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Original Article

Breastfeeding support – the importance of self-efficacy for low-income women

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Abstract

Breastfeeding is a key determinant in promoting public health and reducing health inequality. Low-income women have a significantly lower level of breastfeeding. Midwives in the UK have been encouraged to implement the World Health Organization/United Nations Children's Fund's Ten Steps to Successful Breastfeeding, but to date, there has been no evaluation of the impact of the training initiative on the breastfeeding behaviours of low-income women. As part of a wider study, this qualitative component was designed to answer the question – what are the views and experiences of low-income women (defined by Jarman scores) in relation to their breastfeeding support received in the post-natal period? A sample of seven women was interviewed. The in-depth interviews were analysed using a qualitative, thematic approach based on the self-efficacy theory. The four themes that emerged from the data were the following: breastfeeding related to the woman's self-confidence, the social environment in which the woman lived, knowledge of breastfeeding and the influence of maternity services on breastfeeding outcomes. These themes were interpreted in relation to the self-efficacy theory. The findings suggest that the components that inform self-efficacy are consistent with the themes from the data, suggesting that midwives and other health professionals should take the psychosocial aspects of breastfeeding support into account. As this important feature of breastfeeding support is not explicitly part of the current Ten Steps to Successful Breastfeeding, we suggest that further research and debate could inform expansion of these minimum standards to include the psychosocial aspects.

Keywords: breastfeeding, low income, self-efficacy, midwives' training, WHO/UNICEF breastfeeding initiative.

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Background

This study was conducted in the context of a wider study (Entwistle *et al*. 2007) that examined the impact of the United Nations Children's Fund (UNICEF)/UK breastfeeding training programme on midwives' knowledge and attitude and on breastfeeding outcomes for low-income women. It built on previous work carried out in Italy (Cattaneo & Buzzetti 2001), in France (Vittoz *et al*. 2004) and in the UK (Wissett *et al*. 2000), although none of these studies focused specifically on low-income women.

Breastfeeding is a key determinant of public health for women, babies and their families [United Kingdom National Case-Control Study Group 1993; Department of Health (DH) 2002, 2008, 2009; DH &

DCSF 2009]. The aim of the Public Service Agreement in England (HM Treasury 2008) is to increase breastfeeding prevalence for all mothers at 6–8 weeks, specifically those from disadvantaged groups.

Promoting and supporting breastfeeding are an essential part of the *Healthy Lives, Brighter Futures; The Strategy for Children and Young People's Health* (DH & DCSF 2009), the *Child Health Promotion Programme* (DH 2008) and *Every Child Matters* (Department for Education and Skills 2004). The UK Infant Feeding Survey 2005 demonstrated that mothers from lower socio-economic groups were less likely to initiate breastfeeding than those in higher socio-economic groups. In 2005, 88% of mothers in managerial and professional occupations breastfed initially compared with 77% of mothers in intermediate occupations and 65% of mothers in routine and manual occupations. Forty-eight per cent of all mothers in the UK were breastfeeding at 6 weeks, and 25% were still breastfeeding at 6 months (Bolling *et al*. 2007; SACN 2008). According to the World Health Organization (WHO) data, only 2% of mothers in the UK are exclusively breastfeeding at 6 months compared with significantly higher figures in other parts of the world, e.g. Hungary 43% (WHO 2002; OECD 2009).

Women in the UK are also less likely to breastfeed if they leave school early (under 16 years) and if they are under 20 years of age at the time of delivery. Failure to breastfeed adversely affects the short- and long-term health of both the mother and her child (Howie 2002; Kendall & Entwistle 2007), and the DH for England and the WHO recommend, where possible, that all infants should be breastfed exclusively from birth until 6 months of age, and thereafter, with other foods for 2 years (Kramer & Kakuma 2002; WHO 2002). Only 13% of mothers from routine and manual occupations exclusively breastfed at 6 weeks, and only 5% of mothers in England are under 20.

When focusing on health inequalities, the social gradient within the UK is much more complex than just occupational classification; life chances and social differences need to be seen together and collectively to understand how these affect people and how people's actions impact on the community in which they live (Health Development Agency 2005). Several studies have explored independent predictors of breastfeeding intention in disadvantaged women; the key factors identified included previous breastfeeding experiences, maternal smoking, social disapproval, lack of support from health providers, living with a partner, work and maternal attitudes rather than deprivation *per se* (Guttman & Zimmerman 2000; Raisler 2000; McInnes *et al*. 2001; Zimmerman & Guttman 2001; Meyerink & Marquis 2002; Callen & Pinelli 2004; Mitra *et al*. 2004).

