulties including eating disorders Access to information, helpline and signposting to other services 0300 5000 927 advice@rethink.org

South Staffordshire and Shropshire Eating Disorders Service

St Chads House, Corporation Street, STAFFORD, ST16 3AG

Telephone number: 01785 221331/221502

The Berrington Suite, Shelton Hospital, SHREWSBURY, SY3 3DN

Telephone number: 01743 492256

The Samaritans

If you or anyone you know is in distress and struggling to cope, The Samaritans are available 24 hours a day, 7 days a week, to speak on the telephone confidentially.

www.samaritans.org 08457 90 90 90

APPENDIX L

Summary of findings to participants



South Staffordshire and Shropshire Healthcare NHS

NHS Foundation Trust

A Keele University Teaching Trust

NHS address Line 1 Line 2 Postcode

Our ref: GO'L NHS Number: 123 456 7890

Date

In Confidence

Name Address line 1 Address line 2 Town Postcode

Dear

Thank you for your participation in a recent piece of research: "The experience of being a mother with anorexia nervosa". The research has since been completed and a summary of the findings is attached for your reference. As you directly participated in the research, this is your personal copy and you do not have to return it.

May I take the opportunity to thank you again for taking the time to participate; your responses are invaluable and will help health professionals and researchers to better understand the experience of motherhood for women with anorexia nervosa.

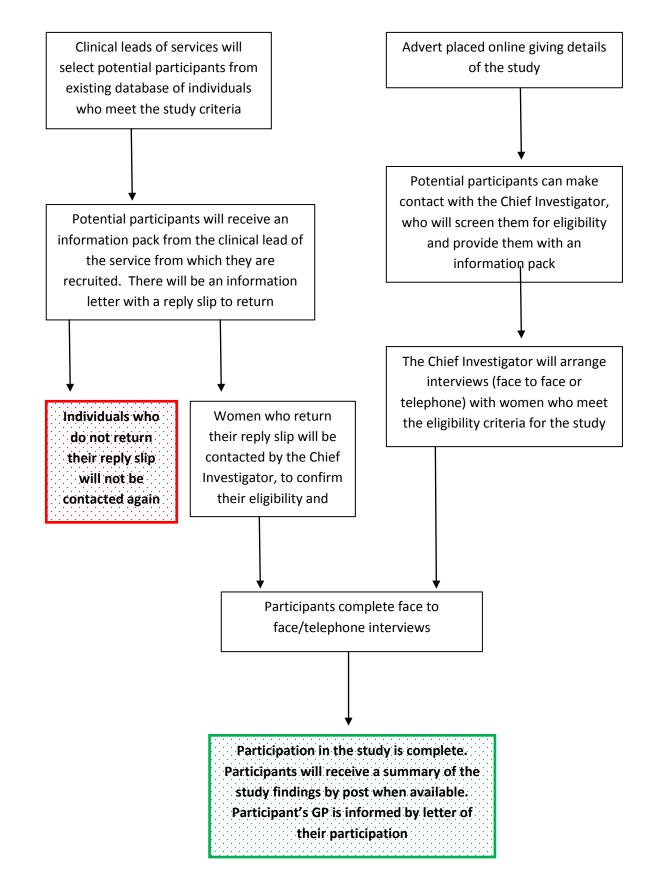
If you have any further questions you are welcome to contact me at gemma.o'leary@sssft.nhs.uk.

Kind regards

Gemma O'Leary Researcher – Staffordshire University [Staff member name] [Staff member role]

APPENDIX M

Flowchart of protocol



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APPENDIX N

Examples of memos taken from reflective diary

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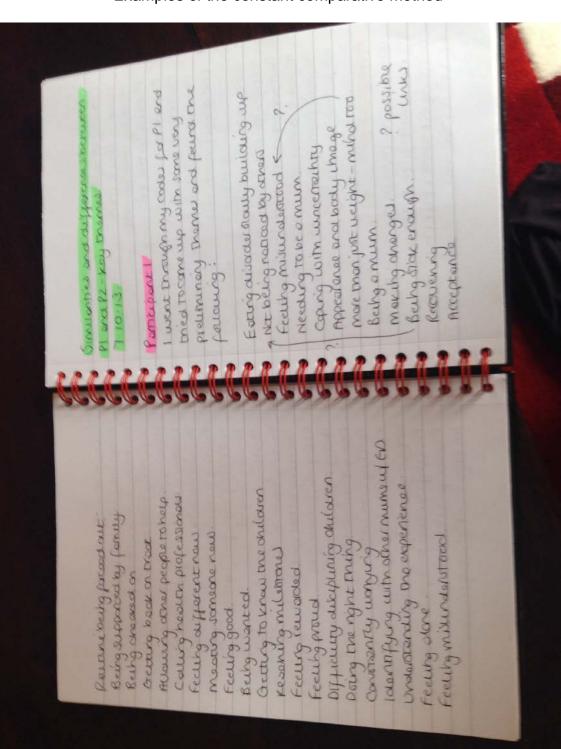
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APPENDIX O

