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Midwives united: technology as the conduit

Key words: Midwifery regulation, technology, eUNity, evidence-based midwifery

I am writing this editorial conscious of the fact that many of you will be at the triennial congress of the ICM in Prague when it is published. As midwives of the world unite for this face-to-face contact and sharing of the knowledge, skill and art of midwifery, I encourage you to reflect on the current role of the midwife in Nepal, as depicted in the paper by Erlandsson et al (2014) in this edition of *EBM*. It will become clear how important it is for women to be cared for by trained, dedicated professionals and why the professionalisation, legislation and statutory position of midwifery that exists in the UK is the envy of so many across the world.

It is easy for those in the UK to underestimate the value of the RCM and the NMC. I believe we do not appreciate the underpinning structure provided by such organisations, because they are the status quo for us. Their roles in supporting professional practice and public protection are mostly invisible and we cannot fully comprehend their contribution to midwifery practice, education and research unless we experience being a midwife in a country where there is no legislated government input into professional healthcare practice.

This has become a stark reality for me during the past 12 months, as I worked with a team of experts on a UNICEF project. I met outstanding midwives, nurses and doctors who were working extremely hard to achieve some of the political and professional strength that is evident within the UK healthcare system.

I also met mothers living in adverse conditions that seemed insurmountable. Their resilience had a halo effect and I was consumed by their strength and calm way of just being. In the midst of scenes of riches, or scenes of poverty, my senses were finely tuned to the sound of mobile phones and, in some cases, not one per person, but two.

It was revelatory as the key to unlocking the potential for communicating health and wellbeing messages was ringing in my ears. At one high school, every hand in the classroom went up when I asked if they had mobile phones. This single point of access is, for me, the key to future communications at an global level.

I will keep pushing myself and others to make effective use of technology to further our cause to achieve good. We need to make technology work for midwives across the world as we unify and personalise care for mothers and babies in a positive and health benefiting manner.

Technology has the power to unite, yet it remains under-used by us. Can we not learn from the marketing companies who use technology creatively; with crowdsource funding being one of the latest ways in which to obtain money? We need to adopt their policies and practice and make technology work for public health and wellbeing gain. We need to use the 'seedling' approach to maximising our health and wellbeing messages at a global level, midwives visibly

present, 'health information for all' style. Perhaps Prague is the place and the time for the midwives of the world to take a stand for e-connect and eUNity? Maybe this is the year in which we will consciously start to use technology to improve the health of mothers and babies and disseminate our evidence base, knowledge and experiences by e-sharing?

It is timely that the RCM i-learn and i-folio have just been given a facelift, with a new platform following a record achievement of 8000 users since its launch in 2010 (Hunter et al, 2014). The technology is providing a platform for shared learning, personalised learning and global learning. However, regardless of all the technology available to us, we need to use it appropriately and be fully cognisant of the importance of talking face to face on matters such as the role and training of skilled birth attendants (SBAs). On this important subject, we must have clarity and it is the triplicate or Trinitarian voice of midwives, nurses and doctors that is essential for a future where birthing women, regardless of country, ethnicity or financial status, will have full access to the minimum standards of care in labour and birth that will be delivered by SBAs. Please note: the definition of SBA, as defined by Erlandsson et al (2014: 59), is multi-professional and inclusive: 'physicians, certified nurses, auxiliary nurse-midwives, or degree-trained nurses...'

Modern technology provides a communication platform for midwives, doctors, women, families and politicians. It offers access to a repository of social media, visualisation, crowd sourcing and more new and emerging technologies that provide unprecedented opportunities for unification at a global level. For example, major change at UK government level is evident with the publication of documents such as *Midwifery 2020* (DH, 2010), and the NICE consultation document on intrapartum care (NICE, 2014). Making the key messages from documents such as these available in different languages as info-bites or info-sights that become seedlings is our dissemination challenge. Let's start to make technology work for us at the ICM in Prague.

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An overview of evidence on diet and physical activity based interventions for gestational weight management

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A table, which provides an overview of the findings and recommendations from all 12 identified reviews covered in this paper, is available online and can be accessed at: rcm.org.uk/ebm

Abstract

Background. Maternal obesity and excessive gestational weight gain are associated with adverse maternal and neonatal outcomes. Currently, 20% of mothers in the UK are obese and the prevalence of obesity is increasing. In the UK, there is a lack of evidence or guidelines quantifying an ideal gestational weight gain or strategies to encourage women to remain within these limits.

Aim. To provide an overview of systematic evidence which have synthesised the results from trials on the efficacy of gestational weight management interventions, and to discuss key components of effective diet or physical activity interventions in improving pregnancy and birth outcomes.

Method. English language systematic reviews published after the NICE guidance on weight management before, during and after pregnancy (2010) were searched for using Medline.

Findings. A total of 12 systematic reviews were identified. Most reported interventions had an effect on reducing weight gain, however, included studies were often of poor quality.

Conclusion. Dietary interventions seem to be more effective in reducing gestational weight gain with some improvement in clinical outcomes (for example, reducing the risk of gestational diabetes, gestational hypertension and shoulder dystocia). Physical activity also has a role to play, however, in light of low compliance and concerns over limited understanding of its full impact on fetal growth and birthweight, more robust investigations are required to address the balance between its benefits, acceptability and impact on birthweight.

Implications. Further research is required to identify optimum gestational weight gain and the particular components of interventions that have been shown to be effective and safe in reducing this during pregnancy. Midwives, with their key role in health promotion, should be offered support and training in keeping up to date with the growing body of evidence on gestational weight management and behaviour change techniques to promote a healthy lifestyle for women and their families.

Key words: Gestational weight management, diet, effectiveness, behaviour change, physical activity, pregnancy, evidence-based midwifery

Introduction

Management of a healthy weight in modern society is notoriously difficult to achieve and sustain. Current evidence suggests that 20% of mothers in the UK are obese and the prevalence of obesity in our society is increasing (Heselhurst et al, 2010). Maternal obesity and excessive gestational weight gain are associated with adverse maternal and neonatal outcomes, including early miscarriage, macrosomia, gestational diabetes mellitus, postpartum haemorrhage and traumatic birth (Olson and Blackwell, 2011). These are in addition to an increased risk of obesity, type 2 diabetes mellitus and heart disease in later life for offspring born to obese mothers (Olson, 2012), thus having consequences for the health and wellbeing of future generations.

Given the costs of obesity, to the individual, future generations and wider society, it is prudent to address the issue of obesity within a childbearing population.

In the UK, there is a lack of evidence or guidelines quantifying a clear gestational weight gain or strategies to encourage women to remain within these limits. NICE (2014,

2010) highlights the importance of limiting gestational weight gain by healthy eating and physical activity (PA), but fails to state any recommended weight gain limits. The American Institute of Medicine recommends weight gains for different pre-pregnancy BMI categories, including 5kg to 9kg for obese women, although their review of the evidence failed to find statistically powerful studies to support these guidelines (Rasmussen and Yaktine, 2009).

Pregnant women and their health professionals need guidelines to benchmark their weight gains against, and to be able to intervene if necessary. But until appropriate evidence is generated to support development of such guidelines, current practice aims to reduce gestational weight gain in obese women, as there are clear risks associated with excessive weight gain during pregnancy (Scott-Pillai et al, 2013; Olson and Blackwell, 2011).

Aim

This study aimed to provide an overview of systematic evidence which synthesised the results from trials on the efficacy of gestational weight management interventions. It

also aims to discuss key components of effective diet or PA interventions in improving pregnancy and birth outcomes. The participants' acceptability of diet and PA interventions and the feasibility of delivering such interventions within the UK will also be considered as important factors in designing future interventions.

Method

Search strategy

The Medline database was searched to identify any systematic reviews that have reported on gestational weight management since 2010. The search was limited to English language where gestational weight gain was stated as a primary or secondary outcome. Search terms included: 'weight gain', 'weight management', 'pregnancy', 'antenatal', 'gestation', 'intervention', 'systematic review', 'exercise', 'diet', 'physical activity', 'lifestyle and behaviour change'.

Findings

A total of 12 systematic reviews were identified and included (Currie et al, 2013; Furber et al, 2013; Brown et al, 2012; Muktabhant et al, 2012; Oteng-Ntim et al, 2012; Thangaratinam et al, 2012; Campbell et al, 2011; Gardner et al, 2011; Quinlivan et al, 2011a; Tanentsapf et al, 2011; Dodd et al, 2010; Ronnberg and Nilsson, 2010), which synthesised the results from trials on the efficacy of interventions designed to improve weight outcomes for mothers.

Study characteristics

Reviews such as Furber et al (2013), Oteng-Ntim et al (2012), Quinlivan et al (2011a) and Dodd et al (2010) focused on interventions specifically aimed at overweight and/or obese pregnant women. While some reported weight gain as a secondary outcome, Brown et al (2012), Muktabhant et al (2012), Gardner et al (2011) and Tanentsapf et al (2011) analysed studies which explicitly stated the primary objective of preventing excessive weight gain during pregnancy. Campbell (2011) included five randomised controlled trials (RCTs), looked at eight qualitative studies and concluded that there were some barriers to behaviour change raised by women, but not met by the interventions, which may limit effectiveness.

The reviews by Currie et al (2013), Brown, et al (2012) and Gardner et al (2011) looked specifically at the behavioural components of interventions, such as goal setting, which appears successful for managing gestational weight gain.

The review by Thangaratinam et al (2012), commissioned by the Health Technology Assessment, consisted of a meta-analysis of 44 RCTs, which included dietary, PA and mixed interventions (with both diet and activity, or other approaches, such as weight monitoring), many of which have also been included in the above mentioned reviews. Dietary interventions generally included a balanced diet of carbohydrates, proteins and fat and use of a food diary. They reported a significant reduction in gestational weight gain of 1.42kg when all interventions were analysed together, compared to the control group. Dietary interventions were, however, more effective in reducing gestational weight

gain, compared to the PA or mixed approaches (3.8kg vs 0.7kg vs 1.0kg, respectively). Dietary interventions were also associated with more improvements in the obstetric outcomes (for example, reducing the risk of gestational diabetes, gestational hypertension and shoulder dystocia). There was no significant effect on neonatal birthweight with any of the interventions, except for PA. Reduction in gestational weight gain remained significant with all interventions and the risk of pre-eclampsia was consistently lower with dietary interventions, in the sub-group analyses based on diabetic status, BMI and bias risk status.

Thangaratinam et al (2012) concluded that dietary interventions were most effective, while others such as Oteng-Ntim et al (2012) and Ronnberg and Nilsson (2010) expressed caution in advocating any particular approach to weight management in pregnancy, highlighting the poor quality of many of the studies included in their review, the significant demographic heterogeneity of participants in the different studies and the highly variable degree of intervention intensity. They concluded the need for further well-designed, suitably powered research before any recommendations can be made. Gardner et al (2011) expressed similar concerns, while also addressing issues of reporting in the literature, and the impact of omissions in reporting on future intervention development.

Summary results

Most of the 44 studies included in Thangaratinam's review had also been included in the other reviews (which contained between 0 and 28 studies) hence the authors have predominantly focused on Thangaratinam et al's (2012) review, as it appears to be the most comprehensive in categorising the interventions and reporting the findings in the context of clinical benefit with practical implications.

Identified reviews report that lifestyle interventions improve outcomes with regard to maternal gestational weight gain, although the effectiveness may differ across BMI categories and between studies. All reviews indicated that existing evidence on dietary or PA interventions in reducing gestational weight gain are low quality and further research with adequate sample size and appropriate design and a better standard of reporting is required.

Discussion

Overall, dietary interventions seem to be more effective in reducing gestational weight gain with some improvement in clinical outcomes (for example, reducing the risk of gestational diabetes, gestational hypertension and shoulder dystocia). PA also has a role to play, however, issues were raised around low compliance and concerns over limited understanding of its full impact on birthweight.

PA interventions – less effective than expected

Thangaratinam's inference that dietary interventions demonstrate greater efficacy than either PA or mixed dietary/PA interventions, presents a point of interest that may benefit from further analysis (Thangaratinam et al, 2012). Why, in the context of weight management, where exercise is well-

documented to be an effective and essential component of maintaining a healthy weight (NICE, 2010, 2006), should those interventions incorporating PA show less effect than a purely dietary intervention during pregnancy?

A Health & Social Care Information Centre survey (2013) found that 32% of adult women self-reported that they met the government's PA recommendation, with lowest levels of activity in obese adults. Studies using accelerometry have found actual PA to be much lower than self-reported with 4% of women meeting the recommendations (Health & Social Care Information Centre, 2013). With so few women participating in PA, it is not a surprise that attempting to initiate active behaviours during pregnancy may present some difficulty.

Pregnancy is often cited as an opportune moment for instigating healthy behaviours, with concerns over both the mother's and baby's health acting as a motivator towards lifestyle change (de Jersey et al, 2011; Keating, 2011; Olander et al, 2011; Oteng-Ntim et al, 2010; Verbeke and de Bourdeaudhuij, 2007).

However, for some women, pregnancy is an opportunity to be liberated from the social body image ideal and freed from constraint in eating behaviours (Olander et al, 2011; Knight and Wyatt, 2010). Such dichotomous attitudinal positions present a challenge to healthcare practitioners involved in advising pregnant women.

Awareness of the above issues is important for healthcare professionals when offering diet and activity advice, and interventions during pregnancy. Midwives, having a unique opportunity in building relationships and being in contact with women for a relatively long period of time, should in particular be encouraged to use established behaviour change techniques (Michie et al, 2013) in promoting a healthy lifestyle for women and their families.

Compliance with PA

PA interventions during pregnancy may fail to produce statistically significant results for numerous reasons.

The PA interventions included in the Thangaratinam et al (2012) review consistently reported high rates of attrition, ranging from 10% to 32%. Of those studies that documented reported reasons for dropout, issues around time commitments, attendance of appointments and a lack of willingness to exercise during pregnancy were all cited.

Several studies involved participants who were recruited on the basis of their pre-existing sedentary lifestyle (Haakstad and Bo, 2011; Barakat et al, 2009; Garshasbi and Faghih, 2005; Marquez-Sterling et al, 2000). Whereas dietary interventions rely on the modification of a current behaviour (eating) that is common to all individuals, PA interventions often involved the adoption of a new behaviour (exercise), which typically requires a greater degree of motivation and determination to achieve.

