Peer support for mothers with postnatal depression: A pilot study

INTRODUCTION
PND is a global problem and a major health issue for many women from a number of diverse cultures. Incidence is high and the treatment programmes available vary greatly. Research suggests that although the causes of PND are multifactorial, many studies have consistently highlighted the great importance of psychosocial support (O'Hara et al 1991; Cooper et al 1998; Beck 1995). As observed by Dennis et al (2009), previous studies clearly show a significant increase in the risk of PND in mothers who do not have someone with whom they can talk openly with (Bruchta et al 2002; Paykel et al 1999; O'Hara et al 1991). Small et al (1997) conclude that mothers become depressed because of a distinct lack of support and 'social isolation'. Within the study, when participants were asked what advice they would give to new mothers with PND, the most common suggestion was simply 'find someone to talk to'. Cox et al (1987) found that the Edinburgh Postnatal Depression Scale scores were significantly reduced with maternal perceptions of support from other women with similar age children. Well-controlled research trials have revealed postnatal depression responds to medication in the short-term (Appleby et al 1997; O'Hara et al 2000), with treatment roughly doubling the spontaneous recovery rate. However, it is unclear whether this short-term effect is maintained and it is also not clear whether different forms of psychological intervention might have different impacts. There have been a number of studies using a variety of psychological and psychosocial interventions (Abramowitz et al 2003; Azrimei et al 1984; Cooper et al 1998; Dennis 2005; Stuart et al 1995) and indeed, several of these studies have found that psychotherapeutic interventions for the treatment of PND are highly acceptable. However, despite an exhaustive literature search, there did not appear to have been any studies focusing on a one-to-one peer support network for mothers at risk of PND. Dennis et al (2009) studied the effectiveness of telephone-based peer support in the prevention of PND but this did not incorporate any face-to-face meeting.

THE STUDY DESIGN
The aim of this exploratory pilot study was to identify whether the support, on a one-to-one basis, from a peer support worker (PSW) would assist in the reduction of postnatal depression (PND) in new mothers. Eight PSWs were recruited by placing an advert in three local GP surgeries. The response to the advert was very good and applications of interest were received from 28 mothers. An interview process was carried out by the lead researcher and two of the health visitors involved in the study.

Each PSW had previously suffered from mild to moderate postnatal depression but had recovered and were not currently receiving any form of psychological support or taking any medication. They were employed on a six month contract by the local NHS Trust. References and enhanced criminal records clearance were obtained. A confidentiality statement was also signed by the PSW. A small amount of funding was obtained from a local children’s charity to fund the PSWs’ travel expenses. Thirty mothers were recruited by their own health visitor. This was carried out using the Edinburgh Postnatal Depression Scale documentation (EPDS) (Cox et al 1987) alongside a clinical assessment. The cut off score, as agreed by both the lead researcher and the health visitors involved in the study, was 11. This is in accordance with the standard care routinely offered by the health visitor (10-12 is usually the cut off score but can differ within different Trusts). Fully informed consent was obtained and participant information sheets given. Using alternating numbers, fifteen mothers were placed into a control group, and fifteen into an intervention group.

The PSWs received formal training about child protection procedures/safeguarding children in addition to the relevance and
importance of confidentiality. However, apart from this, a structured training programme was not adhered to. The PSW’s strongly felt, as a combined group, that they wanted to provide the intervention simply as a fellow mum who had survived the rollercoaster journey of PND. Each PSW wanted to identify the nature of the problem, find a possible solution, and design their own proposed ‘support package’—from the outset of the study.

The PSW visited the mother in their home environment, or a location of their choice, for a period of six weeks on a weekly basis (intervention group). This was then compared to a number of mothers who received support from their family health visitor alone (control group). Both qualitative and quantitative data was collected. The PSWs and the mothers from both the control group and the intervention group were asked to maintain a log book reflecting upon their feelings and thoughts after each weekly visit (either from their PSW or their health visitor). Individual and group support sessions were also offered by the lead researcher to both the mothers within the intervention group, and the control group, in addition to the PSWs. These support sessions provided a ‘safe forum’ in which all participants involved within the study could discuss any concerns, and seek advice and guidance.