Examples of the constant comparative method



APPENDIX P

Example of contributory code

Code 3: Keeping secrets

Definition

For some women their ED had been or was still a major secret, which they had concealed for a long time. Even now some women were trying to hide their symptoms from their families. Sometimes the pregnancy was kept secret until a late stage because discovering the pregnancy was a shock. They had to keep their ED away from their child and sometimes from their partners. They were concerned about the consequences of what might happen if other people found out about their eating disorders now they have children. Sometimes there were family secrets because the women had had bad experiences when telling their family previously. When other family members suffered from similar problems then covered them up it seemed like the normal thing for these women to do the same. At times it seems like the worst kept secret and as children get older the secret gets more difficult to keep, because children notice and talk about it, meaning these women resort to even more extreme measures to keep the behaviour going in secret without it harming their children. Women experienced a great deal of guilt and shame about this.

Links to other categories

- Control
- Feeling misunderstood
- Not feeling good enough
- Passing on the ED to children
- Balancing the eating disorder and the baby

Line by line codes by participant

PP	Line code	Key quotes
1	Hiding the ED from daughter	I can't just put her down and go and make myself sick because you know she'll be there (I. 326-7) I try to keep as much of my symptoms away from her as physically possible, and that isn't always possible but I manage it as best as I can (I. 463-5) I can't jump in my car go and buy a load of food and sit for hours chewing and spitting because she's there (I. 621-3) When she gets older she will start to notice (I. 650-1)
2	Concealing the ED	My mom didn't realise what I was doing (I. 27-8) It wasn't an option for me to do what I did so I didn't do it anymore (I. 49-50) I was still in the wholething of buying and wearing clothes that were too big to hide everything (I. 63-5)
	Feeling guilty	I'm convinced to this day that has something to do with me (I. 124-5)
	Family	They went why haven't you told us you know they were

-	
feeling betrayed	deeply upset (l. 152-3)
Trying to	Even if I didn't eat anything I felt compelled to take [the laxatives] (I. 92-3)
but	I still managed to sneak off now and again but it didn't
becoming very ill	really work (l. 160-1)
Hiding the ED from children	I'm lucky that [my sons] haven't picked up on any of my eating habits cause obviously that was a major concern to me (I. 289-90)
Wanting to protect	I see the warning signs a lot quicker than anyone else (l. 302-3)
children	I want the kids to be kids (I. 304-5) I was absolutely terrified I was like I'd grab things off him (I. 332-3)
Boing found	His mom came and I'd got this BMI chart blu-tacked to the
out	cupboard door and everything they found it and they came upstairs (I. 147-152)
Keening the	My ex-husband and I had kept the eating disorder to
ED a secret	ourselves (l. 146-7)
I rying hard to hide the ED	I'd do the whole eating it and bringing a cup to my face and spitting what I was eating into the cup (I. 121-2)
Hiding the	We didn't tell anyone because there was so much hurt
pregnancy from family	and that in the family (I. 110-1)
Keeping ED secret during pregnancy	While I was pregnant I was still doing what I'd been doing you know making myself sick (I. 117-8)
Covering it	I was always like unsure with myself. But I'd cover it up because I'd always be the loudest one (I. 128-9)
Being	I'd always be the most outgoing but that was kind of a
outgoing	cover and once I stopped going out and doing those
	things that was my only way of expressing myself was through my eating (I. 129-32)
Isolating self	I stopped going out and doing those things (I. 131) You do isolate yourself anyway especially at the
	beginning and it's hard to get out of that (I. 192-3)
Wanting to	When you're unwell you don't really want to do anything
be alone	or see anyone (l. 190-1)
Parent never	When I grew up my mom had erm she still has got a bit of
admitting it	an eating disorder not that she would ever admit it (l. 32- 3)
Making excuses	There's only so many times you can make excuses (l. 41-2)
Not being able to hide it	It got to the point when I couldn't even hide being sick (I. 42-3)
Physically hiding	I can't physically hide things when they're there all the time (I. 44-5)
Keeping it secret	When they were tiny and they didn't really know what was going on I could just [pause] keep it secret but now they're
	betrayed Trying to hide the ED but becoming very ill Hiding the ED from children Wanting to protect children Being found out Keeping the ED a secret Trying hard to hide the ED Hiding the pregnancy from family Keeping ED secret during pregnancy from family Keeping ED secret during pregnancy Covering it up Being outgoing Isolating self Wanting to be alone Parent never admitting it Making excuses Not being able to hide it Physically hiding Keeping it