The intensity of recommended PA is typically such that it produces discomfort in the form of breathlessness, warmth and, potentially, mild musculoskeletal soreness. These add to common pregnancy symptoms, particularly if women are not used to having physical activities in their

usual everyday life. It also requires a time commitment, equipment, access to facilities, child care and so forth. Such logistical, subjective and financial barriers to participation in PA exist where they do not for home-based dietary interventions, perhaps offering explanation for the poor outcome of PA interventions.

Within the UK, NICE (2010) explicitly recommends that, for the purposes of achieving and maintaining a healthy weight, activity should be built into daily life. Of the 14 exercise-based interventions measuring weight gain in pregnancy as a primary outcome included in Thangaratinam's review, only one specified that the intervention included advice around maintaining an active lifestyle (Haakstad and Bo, 2011) with all others focusing on structured exercise such as water/land aerobics or toning/resistance exercise. Such an approach, while methodologically justifiable within the context of the individual studies, does not reflect best practice guidelines within the UK, and as such is of questionable relevance to the delivery of maternity services.

Why were dietary interventions effective and favoured?

Dietary interventions in overweight and obese pregnant women follow dietary recommendations for the general population, with some interventions reducing energy intake by up to 30% (Rae et al, 2000); others increasing consumption of fruit, vegetables and whole grains; or keeping a healthy ratio of fat, protein and complex carbohydrates ranging from 30%/15%/55% (Wolff et al, 2008) to 40%/30%/40% (Asbee et al, 2009; Thornton et al, 2009). Reduced energy intake should slow gestational weight gain, as the mother would partially mobilise her fat stores for energy, but a fetus needs more than just energy to thrive.

Total energy intake and dietary fat are only part of a complex diet. Correct levels of micronutrients, such as folate, iron, calcium, vitamin D and omega 3 fatty acids (Thompson et al, 2010; Baker et al, 2009), may be more important for optimal fetal development than the mother's bodyweight or gestational weight gain, with only one study (Wolff et al, 2008) providing all participants with supplements.

The glycaemic index (GI) is a system for ranking carbohydrate rich foods from one to 100, based on overall effect on blood glucose levels (Diabetes UK, 2012). Lower GI foods take longer to be digested providing a more steady supply of glucose over a longer time period compared to high GI foods, which cause a sharp rise and then fall in glucose levels. Some studies have shown that low GI diets have a positive effect on cholesterol levels and reduce the risk of heart disease or possibility of developing type 2 diabetes (Lui et al, 2000; Salmerón et al, 1997). Therefore, low GI diets have been used in some dietary interventions during pregnancy. Clapp et al (1997) found their lower GI group had increased placental growth, less gestational weight gain and lower birthweights, but larger studies into GI diets are needed. A few studies, such as Guelinckx et al (2010), covered emotional eating and limiting binge eating so considering the psychological aspects of food as well as the energy content.

Compliance with dietary advice

Dietary interventions used a range of data collection methods to measure dietary intakes, including computer-assisted self-interview (Bechtel-Blackwell, 2002) in the home, diet recalls and food frequency questionnaires (Briley et al, 2002), food diaries (Thornton et al, 2009; Wolff et al, 2008; Khoury et al, 2005) and interviews. Completing a food diary for long periods of time (Khoury et al, 2005), or receiving feedback on your current diet (Phelan et al, 2011) can modify intake.

Asbee et al (2009) offered one lifestyle consultation with a dietitian and weight monitoring with feedback. Those in the intervention group who did not follow the dietary guidance had significantly heavier babies. Studies such as Wolff et al (2008) and Briley et al (2002) found those who did drop out stated the time commitment to attend appointments or complete all the tools was the issue. Reported compliance with dietary interventions ranged from 75% to >90%, with diets generally easier to follow than PA regimes. Dietary interventions ranged from 10 times one-hour personal appointments with a dietitian (Wolff et al, 2008) to five-minute brief interventions with a food technologist (Quinlivan et al, 2011b). Briley et al (2002) used six structured home visits by a nutritionist for assessment and counselling which improved the iron status and birthweight, but would be very expensive to implement within the NHS.

Intervention design

The design of interventions should take account of the benefits for the women of face-to-face time with a health professional or attending a group nutrition counselling or exercise session, against the costs to women and the health service in terms of time, effort and transport. If there are too many appointments to attend, the women may struggle or lose interest, but too few interactions and the intervention may have little effect. The same participant time and effort commitment could be argued for completing food diaries, activity logs, using pedometers or regular weighing, with the women most likely to be motivated and engaged if they are to receive feedback and can see a personal benefit. Interventions need to be designed to be accessible by the women they wish to recruit, considering women's employment, family commitments and transport networks. From the existing reviews, evidence on the effectiveness of remote interventions using mobile technology (mobile phones or internet) on gestational weight management is limited and needs further investigation.

No intervention is immune to the culture and environment in which it is based. Women agreeing to take part in interventions will have their own ideas, attitudes, beliefs and views about pregnancy and child-rearing and how they 'should' behave to benefit their baby. Prioritising the baby's development and wellbeing as a motivator for women to adopt healthy behaviour during pregnancy is in line with explorative evidence from analysis of parenting forums' discussions about weight management in pregnancy (Arden et al, 2014). Women's ideas will have been formed over their lifetime and influenced by their peers, who may have been promoting healthy behaviours, such as being active or may

not have been so positive role models, by continuing to smoke and drink but still give birth to an apparently normal baby. These social norms will be considered when a woman reflects on the advice given during the intervention to modify her diet or activity levels. Culture can reinforce incorrect or outdated messages, such as the idea that you should 'eat for two' during pregnancy, or that women should rest excessively. These cultural beliefs need to be identified and the latest evidence no longer supporting these practices sensitively explained. Interventions must be designed to fit into a specific culture and population so may not be replicable globally, unless they are adapted to those cultures.

Limitations

Another issue worth noting is that many studies had not clearly reported which strategy, if any, was used, making comparisons impossible. Gardner et al (2011) identified goal setting, self-monitoring and providing feedback as common features of many of these interventions. Brown et al (2012) developed this theme by concentrating on goal-setting strategies and components of these, such as goal framing, goal proximity and performance feedback indicators. They found goal setting useful in helping women to manage gestational weight gain but, due to the wide variation in how goals were set and supported, it was not possible to identify which aspects of goal setting were most successful (Brown et al, 2012).

Michie et al (2013) developed a taxonomy for classifying key components of behaviour change interventions in health psychology research. The behaviour change taxonomy is a useful tool to identify key components of complex behaviour change interventions (for example, action planning, goal setting, social comparison) with the aim of being able to see which components or combinations of components are most effective. Future studies should clearly state what they have undertaken, using the standardised terms found in the behaviour taxonomy, so that other researchers can evaluate study component effectiveness. The lack of standardised terms in the maternal obesity intervention literature, and use of vague terms such as 'nutrition counselling', make the taxonomy hard to apply. Currie et al (2013) used the taxonomy to identify behaviour change techniques in PA interventions with goals and planning, shaping knowledge and comparison of outcome techniques used to maintain activity during pregnancy, but conclude that they cannot measure the effectiveness of each technique due to a lack of high-quality interventions. Using the behaviour change taxonomy, when analysing the effectiveness of gestational weight management clinical trials, merits further investigation.

Gestational weight management is a growing area of research with several large ongoing intervention trials. The Australian RCT called LIMIT, with 2212 participants, recently published findings in the *British Medical Journal* indicating a lack of effectiveness for their intervention on all outcomes except the incidence of macrosomia (>4000g) (Dodd et al, 2014). Due to the current level of research activity in the area of gestational weight management, continuous review of the topic is important.

Conclusion

PA has a role to play, however, in light of a low compliance and limited understanding of its impact on fetal growth and birthweight, more robust investigations are required to address the balance between its benefits and impact.

Most diet interventions looked at improving the diet quality by moving the woman's diet towards the ideal macronutrient profile and by eating more fruit and vegetables, with some studies looking at reducing energy intake, supplement use or GI diets, with no general consensus as to which approach is most effective and best adhered to by women. Reduced gestational weight gain should not be seen as the only benefit of dietary interventions, as improving nutrient intakes and encouraging women to develop more healthy eating habits and practices, will benefit mother and child during pregnancy and into the future.

Further research is required and, given the complex nature of obesity, a mono-method approach to investigating the topic is liable to overlook relevant aspects of the problem. Neither a qualitative nor quantitative approach can, in isolation, deliver a comprehensive overview of the issues pertinent to gaining understanding and establishing fact. As such, a mixed methods approach may provide greater insight, not only into the efficacy of interventions, but also into the context in which they succeed or fail.

Implications

Healthcare professionals, particularly midwives, should be offered support and training in understanding complexities of gestational weight gain management in conjunction with methods to motivate and encourage behaviour change for women during pregnancy.

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Young mothers' decisions to initiate and continue breastfeeding in the UK: tensions inherent in the paradox between being, but not being able to be seen to be, a good mother

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Abstract

Background. In the UK and other developed nations, adolescent mothers are among those least likely to breastfeed, yet they and their children would potentially benefit more from breastfeeding than advantaged groups.

Aim. To explore the ways in which a small group of UK adolescent mothers conceptualise their decisions to breastfeed and experience breastfeeding in their communities.

Method. A total of six focus groups or interviews with 15 mothers aged 16 to 20. Participants were recruited at young parent groups in Oxfordshire, England. Ethical approval was obtained from the relevant NHS and university authorities.

Findings. Young UK women are acutely aware of the stigma attached to young motherhood in the UK and consider that breastfeeding can help overcome this through its associations with good mothering. Although some did not initially want to breastfeed, they developed a desire to do so as their pregnancy progressed. In common with older breastfeeding mothers, young mothers in the UK rarely feel able to breastfeed in public or in front of male family members. This creates conflict and distress for young mothers, who, as new adults, need to be judged positively, and accepted by and integrated into their families and communities. Young mothers identified a paucity of support for breastfeeding within their social networks, and found maintaining exclusive breastfeeding difficult.

Implications. The paradox between being, but not being able to be seen to be, a good mother creates problems and exacerbates existing tensions between young women and their families and communities. An understanding of the conceptual framework used by young mothers in the UK who decide to breastfeed, and of the difficulties they face, may enable midwives to provide appropriate, targeted advice and support for this group.

Key words: Young mothers, breastfeeding decisions, breastfeeding experiences, cultural influences, evidence-based midwifery

Introduction

Breastfeeding rates in the UK fall short of the WHO 2025 target for at least 50% of babies to be exclusively breastfed up to six months of age, with only 1% of mothers currently exclusively breastfeeding for that long (Health & Social Care Information Centre, 2012; WHO, 2012). Within the UK and other developed nations, women aged under 20 are the least likely to initiate breastfeeding, and the breastfeeding rate for this group declines more steeply over time (Hall Smith et al, 2012; Health & Social Care Information Centre, 2012). Increasing breastfeeding rates among young mothers and other disadvantaged groups is a health service priority in the UK, particularly as the health benefits that breastfeeding confers could arguably have more impact among populations with greater health and social needs (Dyson et al, 2006). However, although it is widely held that young mothers require additional support in order to be able to breastfeed (Department of Health, 2004; WHO, 2003), a review of relevant research literature from 1990 to 2013 revealed that little is known about how teenage mothers conceptualise and experience breastfeeding (Hunter, 2014).

Background

Young mothers in the UK and other developed, English-speaking nations (the US, Canada, Australia) are thought to be less likely to breastfeed because many come from

socio-economically disadvantaged cultures where artificial feeding is regarded as usual, convenient and safe; where breasts are overwhelmingly linked with sexual identity and activity; and where breastfeeding, particularly in public, is held to be at best embarrassing and at worst a morally degrading behaviour (Dyson et al, 2010; Shaw et al, 2003). The resulting dominance of formula-feeding has led to a lack of embedded knowledge about breastfeeding being available to young mothers (Hall Smith et al, 2012). However, there is evidence to suggest that young women are aware that breastfeeding is best for their babies' health and intend to breastfeed, but either never initiate it, or stop very soon after giving birth (Hunter, 2008; Mossman et al, 2008; Wambach and Koehn, 2004).

In addition to formulating an intention to breastfeed against cultural norms and expectations, young mothers are making these decisions as people new to adult life. Adolescents crave acceptance and approval as adults, but yearn for the dependency and protection of youth (Frankel, 1998). In this context, childbirth as a rite of passage ending with incorporation of the new adult self into the community (Wilkins et al, 2009) can be seen to be particularly pertinent to young mothers. Their unique developmental and psychological needs might lead them to conceptualise feeding decisions differently to older mothers and to encounter different challenges.

As part of a larger project which aimed to develop an

intervention to improve inpatient care for young mothers intending to breastfeed (Hunter, 2014), this study explores the way in which a small group of UK teenage mothers conceptualise their breastfeeding decisions. It is suggested that insight into this process is necessary for the development of effective breastfeeding support for this group.

Method

This qualitative research employed a constructivist perspective, viewing reality as something that is constructed by the people who live it (Schwandt, 2000). Focus groups were selected as an ideal medium to enable participants to explore and articulate the concepts and frameworks informing their breastfeeding decisions and experiences. A constructivist approach acknowledges that the understandings conveyed by the participants may be distorted by the researcher, who may not share the same cultural references. Measures were taken, therefore, to ensure the results were as close as possible to the participants' reality. These included the researchers reflecting experiences and concepts back to the participants to ensure they had been understood correctly, and allowing the participants' accounts to challenge and change their own pre-existing ideas. Strategies such as inductive analysis and retrospective member checking were also used (Charmaz, 2000; Schwandt, 2000).

Participants/setting

Six focus groups were set up at pre-existing young parent groups in a mix of city, town and rural locations in Oxfordshire, England between July and November 2010. Using different groups enabled cross-comparisons to be made (Morgan, 1988). Although generally considered a prosperous area, Oxfordshire has significant pockets of social deprivation, with its city ranked 131/354 in the English Index of Multiple Deprivation 2010 (Oxford City Council, 2013). The young parent groups from which the participants were drawn were located in deprived areas.