Ten mothers from the control group, and eleven mothers from the intervention group, were interviewed on a one-to-one basis when their infant was six months old by the lead researcher. The remaining mothers had either returned to work and were unavailable for interview, or had moved away from the area. In addition, seven PSWs were also interviewed following completion of their support visits—again by the lead researcher. The remaining PSW was unavailable for interview. Eleven mothers from the control group completed their weekly log book entries and thirteen from the intervention group. All of the PSWs made entries after each support visit. The interviews were conducted in a semi-structured format. This format was selected as although the interviewer had a clear list of issues to be addressed and questions to be answered, the semi-structured approach allowed the interviewee to develop their own ideas/thoughts about their experiences and speak more widely on the issues raised by the researcher. Data from the interviews was subsequently transcribed, coded and categorised, and key themes identified.

Quantitative data was collected in the form of the EPDS—a tool that is routinely used to identify mothers at risk or suffering from postnatal depression. The EPDS score was recorded prior to the support commencing by either a PSW or the health visitor at six weeks as standard, after completion of all six visits (at 12 weeks), and when the infant was six months old. The health visitor collected the EPDS scores prior to the support commencing and on completion of the six visits. The lead researcher (also a trained health visitor) completed the final EPDS score when the infant was six months old alongside the semi-structured interview.

ETHICS APPROVAL

This research study was carried out in adherence with the Nursing and Midwifery Code of Professional Conduct (NMC, 2015), the Declaration of Helsinki (1964, 2002), and the Research Governance Framework for Health and Social Care (DH, 2001, 2003).

Prior to undertaking the study, ethical approval had to be given by De Montfort University Faculty of Health and Life Sciences Research Ethics Committee. This was granted after two applications. After completing the relevant forms, the lead researcher was invited to meet before the Nhs Ethics Committee to discuss the study. The whole process took around a year to complete. At the time it was most frustrating and extremely time consuming. However, on reflection it is a complex study that does involve aspects of mental health issues. There is also the added aspect of a PSW entering the mother’s own home. There could have been consequences and complications arising from both of these elements of the study. The need to obtain approval from ethics committees reinforces the point that a concern with ethics is not an option—it is a fundamental feature of all good research studies (Farrimond, 2013). References were sought and enhanced Criminal Records Bureau (CRB) checks obtained for each worker in addition to the compulsory attendance on a stringent training programme that involved a session with the lead nurse for safeguarding children. A confidentiality clause was signed and signature witnessed. Each PSW was employed by the Royal Derby Hospital on a temporary contract for a period of six months and a contract of employment was signed.

Following this, further approval was sought from the National Research Ethics Committee.

For the purpose of the study each mother was given an identification number and there was no use of any names in either the data collection or analysis. All documentation was placed in a locked filing cabinet within the lead researcher’s place of work at that time (a Health Centre) and access to the cabinet was via a locked room within the centre.

A MIXED METHOD APPROACH

The decision to conduct semi-structured interviews seemed an appropriate choice because this method is particularly good at allowing the researcher to explore, in-depth, the thoughts, emotions and experiences of this group of mothers. However, because the interviews take time to co-ordinate, conduct and analyse, the number involved was relatively small and this may make the study and researcher vulnerable to criticism that the data is not representative. To compensate for this possible weakness, a mixed method strategy was adopted that also included a questionnaire (the EPDS), thus adding the value of a quantitative element to the study. The questionnaire did not, of course, provide the kind of depth of information that the semi-structured interview did but, by combining the methods, the researcher was in a position to avoid possible criticism linked to either the relatively small sample associated with the interview method or the relative superficiality of the data collected from the questionnaires.

The contrasting methods used can also be a means for moving the analysis forward, with one method being used to inform the other (Denscombe, 2014). The interviews were a way of building onto what had already been learned by the initial method of a questionnaire (that the mothers were feeling low in mood). They enhanced the information already known and provided a much more in depth and fuller picture, a valuable and somewhat rare opportunity to really understand how each participant felt and, in some instances, how they had reached such a low point. This, of course, would not
have been achieved by a questionnaire alone.