r	1	
		at that age that they know that's not right (I. 45-7)
	Feeling like a	I'm trying to intill in them eating and I feel like a hypocrite
	hypocrite	and they say but you haven't eaten your dinner, I'm not
		going to eat mine! (l. 48-9)
	Feeling	It's horrid (l. 55)
	horrid	
	Being sick in	I plan things like erm if we have dinner a bit later and they
	secret	can go to bed and then I can be sick and they won't know
		(l. 55-7)
	Children	It sounds silly but then because they're telling people as
	telling people	well, because kids don't know any different, mummy's not
		very well she's been sick (l. 66-8)
	Keeping	I didn't say anything I felt very much like I shouldn't be
	quiet	feeling like this so don't say it out loud (l. 194-5)
	Not telling	I guess I've [sighs] it's just not telling people what was
	people	going on, erm making out that I've eaten something when
		l haven't (l. 414-5)
	Keeping	It's just easier, it's like it sounds horrendous saying it but
	secrets	to keep it secret (l. 58)
	Easier to lie	When you're the cook at home it's easier to say well I had
		something when I was cooking (I. 416-7)
	Getting away	Just get away with things that way (I. 417)
	with things	
	Wearing big	People do notice you've lost weight, that's when I resort to
	clothes	jumpers [pause] I'll always say I'm cold and then I can put
		a big fleece on (l. 418-20)
6	Hiding the	The anorexia was like, I'd hide it to a lot of people (I. 91)
	problem x 2	The binge eating side I'd do when no one was in the
		house, I wouldn't want anyone to know (I. 195-6)
	Keeping it	It was very dark and hidden (I. 197-8)
	hidden	
	Feeling dirty	It somehow felt a bit dirty and horrible (I. 198)
	Making	If your friends say oh come on out for a meal I'd make
	excuses	excuses so I wouldn't have to go (I. 208-9)
	Finding	I wouldn't even come out and tell anyone I'd find an
	excuses	excuse like oh I don't really like that anymore (I. 212-3)
7	Hiding eating	When I first started realising that I did have an orexia I
	disorder	used to hide it as much as I could from people (I. 80-82)
	Not wanting	I'll keep it separate obviously from [my daughter] but like
	daughter to	cause I don't want her to see any symptoms (I. 94-96)
	see	

My observations during the interview

I'm interested in the idea of family scripts and sometimes family secrets felt like a kind of script. I was also interested in the reality of managing an eating disorder with a baby – that complete recovery is very difficult and there are times when these women still resort to their ED behaviours. This reinforced for me how stressful the process of becoming a mother can be particularly when these women have prior vulnerabilities.

I wondered about the shame and guilt these women might experience in trying to keep secrets from their friends and family and how much they were willing to discuss with me as a stranger.