Young mothers were eligible to take part if they were aged 16 or over – 16-year-olds are considered competent to give consent on their own account by the Medical Research Council (2004) – had given birth at age 19 or under, and had considered breastfeeding or breastfed. They needed to have a good level of spoken English. Exclusion criteria included any young woman whose young parent group leader considered would be distressed by taking part. The researcher visited young parent groups to invite mothers to participate if, after an initial explanation from their group leader, they agreed to this visit. Full understanding of the purpose of the study was discussed and participant information leaflets distributed. Those interested in taking part were then invited to return for the focus group on a mutually convenient day. Individual discussions were held with each participant on the day of the group prior to consent being sought. It was made clear that withdrawing or withholding consent would not compromise future care (Matthews, 2006). Participant confidentiality was protected by keeping contact details and demographic information separately from focus group transcripts. Pseudonyms were

assigned to all transcripts. Ethical approval was obtained from the local NHS research ethics committee and the researchers' university.

Data collection

The focus groups were facilitated by the first author of this paper, who was unknown to the participants before the start of the study. Data saturation was considered to have been reached after no substantively new themes were introduced by the final group. The leaders of each of the young parent groups, with agreement of the young women, sat in on the focus groups. As the participants were used to their presence during meetings and as the discussion was not concerned with their role, it was considered that they would assist in normalising the experience.

Data analysis

Data were recorded, transcribed verbatim, coded inductively and analysed thematically. Transcripts were analysed line by line and emerging codes entered into a coding book. Similar codes were then linked together to form sub-themes, which were then grouped into themes. Coding and analysis did not start until all data had been collected. Selected transcripts were analysed by a third person to check validity of the emerging codes and themes (Lincoln and Guba, 1985). Copies of the transcripts were then cut and sorted under the appropriate theme. This exercise was considered an important way of measuring different points of view, confirming concepts and interpretations, and ensuring that the researchers had not distorted the data to fit their own interpretation of events (Silverman, 2006).

Although some of the original participants responded positively to an invitation to take part in the retrospective member checking, they did not attend on the day and a different group of young mothers took part. As the member checking took place up to six months after the original focus groups, many of the original participants had ceased to attend young parent groups and moved on with their lives. However, the young mothers involved in the retrospective checking recognised and identified with the codes and themes presented to them.

Findings

Participant demographics

A total of 15 participants aged between 16 and 20 attended the focus groups. Four of the groups had between two and five participants. On two occasions, only one person attended and an interview was held, as it was important to capture all possible data to give voice to this vulnerable and minority group (Marlowe, 2008). Although below the often quoted focus group ideal of six to 10 participants (Curtis and Redmond, 2007), these attendance levels align with other research with young mothers, who are particularly difficult to engage (Dykes et al, 2003). Each group or interview lasted between one and two hours. Young parent group leaders were not present during the interviews.

A total of 12 participants were white British, one was Portuguese, and two were of mixed white/black African

heritage. A total of 11 stated that they had completed their education, and four planned to return to school or college. Of the participants, 13 were mothers, with babies aged from two weeks to 21 months. Two were approaching the end of their pregnancies when they first attended a focus group. The group in which these women took part (Focus Group (FG) 1) was reconvened after they had given birth, in order to capture their experiences of breastfeeding (these two groups are counted as one in the analysis as the same women attended on both occasions, and the second group was a continuation of the discussion started in the first). All but one of the participants was primiparous. As members of established young parent groups, the participants in each focus group knew one another socially. A summary of the characteristics of each group is presented in Table 1. The focus groups are numbered one to four. The two 'groups' with only one participant are designated Interview (I) 1 and 2.

Two principle themes of personal, and network and community influences on breastfeeding decisions and experiences were identified. In the personal theme, sub-themes of 'breastfeeding and good mothering', and 'breastfeeding and nurturing', emerged. Sub-themes in network and community influences were 'problems of community integration', 'family support – an emotional minefield', and 'the lure of the bottle'.

Personal influences on breastfeeding

Breastfeeding and good mothering

The participants were very aware of the stigma attached to young motherhood. This was highlighted by their admission of making assumptions and judgements about young mothers in the past:

"Cos I used to be like that [disapproving of young mothers]. I won't lie..." (Avril, FG1).

The young women described going to great lengths to present themselves as respectable citizens, including being deliberately vague about their addresses, so they weren't stereotyped as 'council estate' teenage mothers, and taking their partners to antenatal appointments, so people could see that they were in a relationship.

In this context, breastfeeding was seen as an act that would demonstrate that the young person was a capable and worthy mother. One interviewee expressly linked her decision to breastfeed with a need to prove her mothering credentials:

"I think also because I was a teenager I sort of wanted [to breastfeed] to sort of prove that I was gonna be a good mum" (Sarah, I2).

By choosing to breastfeed, the young mothers felt that they were putting their babies first, as it was healthier for them (Lucy, FG2). They rarely mentioned any benefits of

Table 1. Focus group characteristics

Focus group	Location	No of participants	Age range of participants at baby's birth	Ethnicity of participants	Prevalence of breastfeeding in group	
1	City	3	18 years 11 months – 19 years 9 months	White British White British/ Black African Portugese	1 1 1 15 days to 1 month Still breastfeeding	2 1
2	Town/rural	2	15 years 11 months – not divulged	White British White British/ Black African	1 1 Once, twice or not at all	2
3	Town/rural	5	16 years 6 months – 19 years	White British	5 Once, twice or not at all 3 to 7 days 8 days to 2 weeks Still breastfeeding	2 1 1 1
4	Town/rural	3	18 years – 18 years 6 months	White British	3 Once, twice or not at all 15 days to 1 month	2 1
I1	Town/rural	1	19 years 3 months	White British	1 Once, twice or not at all	1
I2	Village	1	18 years 5 months	White British	1 Over a month	1

breastfeeding for themselves – only one group cited the fact that it helps women lose weight (FG3). In fact, breastfeeding was held to have several disadvantages for mothers – it could be painful, stressful and difficult:

"It was one of the hardest things I've done" (Becky, FG1).

Breastfeeding was also seen to be a sign of good mothering because it promoted 'closeness for you and your baby' (Jemma, FG3), creating a bond that formed an important part of participants' maternal identity and boosting self-esteem:

"...but if you really think about it, if you're breastfeeding, all your baby really needs is you... Because you're his comfort, his food. You know, you've got everything he needs" (Becky, FG1).

Breastfeeding and nurturing

In order to want to breastfeed, participants described how they had to learn to see bodily contact as a nurturing, rather than a purely sexual activity. Only one participant, who had grown up around breastfeeding, saw it as the normal and natural option (Avril, FG1). For the others, a change in attitude generally happened over the course of the pregnancy, as the drive to be a good mother overcame an initial dislike of the idea of breastfeeding. This process is particularly evident in the narratives of Sarah (I2) and Shannon (FG1). Sarah describes how, when asked about breastfeeding in early pregnancy:

"I was like 'oh no, I don't like it, I don't like it'" (Sarah, I2).

This attitude changed as she learnt about breastfeeding benefits and developed a relationship with her unborn child:

"...and then, sort of, as I grew bigger, and then obviously saw the scan, I thought 'oh no, I do wanna'... and then I

think learning about it made me realise that I did wanna do it" (Sarah, I2).

Shannon described rejecting the idea of skin-to-skin contact when she first heard about it, as her baby would be covered in 'goo stuff'. She also struggled to overcome her association of breasts with sexuality:

"I can see my baby's dad latched onto the other one" (Shannon, FG1).

Again, however, she came to associate bodily contact and breastfeeding with nurturing and being a good mother:

"Um, well my neighbour... she didn't breastfeed... I look at her relationship with her daughter... they don't seem as close... I wanna breastfeed – I want to hold my baby straight away and stuff like that" (Shannon, FG1).

Network and community influences on breastfeeding decisions and experiences

Problems of community integration

It was apparent that a deeply embedded taboo about feeding in front of other people, particularly men, made being integrated into the community as a breastfeeding mother difficult. Participants described oscillating between acts of bravado and defeat. Avril was able to follow Shannon's example and breastfeed in a shopping centre:

"Shannon whipped it out and I thought 'if she can do it, I'm doing it'" (Avril, FG1).

But the prospect of feeding her baby in front of other people's partners at a breastfeeding clinic is too much for one participant:

"There was all these blokes there. I was just like – 'I'm 18, and I didn't want to' – you know... So I just sort of said: 'Oh, we're going for a walk and we'll come back.' And I just sort of ran out of there" (Sarah, I2).

The taboo against public breastfeeding extended to feeding in front of male family members. Some young women were even embarrassed to feed in front of their partners initially. Far from bringing praise of their mothering skills, breastfeeding could isolate the new mothers from their families, causing great distress:

"[My mother]... told me I couldn't breastfeed, and told me that if I wanted to breastfeed I had to go upstairs... I had to go and sit in the car... it was almost like they rejected me" (Becky, FG1).

Some felt that they had to choose between breastfeeding and spending time with their families:

"...I wanted to be on my own doing it [expressing], but I didn't want to be on my own like missing out on that time with everyone – like I could hear them all laughing downstairs and I was upstairs" (Sarah, I2).

This feeling of isolation was further compounded by the perception that no one was able to provide help and support:

"...at night time I was the only one that could get up and do it – I just thought that was quite hard that no one else could like get up and do it – it had to be me" (Lottie, FG3).

Family support – an emotional minefield

Receiving support and encouragement from their families and friends helped the young mothers feel valued and accepted,

and gave them the strength to continue breastfeeding when difficulties or opposition were encountered:

"Cos like when I was in hospital... I was gonna give up, but if it wasn't for him [partner] I think I would of, but he was really encouraging, he kept me going" (Vicky, FG3).

Partners and families were not always perceived to be supportive, however. Lack of support was often attributed to a lack of knowledge about breastfeeding or, in the case of some partners, to prevailing cultural norms:

"He preferred me to bottle-feed. It's just a man thing, isn't it?" (Rachel, I1).

"She [foster mother] didn't really breastfeed her kids, so she was giving me the option obviously – it was my choice, so, but she tried helping out as much as she could... like if I needed to express she would hold the baby... but she wasn't very helpful – she just kind of let me do it myself, sort of thing" (Jemma, FG3).

Furthermore, not being able to participate in feeding their babies could exclude partners:

"Partners don't get the bond that you get" (Clare, FG3).

Family relationships could be emotionally charged, making it difficult for mothers in particular to give, and daughters to receive, advice. Even though her mother had breastfed, one participant found it difficult to accept support from her:

"I'm much happier now I'm not at home. Like me and me mum have got a much better relationship now, 'cos we're not arguing all the time" (Tanya, FG4).

Participants in two groups felt that, even when they had a more positive relationship, their mother was not the right person to support them with breastfeeding:

"I think my grandma'd be better, actually showing me how to do it, 'cos my mum's really funny – about stuff like that. She gets – she's – she gets really embarrassed" (Shannon, FG1).

In some cases, it was the young women who were embarrassed to discuss breastfeeding with their mothers and would rather talk to a healthcare professional:

"Yea, I don't have a bond with them or anything like that" (Lottie, FG3).

It appears that these mothers find it easier to accept support from health professionals, not only because discussing bodily functions with their mothers is potentially embarrassing, but also because by identifying breastfeeding with good mothering, they have made an emotional commitment to breastfeeding success, and are more likely to be overwhelmed by their emotions in front of those closest to them. The participants were asked about receiving advice from lay breastfeeding supporters, but regarded this idea with suspicion, categorising anyone who wasn't either family, friend or professional as a 'stranger' who they wouldn't want to talk to.

The lure of the bottle

Initiating feeding was one thing, but sustaining it in an environment that was often unsupportive and where breastfeeding separated new mothers from their families was altogether different, particularly for mothers who left hospital expressing breastmilk. Regular expressing was ultimately an unsustainable commitment:

"And then in the end I just couldn't be arsed, and had enough when I got home, after three weeks, I just shoved him on the bottle" (Jemma, FG3).

Some young women felt that exclusive breastfeeding was not sustainable in their day-to-day lives, but that combining it with bottle-feeding created a perfect feeding method:

"I'd do both bottle and breast [if she had another baby]... I'd find it easier. It wouldn't always be relied on me" (Clare, FG3).

Mixed feeding was seen as an option that enabled new mothers to integrate fully into their families and communities. It was also considered important that babies become 'used to' bottle-feeding, as breastfeeding could not be allowed to continue for too long. One participant, who had grown up around breastfeeding felt that early weaning was essential:

"It's kind of frowned on to breastfeed from three or four months" (Avril, FG1).

The participants, therefore, disagreed with the practice of not offering formula supplements in hospital:

"I think you should [be offered formula in hospital], and then you can choose what you want to do..." (Lottie, FG3).

Discussion

The focus group format employed in this research generated some forthright discussion and opinions. The data support previous findings that young mothers choose to breastfeed because it is 'best for baby', and promotes bonding. Support from families and significant others is identified in other UK studies as an important component of breastfeeding success (Hall Moran et al, 2007; Shaw et al, 2003). The young mothers' descriptions of finding breastfeeding in public challenging are consistent with the experiences of some older mothers (Mahon-Daly and Andrews, 2002). This study adds to the growing body of research from the UK and Australia highlighting the fact that feeding in front of men, even close family members, is taboo (Stapleton, 2010; Benson, 1996).

In this study, these themes are embedded in an overriding need expressed by young mothers to be a good mother and integrated as such into their families and communities. The drive to be a good mother enabled participants to overcome negative attitudes towards breastfeeding during their pregnancies. Their need for family and community integration made exclusive breastfeeding difficult to maintain. The paradox of breastfeeding being a hallmark of good mothering and yet something that cannot be seen is particularly problematic for young mothers: evident throughout is the narrative of young women as 'rookie' adults and mothers, wanting to be judged positively and seeking affirmation and acceptance from those close to them.

The association of breastfeeding with good mothering is well established among older mothers (Marshall et al, 2007), and the stigma of young motherhood makes young women keen to portray themselves as good mothers (Graham and McDermott, 2006). Breastfeeding has not, to the authors' knowledge, been specifically associated with good mothering in other qualitative research with young women. Earlier studies of young mothers' attitudes to breastfeeding in Canada and the UK have pointed towards this idea, in that young women suggest their babies' needs are paramount (Brown et

al, 2011; Nelson, 2009). It may be that the need to be a good mother is particularly strong in younger mothers, because adolescents are developing fragile identities as new adults, and because they fear that being labelled a 'bad' mother will result in their babies being taken into care (Price and Mitchell, 2004; Frankel, 1998).