**STUDY LIMITATIONS**

Despite the strengths of the study, the results may be limited in that the clinical diagnostic data for PND may be questionable. Although the EPDS is administered alongside a clinical assessment, the results may produce a false positive as the mothers' mood may be particularly low on the day the assessment is performed (Paykel et al., 1999). In addition, the EPDS was only repeated at six months, if it had been repeated again at 12 months or 24 months the results may have portrayed a different outcome. A longitudinal study would be a further recommendation. A further confounding factor that requires consideration is the variations in the type of activity undertaken within the intervention group – for example swimming or attendance at a toddler group. However, although a consideration, the majority of meetings were held within the mother's own home and only on an occasional basis was a meeting held or outing arranged at an alternative venue. Other limitations include the pragmatic exclusion of women who did not have English as their first language. This was agreed by the Ethics Committee as funding for the study was strictly allocated to the PSW's travel expenses. A translator would have been a further expenditure. A further limitation was the number of participants selected - a relatively small study due to funding, time and resources – it is a 'stand-alone' pilot study. A greater number of recruits to both the control and intervention group may have produced different results.

**ANALYSIS**

The EPDS scores recorded at 6 weeks, 12 weeks, and again when the infant was six months old, were analysed and summarised using graphs and charts. Non-parametric analysis using Friedman's Anova and the Wilcoxon paired test was carried out. A Mann Whitney test, Kolmogorov-Smirnov test and a Shapiro-Wilk test were also performed (Field, 2013). The results from all EPDS scores from both the control and the intervention group are displayed in the tables 3,4,5 and Figure 1.

A constant comparative method was used as a means of analysing the qualitative data collected from both log books and interview transcripts (Bazeley, 2013). The lead researcher consistently read and re-read text data, compared new codes and categories as they emerged and repeatedly compared them against existing versions. Similarities and differences were highlighted and categories and codes were identified. On completion of this analysis, all participants were contacted to ensure validity of the findings and that each participant agreed with the researcher's interpretation of the data collected.

**RESULTS**

Qualitative and quantitative findings from this study suggest that the input from a PSW may assist in the reduction of PND in new mothers. This is demonstrated in both the analysis of the quantitative data and the qualitative.

The EPDS scores demonstrated little difference between the participants at six weeks but the statistics started to diverge at 12 weeks. The mean at 12 weeks for the control group is recorded at 12.46 and the intervention group is 10.33 – a difference of 2.13. The EPDS at six months demonstrates a difference between the two scores as 2.67 (the control group mean recording is 11.60 compared with the intervention mean which is 8.93). The key themes identified were the immeasurable value of 'social support', 'sympathy' and 'shared experiences'. It is also worth noting that in both the intervention and control group, some mothers still had scores of 16. The resounding factor that appears repeatedly throughout the analysis of data is the fact that the mothers could 'truly relate to their PSW'. Their PSW gave them hope, made them feel as if they were 'not a failure' and gave them an overwhelming 'sense of normality'. This, in turn, increased their self-esteem, their positivity towards their parenting role, and their ability to therefore be a good mother. The mothers viewed their PSW as an expert – the PSW had experienced what they were currently experiencing and 'had survived', therefore any guidance and advice that they could offer 'was tried and tested'. A strength of the work was the involvement of the PSWs in both the planning and the implementation of the intervention. It was their design, their creation, and their own perceptions about what may really help the mother they were working with. This was an individualised intervention and therefore different for each mother.

A number of other themes were also identified that were interestingly, commonalities across the entire data set (participants and PSWs). These included recognition of their own changing perspective – a realisation that there simply is no quick fix solution, that both time and support are required. The PSWs described feelings of 'personal benefit', 'self-awareness' and the 'provision of closure' for themselves. The intervention group also talked, at length, about their 'personal benefit' from the PSW,

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and their own self-awareness about how they truly felt, their emotions and, in some instances, why they felt this way. Some of the mothers from the control group, through attending health visitor-led clinics or ‘toddler’ groups, did find other mothers to talk to. They recognised the advantage of talking to other mothers and, although they did not have the formal support sessions from a PSW, they embraced the opportunity of sharing their thoughts and feelings, with fellow mums. Each participant, and PSW, discussed the sharing of experiences, emotions, the feeling of ‘release’ and, particularly on the mothers part, the importance of knowing that, actually, they are not ‘alone’.

CONCLUSION
The aim of this study was to provide early support to mothers who were classed as ‘at risk’ of suffering from PND. The findings from this paper indicate that this may be potentially effective as a positive intervention in the treatment of PND. However, this was a small scale pilot study over a relatively short period of time. Larger, more longitudinal studies are certainly required to ascertain the effect of early intervention from a PSW.

The importance of the pilot study presented here lies in its usefulness in shaping research to investigate and explore further whether there are indeed beneficial factors to post-natally depressed mothers who receive one-to-one support from a PSW.

References

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