Key theories and references

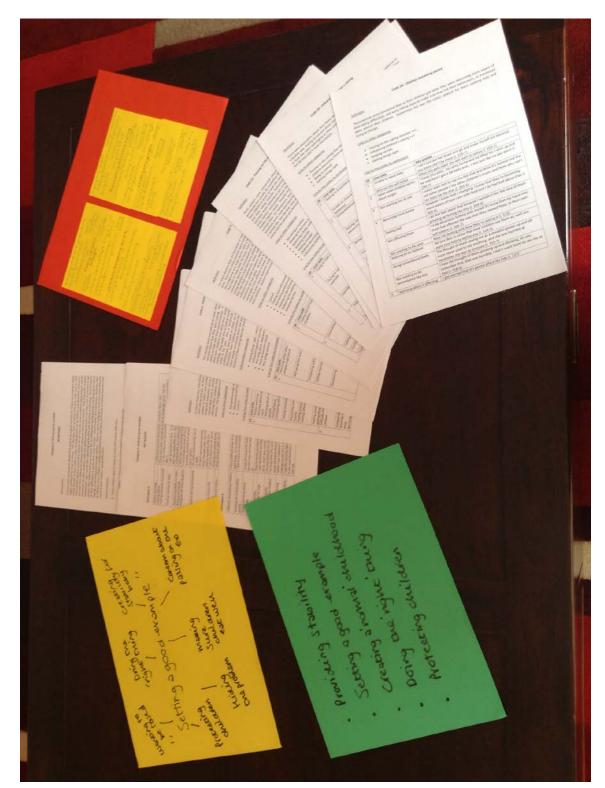
Siebold, C. (2008). Shame, the affective side of secrets: commentary on Barth's hidden eating disorders. *Clinical Social Work Journal*, 36 (4), 367-71.

Dalzell, H. (2000). Whispers: the role of family secrets in eating disorders. *Eating Disorders: The Journal of Treatment and Prevention*, 8 (1), 43-61.

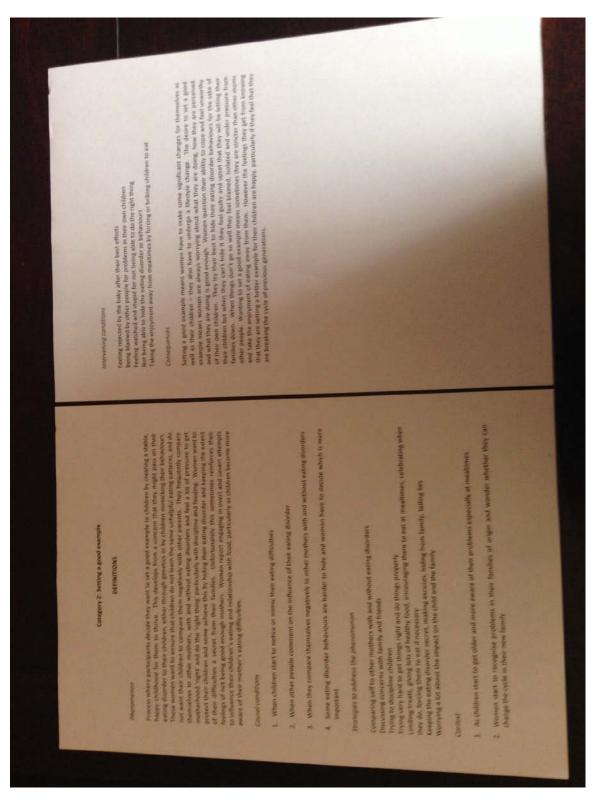
Barth, F. (2008). Hidden eating disorders: attachment and affect regulation in the therapeutic relationship. *Clinical Social Work Journal*, 36 (4), 355-65.

Sanftner, J. (1995). The relation of shame and guilt to eating disorder symptomatology. *Journal of Social and Clinical Psychology*, 14 (4), 315-324.

APPENDIX Q



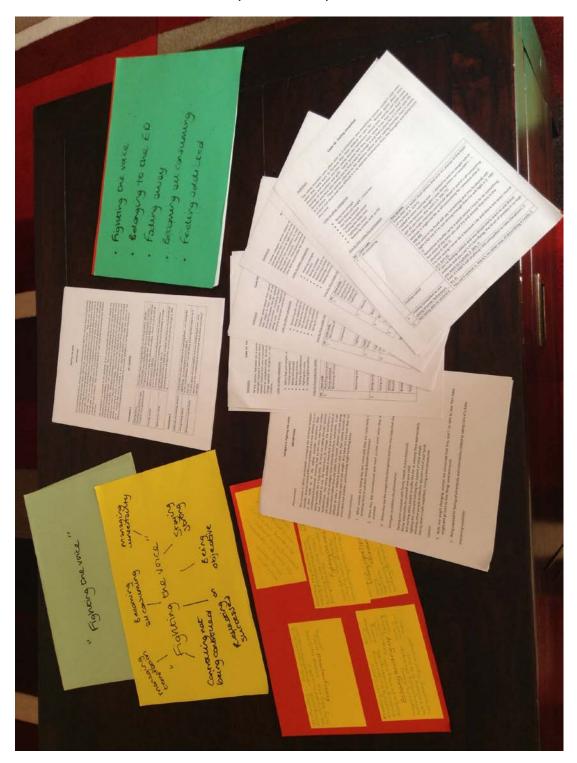
Example of a category developed in axial coding