A recent UK study of factors influencing the infant-feeding decisions of socio-economically deprived pregnant teenagers presents a different view, finding many young women viewed breastfeeding as a morally inappropriate behaviour practised by lazy, 'loose' women (Dyson et al, 2010). Dyson et al (2010) do not state what stage of pregnancy the participants in their study had reached, but the negative views could indicate the women were earlier in their pregnancies.

Also highlighted here is the emotionally charged and delicate nature of many mother/daughter relationships, suggesting that young mothers might prefer to receive breastfeeding advice and support from health professionals. Friendship and support from other young mothers also emerge as important by helping to increase confidence.

Limitations

The number of participants was small, self-selecting, and all attended young parent groups. This, and the limited geographical area of the research, affect the transferability of the findings to other settings. In keeping with a constructivist approach, the researcher was the instrument of data collection and analysis (Parahoo, 2007). This could have compromised internal validity, although transcripts were reviewed and codes agreed with a third person to guard against this.

Implications for practice

The finding that some young women develop a desire to breastfeed over the course of their pregnancies reinforces advice that women should not be asked about their feeding intentions at the beginning of pregnancy, but involved in open discussions about breastfeeding (UNICEF, 2010).

When discussing feeding, midwives need to consider the difficulties that young mothers face maintaining breastfeeding when it isolates them from their families or creates added tensions in fragile relationships. Advice needs to fit into the context of young mothers' lives and diffuse, rather than exacerbate, the emotional strain they are under.

A strong inclination towards mixed feeding among young breastfeeding mothers is also mirrored in other UK and US studies and early formula supplementation is common among this group (Grassley and Sauls, 2011; Wambach and Koehn, 2004). Although breastmilk expression would provide a much healthier alternative, current findings suggest that prolonged breastmilk expression is problematic for this group. The challenges young mothers need to overcome in order to maintain breastfeeding have led to the suggestion that mixed feeding might be a more realistic and practical goal for some (Nelson, 2009). It would certainly appear that in order for more young women to be able to breastfeed exclusively either creative solutions must be found to the stresses and dilemmas they face or attitudes and conventions within society at large need to be challenged and changed.

Conclusion

Young mothers associate breastfeeding with good mothering. Those who choose to breastfeed struggle to balance the competing concepts of their ideal for good mothering and the reality of being an adolescent adjusting to parenthood within a social milieu intolerant of breastfeeding in public and lacking

the heritage to provide adequate breastfeeding support. The views expressed by this small number of young UK mothers suggest that midwives need to understand and address the developmental, conceptual and community frameworks which shape young mothers' breastfeeding decisions and experiences if effective support is to be offered to this group.

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Intrapartum support: what do women want?

A literature review

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Abstract

Objective. To identify how far the nature of labour support shapes women's assessment of their birth experiences.

Method. The structured literature review described in this paper formed part of a broader comprehensive review of the literature on labour support. The broader review was undertaken in July 2009, updated in September 2011 and included a total of 147 sources. The thematic review described in this paper included 91 papers.

Findings. Intrapartum support has been extensively studied over the last 50 years. This has included substantial exploration of the role of intrapartum support in women's assessment of their childbirth experiences and women's definitions of support. The review of research found that support was a central factor in women's responses to childbirth. Studies with women found a consistent list of priorities over time and across geographical and cultural boundaries.

Conclusion. High-quality continuous support is key in promoting normal birth and reducing medical interventions. It also improves women's perceptions of the birth experience, promotes a positive adaptation to motherhood and reduces the risk of post-traumatic stress disorder and other perinatal mental health problems. A large body of evidence enables the definition of the key concepts and behaviours considered by women to be central to the provision of high-quality intrapartum support.

Key words: Intrapartum support, support, labour, midwife support, evidence-based midwifery

Introduction

Women have life-long memories of their children's births (Beech and Phipps, 2004; Simkin, 1991). Women's views and memories of their child's birth are increasingly recognised as important outcomes of childbirth, alongside physical wellbeing (Beech and Phipps, 2004; NCT, 2002; Lavender et al, 1999; Lavender and Walkinshaw, 1998).

This paper reports a literature review to explore women's views about what contributes to a positive birth experience and what behaviours they value most highly from the professional caring for them during labour.

A consensus exists in the academic literature that labour support consists of three sub-categories of emotional, physical and informational support (Hodnett, 2002; Miltner, 2002; Sauls, 2002; Bryanton et al, 1994). Emotional support is defined as expressions of love, admiration, liking, reassurance and respect, spending time with the client and making them feel cared for. Tangible or physical support includes direct assistance and informational support includes advice, information and feedback (Lazarus, 1991; Kahn, 1979). Over time, the categories of advocacy and partner support have been added in some studies to reflect research findings (Hodnett et al, 2007).

Literature search method

The review of the literature relating to support during childbirth was undertaken in July 2009 using CINAHL and PsychINFO, drawing on 165 databases. This search was cross-referenced with a search using the NHS Scotland electronic library database to ensure completeness. The search terms 'Support + childbirth or labo*' were employed, limiting results to articles available in English and published

since 1980. A total of 86 articles were selected for detailed review. Secondary searches were undertaken for key cited articles and related search topics identified in the initial review. This thematic review included 'women's experience + childbirth', 'satisfaction + childbirth', 'post-traumatic stress + childbirth', 'fathers + childbirth', 'doula', 'social support + health', 'companions + childbirth', 'maternity + quality', 'social support + theory', and led to the critical review of a further 60 papers. Papers and position statements from UK governments, national and international maternity care professional bodies and lay childbirth organisations over the last 10 years were reviewed. The literature search was repeated in September 2011 to include material from mid-2009 to 2011, which led to the review of 52 further papers.

When analysing the evidence for what women experience as being supportive during labour, the hierarchy of evidence (NHS Centre for Reviews and Dissemination, 1996) provided a helpful framework. The review first explored findings from meta-analyses of randomised controlled trials (RCTs), then individual randomised studies, then meta-analyses of non-randomised studies and, finally, reviewed individual non-randomised studies. This assisted in the evaluation of the strength and generalisability of findings, as well as enabling the review to move from the more general to the specific.

Meta-analysis of RCTs

One Cochrane library systematic review of specific relevance to this review was identified. The review analysed RCTs comparing the impact of continuous and intermittent support. It identified that women receiving continuous intrapartum support were significantly less likely to report dissatisfaction with the birth experience than women receiving intermittent

support (Hodnett et al, 2011). Data on women's overall satisfaction with the birth experience were collected in 11 trials, with 11,133 participants in total. Reported negative ratings or negative feelings about the childbirth experience were significantly lower among women who received continuous support (RR 0.69, 95% CI 0.59 to 0.79).

Only two of the RCTs included in the review collected any further data relating to women's feelings about the support received. Most of the trials did not seek to identify what aspects of the continuous support were of particular importance to the participants. Hodnett and Osborn's 1989 RCT comparing continuous support by a trained birth supporter (n=49) with usual care by an obstetric nurse (n=54) and asked women about the care received in a postnatal questionnaire. The study found that women in the intervention group reported significantly higher quantities of physical, emotional, informational and advocacy support: the average number of support actions by the trained birth supporter was 15.1, while the average by a nurse in the control group was 8.6 (Hodnett and Osborn, 1989). Fewer than one-third of control subjects reported receiving any physical comfort measures from the nurse. However, the study's authors concede that the postnatal questionnaire employed was a 'crude measure', as it did not look at perceived helpfulness or the relative importance of each type of support.

Another study analysed in the Cochrane review undertook detailed qualitative postnatal interviews with a small subgroup of 16 women involved in the larger randomised trial (Campero et al, 1998). This identified that women in the intervention arm of the trial experienced a sense of comfort and valued the information and reassurance that those providing continuous support were able to provide.

Individual RCT

The next stage in the review identified any individual RCTs that were not part of the Cochrane review that explored women's feelings about labour support. One individual RCT relevant to the review was identified. The primary aim of this large UK pilot RCT with 615 women was to compare labour management and outcomes between the intervention arm, where a partogram action line was used, with routine care where no action line was used. Participants' views of their labour were gathered using an open-ended question in a postnatal questionnaire (Lavender et al, 1999). The questionnaire asked the 412 respondents to identify the elements that were most important to them about their labour experience. The study found that the elements of labour care most frequently identified by the participants were professional support, information giving, decision-making, medical interventions, a sense of control and pain relief (Lavender et al, 1999).

Though meta-analysis and RCTs are viewed as the highest level in the hierarchy of evidence, the information they were able to provide in this review about what behaviours women experience as being most supportive in labour was limited. The Cochrane systematic review and Lavender et al's RCT (1999) highlighted professional support as a central element of women's views about labour, that continuous support

is more positively evaluated by women than intermittent support, and that a higher quantity of supportive behaviours is valued. However, neither provided more detailed evidence about the optimal content of support. It was, therefore, necessary to explore non-randomised research studies.

Systematic review and metasynthesis of non-randomised studies
Review was undertaken of systematic reviews and metasynthesis of non-randomised studies. Five such reviews of research with significant reference to women's views of, and satisfaction with, care and support in labour were identified (Larkin and Begley, 2009; NICE, 2007; Bowers, 2002; Hodnett, 2002; Watkins, 1998). All five reviews identified that professional support is central to women's experience of labour and childbirth.

The most comprehensive synthesis was undertaken by Hodnett in 2002. A systematic and robust review of 137 methodologically varied studies exploring pain and women's satisfaction with their birth experience was undertaken. This review included descriptive studies, RCTs and systematic reviews of intrapartum interventions. The findings of each of these three key types of research were synthesised separately and then summarised qualitatively. A total of 29 studies of satisfaction with intrapartum care were reviewed, ranging from small qualitative studies (n=16) to large population-based surveys (n=>2000), including more than 14,000 women in nine countries. Of the included studies, 10 were undertaken in the UK. Hodnett described two of the larger population-based surveys undertaken in the UK (Green et al, 1998; Green and Coupland, 1990) as among the most rigorous.

The review identified that professional caregiver support is complementary, but distinct from the support provided by a partner: 'Although the support of people who love her undoubtedly is of great benefit to the woman, it is no substitute for the nurse's support' (Hodnett, 1996: 258).

Following the synthesis of the studies, Hodnett concluded that supportive care was the most helpful nursing measure. Strong predictors of dissatisfaction with the birth experience were a lack of involvement in decision-making, insufficient information, obstetric interventions and caregivers that were perceived as unhelpful. Four key factors were so important in women's evaluation of their birth experience that they were found to outweigh the effects of all other variables (age, ethnicity, socio-economic status, birth environment, medical interventions, attendance at antenatal education, pain perception, continuity of care and mobility) (Hodnett, 2002). These factors were: personal expectations, amount of support from caregivers, the quality of the caregiver-patient relationship and the involvement of the woman in decision-making, leading the author to conclude: 'The influences of pain, pain relief and intrapartum medical interventions on subsequent satisfaction are neither as obvious, as direct nor as powerful as the influences of the attitude and behaviours of the caregivers' (Hodnett, 2002: 160).

A further significant systematic review was undertaken by NICE. The 2007 NICE guideline on intrapartum care of low risk women included a review of studies relating to intrapartum communication and psychosocial outcomes

for women (NICE, 2007). NICE employed a 'hierarchy of evidence' approach to evaluating evidence from 1++ (high-quality meta-analyses and systematic reviews of RCTs with a very low-risk of bias) to 4 (expert opinion). The highest level of evidence relating to the topic of communication and psychosocial outcomes reported in the intrapartum guidance was 2+ (high-quality case control or cohort studies).

Two large studies assessed by NICE to have been of high quality identified a strong association between feelings of control during labour, the level of perceived support from the caregiver and women's feelings about their birth experience (Waldenstrom et al, 2004; Green et al, 2003).

The other studies included in the NICE analysis were evaluated at Evidence Level 3. This included a number of smaller qualitative studies with women in the analysis (Vandevusse, 1999; Berg and Lundgren, 1996; Halldórsdóttir and Karlsdóttir, 1996) highlighting a number of 'strong common themes': the importance of feeling treated as an individual, the need to feel guided and supported and to have caregivers who demonstrate positive, caring and empathic traits during labour (NICE, 2007).

A comprehensive approach was taken by Bowers in a systematic review and synthesis of 17 qualitative studies of women's perceptions of professional support in labour including 533 women. The study responses were analysed by Bowers through categorisation into four theoretical dimensions of intrapartum support: emotional, tangible, informational and advocacy. This review identified that the continuous presence of a midwife or nurse, physical comfort measures, advocacy and emotional support were key elements in women's responses to birth (Bowers, 2002). A recurrent theme was the importance of the caregiver being friendly, open and gentle, communicating a warm positive regard and being able to convey a sense of security and tranquility (Bowers, 2002).

The review highlighted that women's perception of care is a key element of their overall experience of childbirth: 'Women who perceived their nurses as negative or uncaring tended to have more negative perceptions of the labour experience' (Bowers, 2002: 750).

Bowers identified that the review was limited by the lack of contextual cultural descriptions in the studies, which limit the reader's ability to assess transferability of the findings. It is also of note that Bowers' review did not contain any critical analysis of the quality of the included studies beyond identifying this lack of context.

Two smaller reviews were identified. Watkins' review (1998) included seven qualitative and quantitative studies focusing on women's views of intrapartum care (Gagnon and Waghorn, 1996; Tarkka and Paunonen, 1996; Bryanton et al, 1994; Bramadat and Driedger, 1993; Beaton, 1990; Green and Coupland, 1990; Mackey and Lock, 1989).

The review identified the importance of individualised care as a central theme of the included studies. The review, described as an 'integration and synthesis', is limited by the small number and high level of methodological heterogeneity.

A further, more recent, review of the literature relating to women's feelings about support was undertaken by Larkin

and Begley in 2009. This review sampled 62 papers from 180 papers identified as being relevant, including 30 qualitative and 30 quantitative studies. The studies were undertaken in the UK (n=22), North America (n=13), Sweden (n=9) and Australia (n=7). The most commonly identified themes in the sample of papers were control, support, the relationship with the caregiver and pain (Larkin and Begley, 2009).

The reviews described above provided further information about the importance of positive support behaviours to women in labour and some insight into the key elements of that support. In order to develop a more detailed definition of the behaviours that women find supportive and less supportive in labour, and to understand the role that those behaviours play in the postnatal period, further analysis of individual qualitative and quantitative studies with women was required. This analysis is divided into two key themes: the priorities for care defined by women, and the impact of the care on women's feelings about the birth.

Findings of individual studies – identifying priorities

Since the 1950s, research has identified the key role that professional support plays in women's overall satisfaction with and perception of their childbirth experience and has sought to identify what behaviours women find most (and least) supportive. A total of 44 papers were reviewed that focused on identifying women's priorities for care during childbirth. Of these, 33 papers used a qualitative approach to explore women's feelings with relatively small samples of women, while 11 gathered data through larger population-based sampling methods. While most of the studies were undertaken in European or North American settings, 10 were undertaken with women from non-Western and developing countries, including a number of African studies (Mbye et al, 2011; Redshaw and Heikilae, 2011; Sawyer, 2011; Morhason-Bello et al, 2008) and Arab states (Mosallam et al, 2004; Oweis and Abushaikha, 2004; Mirmawlai et al, 2003).

The earliest research into women's priorities for care during labour was by Lesser and Keane in 1956 in the US. In total, 66 women were interviewed in mid-pregnancy and then postnatally about what they expected from nurses during labour. These women identified the need to be sustained by another human being through nursing presence, to have relief from pain, to have a safe outcome, to have their attitudes and beliefs accepted and to receive bodily care (Lesser and Keane, 1956).

Another early North American study was conducted by Shields in 1978. A total of 80 women were interviewed postnatally about their satisfaction with the labour. No association was found between a number of variables, such as the woman's age, educational status, parity and analgesia used and her satisfaction with labour (Shields, 1978). Of all variables measured, the type of nursing care was most strongly associated with satisfaction. Presence of the nurse was the most helpful nursing measure, the majority of women wanted the nurse in the room most or much of the time. The presence of other supporters, such as the partner or mother, did not alter the woman's need for the presence of the nurse.

An influential study in the development of knowledge of women's priorities for care was that by Kintz in the US in 1987, which developed 'the nursing support in labour questionnaire'. This questionnaire has formed the basis for a number of subsequent studies. The questionnaire, devised by the author and based on the research available at the time, provided women with a list of nursing behaviours which they were asked to rate postnatally in terms of their importance to them (Kintz, 1987). This questionnaire was adapted and further tested in a subsequent study into the BANSILQ (Bryanton Adaptation of the Nursing Support in Labour Questionnaire), which provided women with a list of 25 possible nursing behaviours. The BANSILQ was tested in this study with 80 postnatal women.

The behaviours chosen most frequently were: made me feel cared about as an individual, kept me informed about progress, touched me, treated me with respect, praised me, appeared calm and confident, provided a sense of security, spent time in the room, instructed me in breathing and made me physically comfortable.

The behaviours chosen least frequently were: providing pain medication, explaining hospital routines, encouraging my partner, familiarising me with my surroundings, including me in decisions and distracted me by talking (Bryanton et al, 1994).

Bryanton et al concluded 'emotional support during labour is more helpful to women than informational or tangible support' (Bryanton et al, 1994: 643).

The BANSILQ has been used in a number of subsequent studies with women from a range of cultural and ethnic backgrounds (Mbye et al, 2011; Sauls, 2010, 2004; Corbett and Callister, 2000; Ip, 2000; Holroyd et al, 1997) which identify many commonalities in women's key priorities for care.

Holroyd et al used a Chinese language translation of the BANSILQ with a purposive sample of 30 Hong Kong Chinese women in the 24 to 36 hours after birth. The women's most highly rated behaviours had a high number of commonalities with the US women in the Bryanton study, though some differences were apparent: the provision of information was rated more highly and the provision of touch was the least rated behaviour (Holroyd et al, 1997).

Sauls used the BANSILQ in two studies with adolescents in the US to identify whether their support needs were different from older women. The most helpful behaviours identified by the 185 participants were providing pain medication, treating me with respect, praise and supporting my partner (Sauls, 2010). The emphasis on the provision of pain relief is distinct from the other studies using the same questionnaire, though the importance of the provision of emotional support is shared with the other studies.

Mbye's study with 120 women in the Gambia using the BANSILQ found that women valued emotional support behaviours most highly and informational support the least.

The BANSILQ approach to ascertaining women's views of which behaviours are most important to them during labour may be criticised as a list of previously defined behaviours is provided to women, thus reducing women's freedom to identify their priorities for care. A number of

studies have been undertaken which did not suggest the behaviours to women but enabled the women to list key behaviours themselves. An antenatal study by Tumblin and Simkin in 2001, with 57 nulliparous women in the US, found eight items that were listed most frequently: making me as comfortable as possible, support, keeping me calm, reassurance, answer questions, helping me with breathing and relaxation, helping my partner, monitoring the baby (Tumblin and Simkin, 2001).

The key priorities identified by women were remarkably consistent across all of the papers reviewed. There were, however, some small variations in the priorities identified by women in different studies: while most of the studies reviewed emphasised the centrality of emotional support (Mbye et al, 2011; Corbett and Callister, 2000; Bryanton et al, 1994), two studies were found that emphasised the importance of the health professional's technical skills and knowledge (Manogin et al, 2000; Schultz et al, 1998).

In total, 11 large population-based studies to identify women's priorities for care were reviewed. A recent nationwide cross-sectional study, which was based on 739 women's feelings and perceptions of intrapartum care in Sweden, identified the importance of feeling in control, including being treated with respect and involved in decision-making, in women's assessment of their birth experience (Wilde-Larsson et al, 2011).

Several large quantitative studies drawing on representative samples of women have been undertaken in the UK. The findings of these studies have emphasised the important impact of the caregiver relationship and communication during childbirth (Care Quality Commission, 2010; Healthcare Commission, 2008; Green et al, 2003; Garcia et al, 1998; Green and Coupland, 1990).

A large scale study, 'Greater Expectations', including 1286 women who gave birth in 2000 in eight maternity units in the South and North of England (four units in the South were matched with four units in the North) used two antenatal and one postnatal postal questionnaire to identify women's feelings about their maternity care (Green et al, 2003). The results were compared with a similar study by the same group of researchers with 825 women in 1987 (Green and Coupland, 1990). The study found that women's priorities and needs for care during labour had remained very similar between the two time points, though women in the later study worried significantly more about pain in labour than the women in the earlier study and were more willing to accept medical interventions, particularly epidural analgesia (Green et al, 2003). The study found that women felt more satisfied with the communication and care of caregivers in the later study, with higher proportions satisfied with the amount of information they were given, more women described the midwives as 'sensitive', more felt that they were treated with respect and as an individual during labour. Multiple logistic regression analysis of the results found clear links between women's satisfaction with their experience and greater feelings of being in control, being treated with respect by staff and being able to get into comfortable positions of their choice (Green et al, 2003).

Women were less satisfied when the staff caring for them in labour were considered to be less helpful and when they were left alone (Green et al, 2003).

The importance of a sense of control to women during their childbirth experience has been found in repeated studies, both small qualitative and larger population-based survey studies (Wilde-Larsson et al, 2011; Namey and Lyerly, 2010; Larkin and Begley, 2009; Green et al, 2003).

The relationship between satisfaction with intrapartum support and postnatal wellbeing

In order to fully understand the role of support in women's experiences of childbirth and what women want from that support, it is helpful to look at the evidence exploring the impact of support on women's wellbeing postnatally. A total of 40 papers were reviewed that focused on the consequences of intrapartum care for women's ongoing psychological health. It was felt to be evident that exploring the elements of care that women identified as having an ongoing impact, contributed further to the development of an understanding of what women want (and don't want) from their intrapartum care.

The literature reviewed identified that generally women are very satisfied with their childbirth experience and the care received (Records and Wilson, 2011; Wilde-Larsson et al, 2011; Care Quality Commission, 2010; Green et al, 2003; Ortega et al, 2001; Waldenstrom, 1999).

Waldenstrom's Swedish study of 1111 women identified 50.3% of women had a very positive overall experience with 3.2% reporting a very negative one. Five variables in a logistic regression analysis which contributed to women's birth satisfaction scores were: sense of involvement in the birth process, anxiety in labour, pain, parity and the midwife's support. The partner's support was not significantly linked with satisfaction scores (Waldenstrom, 1999).

Positive childbirth experiences are linked to more positive feelings about motherhood and parenting stress and lower anxiety levels (Takehara et al, 2009). Poor experiences contribute significantly to perinatal mental health problems including postnatal depression.

'Regardless of the type of labour or the outcome of the labour, the quality of support a woman receives can make the difference in whether she recalls her experience as depersonalising and degrading or as one that increased her self-esteem and self-confidence' (Hodnett, 1996: 257).

Unplanned events in labour, such as emergency CS, are also linked to the development of perinatal mental health problems (Dencker et al, 2010), though it appears that the impact of these adverse events may be mediated and lessened by the provision of high-quality intrapartum support that reduces feelings of being out of control, being alone and fear (Tham et al, 2010). While other factors play an important role in the development of postnatal mental health problems, including woman's personal mental health history, stressful life events, a poor social support network and perceived low levels of partner support, the nature of the childbirth experience represents a key risk factor or, conversely, if positive, may serve as a protective factor:

'Positive experiences act as a buffer against later physical and emotional stress'(NCT, 2002: 1).

Several high-quality studies explored birth experiences and the development of post-traumatic symptoms (Stevens et al, 2011a, 2011b, Stramrood et al, 2011; Yang et al, 2011; Olde et al, 2005; Creedy et al, 2000).

An Australian study including 499 women gathered information through antenatal questionnaires, including demographic details, antenatal risk factors, relationship status and state and trait anxiety scores (Creedy et al, 2000). The authors concluded: 'Antenatal variables (partner support, antenatal risk factors, state and anticipatory anxiety scores measured antenatally) did not contribute to the development of acute or chronic trauma symptoms. The level of obstetric intervention experienced during childbirth and the perception of inadequate intrapartum care during labour were consistently associated with the development of acute trauma symptoms' (Creedy et al, 2000: 104).

The impact of women's childbirth expectations on their perceptions of their birth experience has been examined in a number of studies (Records and Wilson, 2011; Kuo et al, 2010; Bryanton and Gagnon,; Hauck et al, 2007; Green et al, 1998).

Green's study found that women with higher expectations of the birth had higher levels of satisfaction (Green et al, 1998), a finding which is echoed by Bryanton et al's considerable body of work, including a large prospective cohort study with 652 women in Canada (Bryanton and Gagnon, 2008).

One study, in which 20 women were interviewed in depth, concluded that their evaluation of their birth experience is dependent on whether their priority expectations are met (Hauck et al, 2007). This study found that the role of the midwife is central in helping a woman to 'frame' her birth experiences: 'Caregivers become even more important when expectations are not able to be realised... Supportive behaviours of maternity healthcare providers assisted women to evaluate their birth experience as positive even when expectations could not be achieved' (Hauck et al, 2007: 235).

This finding appears to link well with the research on Post-traumatic stress disorder, which suggests that difficult labours with numerous medical interventions are made more difficult for women if there is a perceived lack of care or support from health professionals (Niven, 1988).

Discussion

The methodology of the review, employing the hierarchy of evidence approach as a framework, enabled understanding of women's priorities to develop from more general findings about the impact of continuous support compared to intermittent support on clinical outcomes and women's satisfaction, to a more detailed understanding of the importance of specific elements of that support for women and of the association between support behaviours with psychological outcomes for women.

The review demonstrated the high level of interest and academic exploration undertaken to explore the role of professional support in women's experiences of childbirth.

The evidence reviewed highlights the centrality of

professional support in women's experiences and the detrimental impact on women's longer term wellbeing where high-quality support is not provided.

Conclusion

Continuous professional support in labour is associated with higher levels of maternal satisfaction and feelings of reassurance than intermittent support.

Professional support is, for many women, the most significant element in their feelings about their birth experience, outweighing other factors including medical interventions, antenatal education and birth environment.

There is a strong association between women's perception of the support they received and how in control they were enabled to feel during labour and their emotional wellbeing postnatally. High-quality support appears to mediate the impact of stressful events during labour, acting as a 'buffer', reducing the possibility of trauma following childbirth.

High-quality professional intrapartum support, when defined by women, includes a number of key behaviours

that can be quite easily incorporated into maternity care professionals' roles, whether the professional is a midwife, doctor or obstetric nurse: supportive presence; enabling the woman to have a sense of control, asking the woman and her birth partner what kind of care they would like; presenting a positive, calm and friendly attitude; providing reassurance and praise; coaching the woman and her partner in ways to cope, such as breathing and relaxation, when needed; ensuring the woman feels respected and cared for as an individual; keeping the couple informed about progress; ensuring the partner feels involved and supported and providing physical support, such as touch and assisting with position changes, when wanted.

While the care of every woman in labour must be tailored individually to the woman's particular needs and preferences, the review of the literature suggests that if such simple behaviours are consistently practised in every labour for every woman, care providers can be confident that they will generally be providing the support that women want during their childbirth experience.

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Safety before comfort: a focused enquiry of Nepal skilled birth attendants' concepts of respectful maternity care

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Abstract

Background. Respectful maternity care is the universal right of childbearing women, but in Nepal there are no midwives to deliver this care and it is provided by skilled birth attendants (SBAs), who may be physicians, certified nurses, auxiliary nurse-midwives or degree-trained nurses.

Aim. To explore how this concept of respectful maternity care was perceived by SBAs in practice.

Design. Focus group discussions were used and the setting was two tertiary level maternity hospitals in Nepal. Ethical approval for the study was obtained from the Nepal Health Research Council. A total of 24 SBAs were recruited voluntarily from the maternity units. Data were analysed using a phenomenographic approach and interpretation was verified by the focus group facilitator and note-taker.

Findings. Five categories, divided into 16 sub-categories, present the SBAs' collective description of respectful care.

Conclusions. SBAs understood that respectful care at birth was important, but argued that 'safety comes before comfort'. To achieve safe maternity care, the contribution of relatives is essential, in addition to the provision of medical care.

Implications. Family members need to accompany the woman and her newborn from admission to discharge to provide basic care and this needs to be reviewed. Professional midwives need to be trained, recruited, and deployed in areas where they are most needed and the government needs to regulate the profession and make it legal.

Key words: Maternity care, midwifery, phenomenographic analysis, focus group discussions, evidence-based midwifery

Introduction

The WHO's definition of a skilled birth attendant (SBA) is someone 'trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, birth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns' (WHO, 2004: 1).