	KEY QUOTES	healthy	I'm always aware of making sure that they've had their five a day and eventhing I want them to be healthy (II. 291-4).
Participant 1		Being aware of good foods	2.6 very aware of what healthy and non-healthy foods are that they are note for a treat once in a while but not to have overy day (i. 257-300)
Always worrying I definite Fearing failure	I definitely warried about what I would be like (I. 556) There was a teat I was anise to be so short-their boot if 550.000	hildren worry	I mean [my con] he came home and he lifted his t-shirt up and he callet have I exit a fat beliv and _ I was just life no you don't [l. 294-7]
N concerned	Trm like really intervely concerned about it and it's all consuming (). 385-7)	Participant 3	
Feeling rejected by baby I was den	I was devestated by that . It really affected me and I felt rejected.	Lantine seconds divert	You feel like you're letting (your child) down (I. 270-1)
Questioning ability to cope I containt	I containly felt very inadequate for the first few months (). 559-60)	Not feeling good enough	i suppose that's like it excalates the feeling of not being good enough in 271-21
3	visit and the second	Comparing self to other mome	I never want him to see me like that and think it's normal and then see other poople like other children's moms and think why can't my mum be like that (I: 283-5)
Inving to set a good example it's really a sear	cer (s work) (2) really important for me to see a good example for (my daughter) (1)	tsoluting self	You do toolate yourself anyway especially at the beginning and it's hard to get out of that (1. 192-3)
time in	(i) creating M 1 don't set a good example she's going to well not straight away but while one has not show the will creat to entries. I have the out for her as	Wanting to be alone	When you're unwell you don't really want to do anything or see anyone (J. 190-1)
In the line	well as myself (1.649-52)	Worrying about having	It was worried obviously about having a disorder after him and I did \L
Linable to choose ED I can't jur	I can't jump in my car go and buy a load of food and sit fits hours changes and contrine because sho's there 0.621.33	children with an ED Wanting to protect the baby	1 don't ever want him seeing what everyone else sees (l. 282-3)
Morried she will notice When shi	When she gets older she will task to notice () 650-1)	Participant 4	
Participant 2		Fearing failure	The most challenging thing is if m worned that (m going to fail (i, 443) to be a shown only a wave of onlook on life that (i's
ifficulty disciplining children 1 find R d	Difficulty disciplining children i find is difficult when it comes to disciplining them am i doing the right thing it's a constant worry (1. 446-9).	Affecting children	That I migolog colore users assive to the provide the second seco
Wishing not to hurt other 1 didn't w	I didn't want to hurt arother human being ske that (i. 240-1)	Not beatest with it	adults, I don't think I could deal with that guilt, it's immense (i. 450-2)
	the second second second shart desperately wanted to be with	Feeling like a failure	I'm worried that I'm going to fail (I. 448)
Adverys worrying about to got the corrections but all tw	r o got this certainty work way way weight and how I looked (). 174- but all I was worked about was my weight and how I looked (). 174-	How you're being perceived	
They're to	They're lovely considering they've had me as a mom (I. 209-10)	Wanting approval	It want to be wrist I brink unty own a provide the period size (I. 42-3)
	I was absolutely terrified that I could, that I just wouldn't be able to do it, and I was xeed about the simple little thing it 386-81 able to an about about the symple little thing it 386-81	Keeping it secret	When they were tiny and they didn't really know what was going on could just (pause) keep it secret but now they relatinge that they
5	rim turcky that (my sore) haven't picked up on any of my eating habits rim lucky that (my sore) haven't picked up on any of my eating habits curse obviously that was a major concern to me (ii. 289-90) curse obviously that was a major concern to me (ii. 289-90)	Ouldren telling people	In the trait is not its in the second s
	torone was evaluated (117-8) multiple myself key (117-8) so the unsume sters a las quicker than anyone else (1.302-3)	Children starting to notice	(i. 65-5) The reason that i'm trying to deal with it now is because of my the reason that interaction now has started to, they we started discontenses are then interaction now has started to, they we started
Wanting to protect children in the mail Hiding eating habits 319-201	The mean the boys don't see the doing amptimg like I used to do (I. 315-30)		to notice (L. 29-31)

APPENDIX R

Example of a sub process



NOTIFICATION NOT	Rationg concerno	dicopping dicopping dicopping. Living meanly preen recording at the time. (1. 240-1)
		Even al. 1 didn't was anything 1 fait compalied to take (herefored) (j. 50, 51
c) morthers warmen discuss a transweed desire to fight the voice of their earling disorder one changes which will benefit them and their childben. They are user to constrain on the various disorders to their childben. The childben their their childben their their state areas.	auting disorder herbeviours Taking decision out of her hands	I was activated when the send traver a topole report the write last one to be admitted, have three sorts of socials in our of may have be \$15,054.61
results on them hidding their earling disorder behaviour's from their family as much as are been to create a stability, loving environment for their children and make sure	Participant 3	
in return they also want to be loaved and remember in good mothers who set a good or children. They gooke about doing the right thing and not wantleg their children	Letting people down Not feeling good anough	You fail like you're letting (your child) down (I. 770-3). I suppose that's like it escalates the facilitie of not being good enough around so
to succursh to the demands of the easing disorder arres frequently despite the suprashitties of motherhood. The voice tells them that they are not good encouple engla enclose. The voice is noot levely to othen when example the endlands, streads them. Adamping uncernativity is the key to this process and the exercise that the on they don't feel happy. Sometimes the earing disorder feels all consuming that.	Warning to protect the bally Addiction raking hold	Control is were starte them searing which everyption data share (1, 202, 3) (don't have water them shall be concreted to the were been used them you shall of year throughing were transfer, you arritrore, they like being to the disorder, and them 1 suppose you loss shift of you being to the disorder, and them 1 suppose you loss shift of you have a group at the through (1, 22-0).
B to move to a position where they were in control of the position, they are incoment, not conversion are moving towards a more objective position where they can reflect on the area in an exception or an	Betonping to the ED	Your thoughts aren't really yours anymore (pause) they kind of before to the disorder (1, 73-4).
dating displacer in their lates and their surveyore in memory of a surveyore in	Mind fading ED taking hold	They also see your mind fading away (r. 298-9) Once you become and it actually really takes hold then it's not about that anymore it's about controlling yourself (r. 83-5)
and the state of the second seco	Participant 4	
y to cope Interviewe a rear way going for the first fear months (1.529-60) of example III don't set a good example she's going to well not straight away but	Not dealing with it	The fact that I could imprint them so badly that I could affect them as adults, I don't think I could don't with that put, it's timmers (II 450.21, adults, I don't think I could don't be not so a series allocations affect them II.
when she gets older she will start to notice. I have to est for her as well ac meant () 649-521	Doing something about it	1 know 1 ve got to do someoning dead a nameri versari 1
If you're feeling rubbish and you desperately want to use those mechanics and you car't if's territying, the level of anxiety is so high	Taking enjoyment away	I know I'm doing it and I feel aviul I guess five taken the enjoyment of earing away from them and I hate that (I. 289-90)
you want to explode () 665-7) you want to explode () 665-7)	Wanting to be idolised	No one likes to know that their children see them as, well you want your kids to idolise you (i. 314-5)
Nov nuscand synce a new way to make an an arrange anough (I. 490 something and he will fight it for me if i'm not strong enough (I. 490 so	Not understanding what thin is	
	Brushing off comments	When people say that I'm thin it's just brushed off as I'm like I don't know what you're taiking about (I. 27-8)
I feed to difficult when it comes to disciplining themam I doing the	Getting more insidious	It's just got to a point now where I know it's getting (pause) more instalous I guess (I. 34-5).
In the main the boys don't see me doing anything like I used to do (I.	Participant 5	
319-200 d foods Z is very aware of what healthy and non-healthy foods are that they're nice for a treat once in a while but not to have every day (i	Not wanting them to get the same way	Not wanting them to get the 1 just don't want them to get like the way I am (I. 487) same way

Serves bacoming a add mask mask using add mask passing con add mask passing con agorden They ad they and well har they and well har to be built. The temperation for comparts and regist and upsit at beil-and upsit and well and upsit about 1 scrong even when the serving by it. Women al

Participant 1 Fearing (allure Questioning (allure Thying to set a good Fediling scared Fighting the volce Participant 2 Hiding eating habits Being aware of good t Difficulty disciplinit