In Nepal, there are no midwives to deliver this care and it is provided by SBAs, who may be physicians, certified nurses, auxiliary nurse-midwives, or degree-trained nurses (National Health Sector Support Program, 2012). In addition to basic education, the above professionals can undergo two-month country-specific SBA training, which covers respectful care (Utz et al, 2012; White Ribbon Alliance, 2011). Nepal does not yet have midwives, according to global standards for the role of a midwife (Bogren et al, 2013; van Teijlingen, 2012; International Confederation of Midwives, 2010; Family Health Division, 2006).

Women need access to SBAs to be safe during birth, but the quality of that care is crucial (Harvey et al, 2007). Quality of maternity care and its improvement is one of the priorities in the long-term Nepal National Safe Motherhood and Newborn Health Plan, 2006-2017 (Family Health Division, 2012). The goal of the plan is to ensure delivery of healthcare services with full community participation and gender considerations. This is reported to be undertaken throughout the country by competent and responsible SBAs (Ranaa et al, 2007; Family Health Division, 2006).

In order to increase the number of births attended by

the SBAs, the maternity incentive scheme was introduced in 2005 (Ensor et al, 2009). This has provided expectant women with the opportunity to give birth inside healthcare facilities free of charge. This has contributed to more women accessing such facilities for birth (from 19% to 36%) (Ministry of Health and Population, 2012). However, this increase has not reached the MDG5 target of 60% by 2015 (Family Health Division, 2012). One reason for this could be the lack of access to the healthcare system, resulting in many women choosing to give birth at home (72%) with no skilled assistance (Ministry of Health and Population, 2012). Other women choose to approach tertiary level hospitals, bypassing nearby birthing centres (Department for International Development in Nepal, 2010).

Women in Nepal give birth at an early age. It is estimated that 17% of married women aged 17 to 19 are either pregnant with their first child or are already mothers. On average, a woman in Nepal has three live born children (WHO, 2013a). The birth of a child is often a welcomed event with high involvement of family members (Bajracharya, 2012; Filippi et al, 2006). However, a lack of professionals to assist women during pregnancy and birth and high patient flow at tertiary hospitals (Family Health Division, 2006) increases the likelihood that these women will experience disrespectful maternity care (Swahnberg et al, 2007). Disrespectful care has been identified by Bowser and Hill (2010) as physical and verbal abuse, abandonment, non-consented, non-confidential, and non-dignified care. Respectful maternity care, as set out in Table 1, is the universal

right of childbearing women (White Ribbon Alliance, 2011). However, there are limited descriptions of the SBAs' own views of respectful care in overloaded tertiary hospitals in Nepal. Furthermore, recent publications can be critical of SBAs and their disrespect to women (Bowser and Hill, 2010; Swahnberg et al, 2007). This study aims to explore how this concept of respectful maternity care was perceived by SBAs in practice, based on their professional working life experiences at two tertiary maternity hospitals in Nepal. The SBAs in the study are nurses and not all of them have undergone additional Nepal country-specific two-month SBA training. The terms 'at birth' or 'in maternity care' are used in this study to define the care a woman receives from admission to discharge. The term 'comfort care' refers to non-medical tasks regarding basic care.

Method

The settings

This study was conducted in two tertiary level hospitals in Nepal. Both are recognised as teaching-learning facilities and training and research sites in reproductive health. One was a specialised maternity hospital with more than 25,000 births annually and the other was a multidisciplinary hospital with more than 4000 births each year.

Focus groups and participants

A focus group is a group interview with the optimal size of four to eight participants. They aim to capture perceptions, opinions, beliefs and attitudes towards a concept or service. The interaction between the focus group members can, therefore, add more value than individual interviews, although in less depth. The moderator is leading the session, focusing the topic and notes are taken by an assistant to get the best outcome and understanding of the tape-recorded focus group interview when transcribed (Morgan, 1998; 1996; Kitinger, 1995). In this study, the four focus group discussions (FGDs) took place in meeting rooms at two maternity hospitals in Kathmandu. The interviews were conducted by two native Nepali members of the research team, one acting as moderator, the other as note-taker (Morgan, 1998; 1996). The group was mixed regarding work experience and age. Inclusion criteria was: a minimum of three months in a maternity unit; and at least five deliveries attended during their professional career.

They were informed and assured that they were free to withdraw from the discussion at any time. Participating SBAs gave written informed consent and all the data remained confidential within the group of researchers. The SBAs were female nurses, aged 21 to 56, with the average age of 32. Details of participants are in Table 2. Ethical approval for the study was obtained from the Nepal Health Research Council (reference no 1434).

Procedure

The focus groups were conducted between July and November 2013, with between five to eight participants in each group. Information (including

Table 1. Seven articles of women's right to respectful care (White Ribbon Alliance, 2011)

Every woman has the right to:
1. Be free from harm and ill treatment
2. Information, informed consent and refusal, respected for her choices and preferences, including the right to choose her birth companion
3. Privacy and confidentiality
4. Be treated with dignity and respect
5. Equality, freedom from discrimination and equitable care
6. Health care and to the highest attainable level of health liberty, autonomy, self-determination
7. Freedom from coercion.

study aim and data collection methods) and request for voluntary participation in the FGDs was communicated to all SBAs (also physicians) through the nursing directors. Potential participants were able to contact the research team directly. When at least five SBAs had expressed their interest, a time and place for a focus group was agreed. The opening question was: 'Most of you have heard about the term "respectful care at birth". What does that mean to you in your working life?' The participants shared their conceptions, stories and experiences. The interview continued with questions designed to capture their professional experience with the focus on the SBAs' conception of respectful care at birth. Participants were encouraged to talk freely and, when necessary, the moderator asked follow-up questions. Each focus group discussion lasted 90 to 120 minutes, was tape-recorded and transcribed verbatim. A total of 110 pages were produced and translated into English. A WHO guideline for translation and back translation was used (WHO, 2013b).

Analysis

The analytical approach of Marton (1986; 1981) inspired the design of the present study with the aim of exploring how the concept of respectful maternity care was perceived by SBAs in practice by capturing their conceptions. The phenomenographic method was originally developed by Marton (1986; 1981) in the field of learning to identify different aspects of reality as conceived by different people.

Table 2. Details of participating SBAs in four focus groups

Variables	FDG 1	FDG 2	FDG 3	FDG 4
No of participants	8	6	5	5
Education in nursing/midwifery				
Masters	1			
Bachelor	5	5	4	3
Proficiency certificate	2	1	1	2
Average working experience:	9 years	5 years	3 years	2.5 years
Received additional SBA training	5	3	2	4

The outcome of the analytical process is presented as a collective phenomenographic description of the perceptions, (presented in the finding section) which constitutes the 'outcome space' with sub-categories and categories (Wenestam, 2000).

The first step in the analysis was familiarisation. In the first reading of the transcribed interviews, the conceptions of the SBAs were assessed with a view to capturing their understanding of respectful care at birth. Step two identified 150 different conceptions. In step three, each statement was carefully examined for meaning and refined, while preserving the essence, and described. In the fourth step, similar statements were grouped together. The groupings were: caring on demand; one-to-one care by relatives; communication; information; emergency; environment; protocols and rules; prioritisation; education; definition of respectful care; public versus personal; perception of respectful care; relatives' support maintained the basic care in the ward; knowledge gaps; respecting visitors; respectful care; woman's right; time is changing. In step five, the text in the different groupings were read and re-read, separated, and similar topics were grouped together, condensed, described and labelled into a structure of five categories and 16 sub-categories.

The SBAs' collective perceptions were described in five categories and within the 16 sub-categories in a varied way. In the final step, the comprehensive description was confirmed as an accurate reflection of the original data. The analysis was a dialectic process between the authors. The focus group facilitator and the note-taker verified the description of concepts to be presented in the 'outcome space' with sub-categories and categories and the SBAs' perceptions were in that way confirmed.

Findings

The five themes from the SBAs' collective perceptions of respectful care are broken up into 16 sub-categories.

Relatives' involvement in mother and baby's care facilitated respectful care at birth

This category was represented by four sub-categories:

It was easier for SBAs to ensure respectful care when relatives were there with the woman

The SBAs' perception was that the relatives' support maintained respectful care of the woman as they could stay close to the mother and baby during and after birth. At times, the SBAs arranged counselling sessions with the husband or mother-in-law to bridge gaps in understanding and convince them about what needed to be done to ensure good health of the woman and baby. Relatives then counselled the woman to ensure that she was agreeable to the work being undertaken by the SBAs. When there was shared decision-making with the woman and her relatives, this enhanced respectful care. The woman felt secure with relatives accompanying her:

"Here one visitor is allowed (husband/mother-in-law/ anyone)... and she feels comfortable and her spirit rises up giving her a feeling that she can give birth" (Shanti, FGD3).

Birth preparedness of the woman-relative dyad

The SBAs wanted to be transparent and felt that they guided the dyad in steps throughout the birth process. They encouraged and assisted the woman and her relatives, continuously provided information and told them about what would happen next. The information provided would vary depending on the woman, her relatives and their education:

"Family support, providing proper information and records to the patient party and hospital orientation is what I think is respectful care" (Madhu, FGD4).

Knowledge is beneficial to respectful care

The SBAs found it beneficial to the woman when she had comprehensive knowledge about birth. A lack of knowledge meant that sometimes the SBAs had to be more assertive with the woman-relative dyad to ensure the best outcome. The SBAs recalled that during a natural labour process, some women would complain about the SBAs being uncaring because the woman did not understand the normal birth process and why the SBAs preferred normal birth instead of interventions. There is a need for the woman-relative dyad to have more perinatal knowledge. In order to raise the quality of care, it is vital that the woman and her relatives are provided with adequate information during antenatal visits. This lack of knowledge did, however, ensure the mother's compliance:

"In other countries the patient, husband and family are given antenatal education which we don't have here. They don't know in which position to deliver the baby... therefore they do what we make them do" (Anju, FGD3).

Respecting the woman-relative dyad

The SBAs had a wider patient focus that included respecting the family. The SBAs felt that, in order to maintain respectful care for the women during birth, they should respect and inform the woman's relatives about her progress. The relatives were expected to monitor the labour and report to the SBAs:

"If one person is allowed to stay with the mother then they will be able to see if the labour is progressing and whether or not the mother is getting proper care" (Deepa, FGD1).

A respectful environment enhances respectful care

This category was represented by three sub-categories:

Communicate and seek advice and support from colleagues

It was said that if an SBA was not able to manage a situation, they should seek advice and support from their colleagues instead of neglecting a woman. They felt discussions should not take place in front of the woman or other colleagues:

"An environment of respectful care should be created from the time of antenatal care through to delivery and postnatal care" (Ishwari, FGD1).

Importance of professional behaviour

The SBAs felt it important to openly show their identity with a name badge, post and field of work. In that way the woman and her relatives would feel they were being treated by fully trained and skilled service providers. This increased the woman's and relatives' trust of the SBAs. The SBAs wanted

to be recognised and encouraged by senior staff members for their professional behaviour. They felt that if a professional attitude was lacking among themselves, it would influence their ability to provide respectful care to the woman.

Respectful care at normal birth empowered SBAs

The SBAs defined respectful care as caring without discrimination of, for instance, caste and religion. They told how they felt empowered when they were held responsible for a normal birth and fulfilled the woman's psychological and physiological needs during birth. Lack of privacy for the woman and insufficient staffing were identified as barriers to providing respectful care. Dignity and security were the priorities for the SBAs to prevent unnecessary interventions.

Preservation of hierarchical roles and structures was not beneficial to respectful care at birth

This category was represented by three sub-categories:

A blame culture

The SBAs described how, when complications arose, a culture of blame threatened respectful care. When complications or problems occurred, the doctors sometimes blamed the nurses:

"On one occasion I told the doctor that when I informed you about the complication in time, you did not take heed and when the problem became serious you blamed me" (Meeta, FGD3).

Hierarchical structure – an obstacle to respectful care

The SBAs reported that respectful care was not always maintained because of professional hierarchical structures and cultural attitudes, gender roles and social status. Nurses were considered by doctors, families and patients as helpers or assistants due to their gender and lower social status. The SBAs felt that tension was created by the overpowering view of the medical professional overshadowing the rights and desires of the woman for a normal birth. Barriers to provision of respectful care identified include: power dynamics, high patient flow, lack of encouragement and a low salary:

"Social status also plays a role. How much we ever try to inform and make the patients and families understand, they will say that we are just a nurse. Then when the doctors come, they will listen to the doctor" (Pramila, FGD3).

Teamwork – essential for respectful care

The SBAs said they wished teamwork was a priority above and beyond professional, gender and social status in order to create, maintain and improve quality of care at birth. Effective teamwork was hampered when conflict arose.

"To reach a common conclusion, staff meetings should be held, this would be better for the woman" (Rashmi, FGD2).

SBAs' 'life and health saving' – as important as comfort care

This category was represented by four sub-categories:

SBAs' strategy to get the most out of the woman-relative dyad

During labour, the SBAs tried to guide, advise and collaborate with the informed relative. This enabled the SBAs to monitor

many women giving birth during the same period to ensure a healthy outcome. However, this meant that the woman's relatives took responsibility for basic care and monitoring:

"During the delivery, they want the company of their husband but post-delivery, we prefer female support... Many husbands do not know about basic care of the infant... so the women do this. That is why in postnatal care, we focus on female relatives" (Sheela, FGD4).

Equality of care – a guarantee to maintaining respectful care

The SBAs could not focus all their time on just one or a few women. When only one SBA had to care for nine women simultaneously, they had to prioritise safety and emergency care over a woman's comfort.

"If the women on the ward are all low risk, they will be told that they will be taken care of one by one until their turn" (Uma, FGD4).

Routine care saves lives

The SBAs had to control the situation on the ward for the benefit of the women. This meant focusing on critical patients, prioritising routine care, ignoring complaints and minor issues and remaining focused to avoid mistakes:

"...if the woman is primae (till 6/7 centimetre), the routine is that we allow movement, but if she is multi, then we prevent movement. We do not have sufficient manpower for own choices" (Reeta, FGD3).

Respectful care is a woman's fundamental right

The SBAs were convinced that they had to have a master plan to maintain health and safety and that a safe birth and healthy baby were a woman's rights. Respectful care implied privacy and confidentiality as part of a woman's rights. However, it was hard to maintain confidentiality, with women giving birth in the same room. The SBAs' perceptions were that it was easier to maintain both medical and basic care at birthing centres and health posts where there were fewer interventions, a slower flow of women and fewer emergency cases.

The main focus of respectful care was a safe outcome

This category was represented by two sub-categories:

Prioritising mothers in need

By overseeing the women in postnatal care, the SBAs were able to prioritise those most in need. For example, they could identify mothers who did not know how to feed, maintain hygiene, keep their baby warm or hold them in a safe position. The SBAs would then offer instructions and advice to those mothers about how to care for their baby:

"...even if we do not take the temperature, the mother will not die, but it is not the case with critical ones, so we must also learn to analyse the situations and act" (Kiran, FGD2).

'Caring on demand' – a new trend is emerging

At present, only a few mothers and relatives go against the advice SBAs offer, mainly due to a lack of education and knowledge. However, now women and their relatives are more likely to have looked up information on the internet.

This is positive because the women are better informed and can be more involved in decision-making. But caring for better-informed women is much more time-consuming. This will create a new challenge:

“...we think it will be more staff consuming to let the patient deliver the baby in their preferred position” (Sarala, FGD3).

Discussion

There are many programmes or agencies working to strengthen maternity care in Nepal. Publications can be critical of SBAs and their disrespect to women (Bowser and Hill, 2010; Swahnberg et al, 2007), but the SBAs' views are scarcely described. Therefore, this paper aimed to explore how the concept of respectful care was perceived by SBAs. The findings of this study captured SBAs' working culture – ‘safety before comfort’ – in tertiary level hospitals where the SBAs' knowledge about respectful care created a dilemma: their view was that, in general, respecting childbearing women should be the norm (White Ribbon Alliance, 2011), however, saving lives and ensuring health must come before comfort.

Contrary to previous reports (Bowser and Hill, 2010; Swahnberg et al, 2007), this study did not identify uncaring attitudes by SBAs but identified numerous obstacles to the provision of respectful care. Hence, this study focuses on SBAs who might not be keen to admit that they offer disrespectful care, or they might not be aware that the standard care they provide is less than optimal, and the question raised by Harvey et al (2007) remains relevant: Are SBAs really skilled? Furthermore, this study highlighted how respectful care required input from both the SBAs and the woman's relatives in an attempt from the SBAs to provide respectful maternity care as a universal right of childbearing women (White Ribbon Alliance, 2011). In fact, this study highlights that women can only have respectful care if facilitated by relatives. What happens to the poorest women who do not have a relative to look after them, for example, if their relatives cannot afford to take the time off work to come in with the pregnant women? It could be discussed how much user costs and informal payments for maternity care may contribute to disrespectful maternity care at tertiary level hospitals in Nepal (Simkhada et al, 2012). However, at present, it may not be a safe recommendation for SBAs to focus on a ‘one-to-one care’ concept and leave behind routine care, because this could prevent the delivery of safe medical care. Women also need to approach the appropriate level of health care based on their need, instead of approaching overloaded tertiary level facilities. To provide respectful maternity care to women in Nepal, professional midwives need to be trained, recruited, and deployed in areas where they are most needed, moreover, the midwifery profession needs to be legalised (Bogren et al, 2013; Family Health Division, 2006).

The SBAs' strategy of providing care with respect was to involve, inform, encourage and advise relatives so that they could make an informed choice and contribute towards monitoring, as well as basic care, in line with article two of the White Ribbon Alliance (2011) guidance. One could discuss whether the SBAs overestimate the relatives' ability to provide basic care and have the knowledge required to

take on a monitoring role. This implies that it would be in the SBAs' interest to provide perinatal education for the relatives and expectant parents (Bajracharya, 2012; Acharya et al, 2007). This is particularly important with the emergence of a new trend where partners are allowed to accompany the woman during birth (Sapkota et al, 2012, 2011). Furthermore, one could ask whether the SBAs underestimate a mother's own desire to take part in decision-making regarding her body and baby (Legare et al, 2012). Would education programmes for women and girls regarding their own sexual and reproductive health and rights empower them to make decisions (United Nation Population Fund, 2013)? An education programme that specifically addresses female reproductive health would be in line with the expressed intentions of the Government of Nepal to give consideration to gender issues and improve the quality of care (Family Health Division, 2012).

Strength and limitations

Regarding trustworthiness of the literature review, no review analysis or analysis of the quality of the referred article has been performed. The search strategy was to find and present Nepal-specific articles related to SBAs and respectful care. Moreover, the broad overview of the field documents and reports from the Nepal government and international organisations were prioritised and might be a threat to the depth of the literature review.

As the participants were self-recruited, it's likely that they were already interested in the subject, threatening the trustworthiness of the findings. Although the translation from Nepali to English was done in a process of translation and back translation in the first phase by a Nepali person with appropriate knowledge of Nepali and English, as well as the topic, there is no guarantee that in the translation process some of the findings were not unintentionally distorted or misrepresented (WHO, 2013b). To achieve trustworthiness (Polit and Beck, 2012), data gathering and analysis was carefully conducted and data gathering conducted in sympathy with the choice of analysis. Throughout the analysis process, members of the research team discussed the analysis and findings, and the focus group facilitator and note-taker verified the conceptions, thus ensuring credibility. Quotations presented along with the findings support our interpretation. However, these findings should not be transferred to other contexts and settings without careful consideration (Polit and Beck, 2012).

Conclusion and implications

The SBAs understood that respectful care at birth was important, but argued that ‘safety comes before comfort’. The SBAs identified that women can only have respectful care if facilitated by relatives. Hence, the contribution of relatives, in addition to the provision of medical care, is essential.

For practice, family members need to accompany the mother and her newborn in maternity care from admission to discharge to provide basic care and this needs to be reviewed. SBAs need to support and educate relatives to enable them to provide comfort care to the mother and her

newborn baby. Multidisciplinary staff meetings could also be recommended to build trusted relationships and a mutually respectful environment. For policy, the development of a midwifery workforce planning tool to determine the required number of midwives for safe and respectful maternity care would add weight to the recommendation to

employ sufficient midwives in Nepal. Professional midwives need to be trained, recruited, and deployed in areas where they are most needed and the government needs to regulate the profession and make it legal. Further studies could be undertaken into all levels of healthcare facilities to develop country contextual respectful care interventions.

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An exploration of the experiences of mothers as they suppress lactation following late miscarriage, stillbirth or neonatal death

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Abstract

Objective. To explore the experiences of bereaved mothers as they suppress lactation following late miscarriage (>20 weeks), stillbirth or neonatal death.

Method. A qualitative, focused ethnographic approach was used involving in-depth interviews with 15 bereaved mothers, who attended a maternity hospital in Dublin. Data were collected from January to August 2012.

Findings. Three key themes were identified: (1) suppression of lactation following the loss of a baby: silent tears; (2) mothering; (3) supportive care needs and the bereaved mother's experience. This paper focuses on the first global theme. The majority of bereaved mothers found engorgement and leaking milk particularly challenging both physically and emotionally following the loss of their baby; especially as their baby's funeral or wake took place during this period. The study highlights a number of areas where women could be better prepared for this experience.

Conclusion. The findings highlight that the majority of bereaved mothers will require improved guidance and support with their breast care needs following the loss of their baby with awareness and sensitivity to their shortened motherhood.

Key words: Bereaved mothers, perinatal death, pregnancy loss, engorgement, suppression of lactation, breastfeeding, evidence-based midwifery

Introduction

The death of a baby is described as one of the most difficult losses to bear (Norlund et al, 2012; Mander, 2006). The baby's death is further compounded with physiological lactation, which develops between 48 and 96 hours following the birth. Colostrum is present in the breasts from 16 weeks' gestation (Inch, 2009), therefore, a mother who delivers after 16 weeks will secrete colostrum, even though she has delivered a non-viable infant (Lawrence and Lawrence, 2011). While engorgement plays a role in decreasing milk supply (Cole, 2012), engorgement and fullness in the breasts is often an unexpected shock for a grieving mother (Pugmire, 1999). The grieving experience is often compounded by breast discomfort and leaking milk experienced as a consequence of the physiological suppression of lactation (Cole, 2012; Spitz et al, 1998; Mines, 1982). This is further accentuated if a baby dies following a period in the neonatal intensive care unit, given that in general the mother's milk supply is already established with hand expression and/or the use of an electric breast pump/or breastfeeding (Busta-Moore and Caitlin, 2003). Mothers will, therefore, require further support and anticipatory guidance with their breast care needs following the loss of a baby.

In Ireland, the funeral service takes place within a short timeframe following death, usually three to four days. On many occasions, a traditional Irish wake precedes the funeral service. This is where the deceased person's body is laid to rest in the family home. During the traditional wake, the family home has an open door, providing family, friends and neighbours an opportunity to visit, offer support and comfort the bereaved family. Food and drink (usually tea) is provided and people sit around talking. The traditional wake is an old

Irish way of celebrating life. It is during this period that a mother is also experiencing physiological lactation.

The suppression of lactation following the loss of a baby has been addressed in the literature: Cole (2012), Busta-Moore and Caitlin (2003), Pugmire (1999) and through support material, however, there is a lack of evidence-based research exploring mothers' experiences of suppressing lactation following perinatal death. This study set out to explore the experiences of 15 mothers who had experienced a late miscarriage (after 20 weeks of pregnancy), stillbirth or neonatal death, as they suppressed lactation following the death of their babies. The study hospital was a large tertiary referral centre in Dublin with approximately 9000 births during 2011, of which 66 perinatal deaths were reported. In addition to this, some mothers also experienced a late miscarriage from 20 weeks' gestation. Bereaved mothers at the hospital received a pilot breast care leaflet with information on the suppression of lactation. The study sought to provide information to assist in the development of guidelines for bereaved mothers on the suppression of lactation.

Method

A qualitative-focused ethnographic approach was used to explore the perspectives of bereaved mothers recruited at a large maternity hospital in Dublin. In a focused ethnography, the number of participants is limited and the objective is to obtain information from people who have knowledge and experience of the subject matter (Meucke, 1994). As a clinical midwife specialist in lactation, the topic area was known to the researcher and this knowledge was used to set the direction for the research, as suggested by McNeill and Nolan (2011). In accordance with Richards and Morse's

(2007) description of how a focused ethnography may be used to study a subcultural group, bereaved mothers following perinatal death with engorged breasts and breastmilk were defined as a subculture of bereaved mothers.

Participants

Using a purposeful sampling approach, 27 women, who had experienced the loss of a baby within the previous six to 12 months, were invited to participate and, of these, 15 women agreed to participate. Mothers were recruited from three categories: 1) Late miscarriage >20 weeks' gestation; 2) stillbirth, and 3) neonatal death. The purposive sample included mothers who gave birth to their baby at the hospital or when their baby was transferred to the hospital for further care. A varied age profile and mixed socio-economic class was sought.

Initial contact was made with the bereaved mother by the clinical midwife specialist in bereavement who informed women of the study and asked if they would be willing to participate. These details were then passed on to the researcher, who then contacted each woman to answer any further questions. Details of the study were subsequently posted to each woman, who then had an opportunity to discuss participation with a family member. Women who wished to participate were asked to return the signed consent form in a stamped addressed envelope. This contact was followed up with a telephone call or a reminder letter, where the consent form was not returned.

Data collection

Data collection comprised individual semi-structured interviews, which took place between January and August 2012. Most interviews were conducted in the participant's home. The humanistic approach of the psychologist Carl Rogers (1967) guided the interview technique. Rogers pioneered the concept of congruence, empathy and unconditional positive regard. During the sensitive interviews, these concepts facilitated trust between the mothers and the researcher. Good communication skills and assisting mothers to feel comfortable during the sensitive interview process was particularly important. A growing body of research describes how research participation with the bereaved may serve the interests of participants and be therapeutic, educational or empowering (Hynson, 2006; Dyregrov, 2004).

Ethical considerations

Ethical approval for this study was obtained from The National Maternity Hospital and university human ethics committees. In light of the sensitive study topic and in order to safeguard the wellbeing of the participants, the clinical midwife specialist in bereavement at the hospital was available for support and counselling, however, this support was not requested. Written contact details of bereavement support groups were also issued post-interview.

Reflexivity

Reflexivity was central to the study where the researcher was conscious of the dual role of clinical midwife specialist in

lactation and researcher. On a practical level, the researcher brought prior knowledge and understanding to the field, while, at the same time, the researcher was cognisant of any influence, intentionally or otherwise during data collection and analysis.

Data analysis

The transcripts were read until the researcher became familiar with the text. The coding framework used was based on the theoretical interests guiding the study: the physiology of mammogenesis (Pollard, 2012); attachment theory (Bowlby, 1974, 1969) and recent grief theories (Stroebe and Schut, 2010, 1999; Walter, 1996) along with salient issues that arose within the text (Attride-Stirling, 2001). Bias was addressed through discussion with an experienced academic. Thematic network analysis (Attride-Stirling, 2001) was utilised to identify three global themes, one of which is the central focus of this paper.

Findings

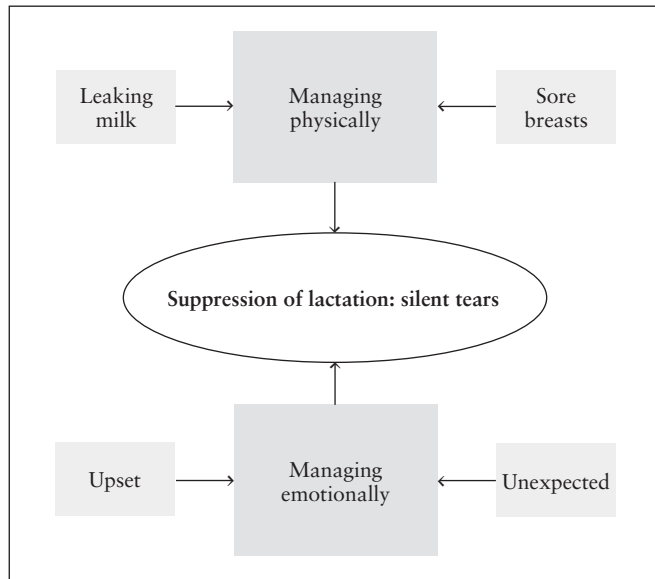
A total of 15 women agreed to participate in the study; five had experienced a late miscarriage, three had experienced a stillbirth, and seven had experienced a neonatal death. The age range was from 28 to 44 years and for the majority of women (11/15) this was their first pregnancy (see Table 1). There was an even mix of professional and non-professional women in the sample and although the majority of women were Irish nationals, three non-national women also participated.

The findings reported in this paper are from the first global theme – suppression of lactation following the loss of a baby: silent tears (see Figure 1). It describes two organising

Table 1. Description of the participants

Participants (n=15)	Clinical details
Age	28 to 44 years
Professional	8
Non-professional	7
Irish national	12
Non-Irish EU national	2
Non-EU national	1
Number of pregnancies	
– Para 0+1	5
– Para 1	6
– Para 2	2
– Para 3	2
Gestation/weeks	
– 24+6 days to 42 weeks (neonatal death)	7
– 29 to 38 weeks (stillborn)	3
– 20 to 23 weeks	5

Figure 1. Suppression of lactation following the loss of a baby: silent tears



themes: managing physically and managing emotionally. The findings describe that in the midst of a mother grieving the loss of her baby, sore and engorged breasts compounded this grief experience. Emotional pain exacerbated the physical pain of engorged sore breasts and leaking milk.

Managing physically

Sore breasts

In this study, mothers generally described varying levels of engorgement from the second to the fourth day following the loss of their baby. Mothers described the physical discomfort, pain and sensitivity of their breasts. First-time mothers experienced a significant level of engorgement and were quite shocked by the physicality of it, with some describing their breasts as like rocks. Some of these mothers also leaked milk and needed to wear breast pads. Mothers who had breast-fed previously experienced marked engorgement and leaking milk. The majority of mothers had been discharged from hospital before these symptoms developed:

"I believe my milk came in on about the third or fourth day... I was quite surprised at how full my breasts became" (Sarah, 26+6/40 P2).

"I remember just the filling up and the pain... just the ongoing pain for at least, whatever it was, eight to 10 days afterwards, so definitely, it was definitely my experience... filling up and the leaking and just trying to manage it and reduce it and ease it off" (Anne 41/40 P1).

A number of mothers used chilled or frozen cabbage leaves in their bras and found this very soothing for hot, tender breasts: *"I did find it helped, I really did."* Two mothers, however, were not supportive of the idea of using cabbage leaves in the bra: *"I didn't want to do that."* And: *"It was cold from the fridge, the leaves were getting warm."* And: *"I was swapping them in and out the whole time and I think it was just stimulating the breast further."*

The symptoms of engorgement and sore breasts challenged mothers physically as their baby's funeral or wake took

place during this period. At the funeral, Anne describes being hugged while having sore, tender breasts as very painful. She remembers placing one arm across her chest to protect herself from the pain of engorgement as people hugged her closely:

"I do remember ending up structuring myself so that my left arm was doing the hug... I put my right arm in, like in front of my chest, almost able to push the person back if they were getting a little bit too close" (Anne, 41/40 P1).

One mother was dealing with breasts full of milk and hosting a wake in her home:

"It was a very busy day... I meant to go up and express, but I never got a chance" (Anna, 24+6/40 P2).

Jill describes her experience of sore breasts on the day her baby was cremated:

"I shed a few tears over the time as I remember thinking I really don't need this" (Jill, 20/40 P1).

An interesting aspect of women's experiences was the silence surrounding the painful engorgement they experienced and this was particularly evident at the wake and funeral:

"The pain was unbearable at times... I ended up just putting out my hand so I didn't have to hug anybody" (Cora, 27+4/40 P3).

Experiences of mothers as they managed leaking milk

Participants suggested that the experience of leaking milk brought additional challenges. Providing milk for a baby continues the attachment of mother and baby after the birth. Having breastmilk and leaking milk challenged mothers' self concept:

"I had to put in two or three pads at a time because I felt that it was coming through one" (Cora, 27+4/40 P3).

"When I was in bed, I woke up and I had a massive leak. My pyjamas were completely drenched – you could wring them out, they were that bad" (Janice, 35+5/40 P1).

The majority of mothers interviewed experienced engorged breasts and leaking milk, which continued over a longer timeframe than would be expected – some reported it continuing for two weeks. Mothers were generally unprepared for the length of time they would experience this. Sarah described her experience:

"I think probably... the leaking ended maybe after two weeks, but I could actually get milk out of my breast I remember... six weeks after" (Sarah, 26+6/40 P2).

Managing emotionally

Providing breastmilk for a baby is deeply connected with motherhood and descriptions of mothers as nurturing and nourishing. To have milk and no baby compounds the loss further. One mother described it as feeling as though her milk is just for her baby, who is not with her any more.

Unexpected

The descriptions of some mothers suggested they had not expected to lactate or did not expect it to be as challenging an experience as it was. Some mothers felt their baby was not alive therefore their body would know this and not produce milk. The production of breastmilk was particularly a shock

for mothers at an early gestation:

"The pain was just painful and the fullness was just uncomfortable, but I found the fact that it started to leak was emotionally very difficult" (Cait, 23/40 P1).

Melanie described: *"It was one of the worst things... (to) go home without a child and have your breasts so painful and like rocks and kind of go: 'Why can't this just go with the child?' That was the biggest thing for me"* (Melanie, 25+4/40 P1.)

Another mother, Sally said: *"(I) just got the breast pads and literally just waited it out til it stopped... and then eventually it just went"* (Sally, 28+6/40 P2).

Jill commented on the unexpected relief from placing cabbage leaves on her breasts: *"It was really nice to have that relief straight out of the freezer... I think I had gone a good few days before I had learned this trick... I was in a good few days of pain at the start before I had tried that"* (Jill, 20/40 P1).

Upset

Participants described how emotionally sore breasts, leaking and visible drops of milk added to the upset that they experienced and compounded their inability to mother:

"Emotionally it was very hard to come to terms with, I felt like I needed to mother" (Amelia, 38/40 P3).

"I just remember it constantly being there that even towards the end of the two weeks or, whatever it was, when I kind of thought it was gone and I remember being in the bed... And I remember like feeling... I could feel it on my arm, you know the wetness and I remember getting really upset because I thought it had finished and I was like: 'God when is it going to stop?'"(Jill, 20/40 P1).

Sarah described how she would put off having a shower every morning because the heat of the shower would make her breasts leak milk:

"I hated having a shower, I would put it off. I am in the shower with no baby and full breasts... and I am on my own, so I would cry in the shower regularly... it was just a very, very hard... hard time" (Sarah, 26+6/40 P2).

Two mothers were expressing milk for their baby. Anna had built up a good supply of breastmilk during the week her baby was in the intensive care unit. Following the death of her baby, Anna found comfort in donating her stored breastmilk to the human milk bank in Northern Ireland:

"I donated my milk... when the milk is no longer needed, I think it's great that it can be used" (Anna, 24+6/40 P2).

The findings from this study highlight the physical, emotional and social consequences of the suppression of lactation in the aftermath of a baby's loss.

Discussion

This study described the experiences of mothers and the varying degrees of breast engorgement following the loss of their baby, from as early as 20 weeks' gestation. In keeping with the literature, the majority of mother's experienced lactogenesis between days two to four following the birth/loss of their baby (Pollard, 2012; Riordan and Wambach, 2010). This was accompanied by varying degrees of breast

pain, engorgement and leaking milk. The majority of mothers interviewed described engorgement as a significant experience for them. Leaking milk and the duration of the lactation process added to their physical and emotional discomfort.

Some mothers experienced a more intense leakage of milk during the night. The production of prolactin is described as circadian and increases during sleep (Donaldson-Myles, 2012). This is a possible contributing factor to the level of leaking milk experienced by some mothers in the study. Lawrence and Lawrence (2011) suggest factors such as psychogenic influences and stress can increase prolactin levels.

Non-pharmacological approaches to aid the suppression of lactation include wearing a good supportive bra and the application of cold compresses to the breast (Pollard, 2012; Walker, 2011; Riordan and Wambach, 2010) and the findings of this study are supportive of these measures. A number of mothers found the application of cool or frozen cabbage leaves soothing for hot, tender breasts. Lauwers and Swisher (2005) suggest that phytoestrogens present in the cabbage leaves may reduce swelling in the tissues while Humphrey (2007) suggests that it is the sulphur compounds and flavonoids that provide anti-inflammatory and anti-oedematous properties. This is supported in the findings of Arora et al (2008), Roberts (1995) and Nickodem et al (1993). More recently, Chiu et al (2010) reports Gua-Sha (acupuncture) therapy as an effective technique in the management of breast engorgement, however, further research is indicated.

Pharmacological measures to suppress lactation include the drugs, bromocriptine and cabergoline; however, both are not recommended for routine suppression of lactation. The ergot alkaloid, bromocriptine, inhibits prolactin release and therefore stops lactation. Bromocriptine is administered over a 14-day period to prevent rebound lactation. While serious cardiac side effects have been documented (Iffy, 1996; Hopp, 1996; Ruch, 1989) with the use of bromocriptine for ab lactation in the puerperium, a systematic review by Oladapo and Fawole (2012) did not show any clear evidence of serious adverse effects with the use of the drug.

A European multicentre trial found cabergoline to be the drug of choice for lactation inhibition, where indicated, due to its single dose administration and lower rate of rebound breast symptoms and adverse events (European Multicentre Study Group, 1991). Pugmire (1991) offers the opinion that, for some bereaved mothers, milk suppression by medication is a valuable compassionate alternative. More recently, Oladapo and Fawole (2012) suggest there is weak evidence that some pharmacologic treatments are better than no treatment for suppressing the symptoms of lactation, during the first week postpartum. Further research is needed in this area.

Bereaved mothers found the experience of producing milk, while having no baby to feed, very emotional. Welborn (2012) describes the comfort bereaved mothers experienced through the donation of their breastmilk to a human milk bank and this finding was mirrored in the present study. This study also offered personal narratives of the challenges mothers faced managing engorgement at their baby's wake or funeral,

providing insight for professionals involved in their care.

There are currently no available guidelines in Ireland to direct clinical practice in relation to the suppression of lactation following the loss of a baby. The present study found that bereaved mothers require information and supportive measures to manage their breast discomfort. A revised breast care information leaflet is now available at The National Maternity Hospital, a guideline is being developed and staff education sessions are ongoing.

Implications

The present study demonstrates the importance of the midwife addressing the emotional and physical aspects of the suppression of lactation with a mother following the loss of a baby from 20 weeks' gestation. Information should be provided in verbal and written format with sensitivity to an individual mother's emotional response to grief. The bereaved mother is often discharged from hospital within 24 hours following the loss of her baby, therefore she should be informed that her breasts may become engorged between the second and fifth day following the loss, and that the breasts may feel uncomfortable and leak milk for up to seven to 14 days. The baby's funeral may take place during this period.

To relieve symptoms of engorgement, it should be suggested to mothers that they:

- Wear a good support bra continuously while the breasts feel uncomfortable
- Have breast pads to absorb leaking milk
- Use cold compresses to alleviate painful, engorged breasts
- Take regular pain relief
- Have a warm shower, but try to avoid the water jets directly stimulating the breasts
- Hand express a little colostrum/breastmilk for comfort if the breasts feel very full and uncomfortable
- Sleep in a semi-upright position where there is less pressure on firm, engorged breasts
- At the wake or funeral, if standing, place one arm across the chest to protect sore breasts when being hugged.

In situations where a mother was regularly expressing milk, to stop suddenly would lead to a build-up of milk, which may lead to blocked ducts or mastitis. Mothers should be advised to reduce their milk supply gradually for

comfort, aiming to express less often and to shorten the duration of expressing. Alternatively, mothers may prefer the more structured weaning regime, as described by Busta-Moore and Caitlin (2003): day 1 – pump each breast for five minutes every four to five hours; day 2 – pump each breast for three to five minutes every six hours; days three to seven – pump each breast just long enough to relieve discomfort. Mothers may wish to donate their frozen breastmilk to a milk bank.

Limitations

This was a small qualitative study with a sample size of 15. Data saturation was achieved within the categories where mothers experienced breast engorgement and leaking milk and the findings provide considerable insight into the experiences of women. The study may be limited in relation to memory bias that may exist on the part of the mothers due to their grief experience.

The research was carried out at a Dublin maternity hospital and the results may not apply beyond this context. In order to minimise bias, the researcher used a reflexive diary and fully described the research process in reporting the findings. Notwithstanding these limitations, this study illuminates the experience of a very vulnerable group of mothers and has produced important findings for clinical practice. It also highlights the need for further research in this area.

Conclusion

This study is the first exploratory study that looked at mothers' experiences as they managed breast engorgement and leaking milk following the loss of their baby. The findings from the first global theme 'Suppression of lactation following the loss of a baby: silent tears' have provided a deep and meaningful insight into the silent world of the bereaved mother. With cultural expectations of a wake and early burial within a few days following the loss, mothers experienced full engorged breasts and leaking milk, which is physically and emotionally painful for them. The findings from this study recommend that all bereaved mothers following a pregnancy loss from 20 weeks or neonatal death are provided with both verbal and written information regarding the suppression of lactation.

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News and resources

Florence Nightingale leadership scholarship available

The Florence Nightingale Foundation is offering scholarships to midwives who want to become leaders. The funding is aimed to develop skills and self-confidence. Recipients of the award, which is up to £15,000, will undertake a bespoke programme for their individual needs. Applications are welcomed from those who aspire to a board position, or who may already be a HoM or consultant midwife. The applicant's organisation is expected to support the application. The deadline is 24 September. To apply, or for more information, visit: florence-nightingale-foundation.org.uk

RCM annual conference returns to Telford

Booking has now opened for the RCM conference 2014, which returns to the International Centre Telford on 11 to 12 November. This year's theme is 'Better Births: United in Excellence' and the programme offers a range of research seminars and management masterclasses, plenary sessions and hands-on workshops. Special early bird rates are available until 16 July for RCM members who book to attend for both days. Alongside the main event are the workplace representatives conference and the student conference. For more information, to view the programme, or book tickets, visit: rcmconference.org.uk

Grant for pre-term research centre

A five-year grant of £1m is available to establish a research centre, where work will focus on the issue of pre-term birth. Wellbeing of Women is welcoming applications for the funding, which is available thanks to a Harris Programme Grant. It is looking for a research leader with an impressive track record in the field to establish the centre, which is due to open by April 2015. The centre will focus on in-depth research into pre-term birth and building understanding to reduce the incidence. The centre must be located in a major UK teaching hospital or university, and the host institution must have the space and facilities to accommodate the centre. The deadline for applications is 3pm on 25 July. For more information, visit: wellbeingofwomen.org.uk

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