Women themselves report that the health professionals' goal was for them to continue to breastfeed and that care was breastfeeding-centred rather than woman-centred (Hong *et al*. 2003). While health professionals have an impact on breastfeeding behaviour, women often turned to friends and family for support, finding health professionals' support conflicting and not meeting their social needs (Hoddinott & Pill 2000; Zimmerman & Guttman 2001; Hong *et al*. 2003; Stewart-Knox *et al*. 2003; Rempel 2004). Women often

Key messages

- A mother's confidence to breastfeed is a key consideration that health professionals should take into account when supporting women to breastfeed.
- Women who feel self-confident about their ability to breastfeed successfully are better able to overcome social barriers.
- The major difference in breastfeeding duration among the women within this study was defined by psychosocial influences.
- A commitment to implement breastfeeding policies and target women from disadvantaged groups requires a strategy and debate to inform the expansion of the World Health Organization/United Nations Children's Fund's Ten Steps to Successful Breastfeeding to include the psychosocial needs of women.
- Further research is required to assess if a self-efficacy scale could be used effectively within the UK context to identify women requiring targeted breastfeeding support.

know they can access the professional for support, but some choose not to because of a fear of having their confidence undermined (Hoddinott & Pill 1999a). Conversely, midwives sometimes feel the need to protect women from tiredness, distress or feelings of guilt by offering non-supportive breastfeeding behaviours, e.g. supplementation of feeds with formula milk (Cloherty *et al*. 2003). What women appear to need is practice-focused care that helps them to overcome the everyday practicalities of breastfeeding (Hunter 2004). Women in disadvantaged areas often live within a bottle-feeding culture with very few breastfeeding role models and some expecting to fail (Hawkins & Heard 2001; Scott & Mostyn 2003). A systematic review demonstrated that post-natal support can be effective in supporting women to breastfeed and concluded that qualitative research of women's experiences of health-professional support must be evaluated (Britton *et al*. 2007).

Towards a theoretical framework for breastfeeding among low-income women

The understanding and explanation of women's breastfeeding behaviour require a theoretical framework that will enable practitioners to both assess and be more responsive to the breastfeeding needs of mothers. The qualitative interviews in this study provided the opportunity to explore the data in the context of a self-efficacy framework.

The self-efficacy theory, described by Ormrod (1999), belongs to the field of social learning that occurs in a social context. Bandura is a major proponent of this theory, which he simply describes as learning from observation and improved performance associated with role modelling. The learning that occurs does not have to result in change but provides the learner with options linked to the consequences of different actions and a sense of their own confidence in achieving a desired outcome.

Perceived self-efficacy beliefs concern judgements of one's ability to perform competently and effectively in a particular task or setting. Bandura (1982, 1986, 1989) has identified self-efficacy beliefs as central to the understanding of individuals' transactions with their environments and a core construct that mediates relations between knowledge and behaviour. Bandura (1982, 1989) also suggested that the relation between self-efficacy and performance is best conceptualized as bidirectional. Self-efficacious individuals tend to persist in a given task until success is achieved, whereas self-inefficacious individuals give up prematurely. In turn, self-efficacy beliefs are enhanced or decreased, respectively, by success or failure experiences. Performance attainments (successful breastfeeding) are viewed as having the strongest impact on self-efficacy beliefs, but other sources of information such as a vicarious experience (observing others breastfeeding), social persuasion (encouragement from family, friends and health practitioners) or emotional arousal (pain, stress and fatigue) can also be influential (Bandura 1982, 1986). Furthermore, Bandura asserts that self-efficacy should be considered in terms of the expectation of one's ability to perform a behaviour and the outcome expectation of that action. Thus, according to the theory, if, on the one hand, a mother confidently expects to breastfeed successfully and is indeed successful, then self-efficacy expectations for a subsequent breastfeeding behaviour will be enhanced. If, on the other hand, self-efficacy expectations are low, then the outcome expectation (successful breastfeeding) is also negative and future self-efficacy expectations will be lowered. Self-efficacy thus provides a useful and theoretically sound framework in which to examine breastfeeding behaviour among low-income women. According to Bandura, verbal persuasion that one can accomplish a behaviour is the least effective form of self-efficacy information. Thus, the verbal encouragement of midwives and health visitors to help a mother to breastfeed may be less effective than providing the mother with active support and role modelling from within her own social network. The scope for self-efficacy as a theoretical basis for health visiting practice was explored by Kendall (1991), but very little research that draws on self-efficacy as an approach to evaluating the work where midwives and health visitors are constantly involved with families of young babies has been undertaken in the UK. Some studies have demonstrated an association between breast-

feeding duration and self-efficacy (Blyth *et al*. 2002; Ystrom *et al*. 2008), and a predictive association between self-efficacy and breastfeeding in the immediate post-partum period (Dennis 2006). These studies have been built around the work of Dennis in her construction of a validated breastfeeding self-efficacy measure (Dennis 2003). This tool provides a significant and validated method for both predicting and assessing a mother's self-efficacy expectations of breastfeeding. However, it has some limited application to the UK breastfeeding culture and is not designed specifically for low-income groups. Neither have the studies cited evaluated the approaches that health practitioners could take to enhance breastfeeding self-efficacy. This process of informing self-efficacy can be achieved through group work (O'Leary 1985; Kendall & Bloomfield 2005; Bloomfield & Kendall 2007) and sharing the experience with other similar individuals. A recent study by Stockdale *et al*. (2008) has used expectancy value as a framework for their quasi-experimental study on sustaining breastfeeding. This approach could be useful in supporting breastfeeding continuation and, while not specifically concerned with self-efficacy, it does seem to share some basic concepts such as motivation, increasing confidence in the expectancy value of breastfeeding. The evidence from this research has shown that nurses and midwives can facilitate and enable the process of performance accomplishment in breastfeeding. Thus, it is suggested that the self-efficacy theory is a useful framework for understanding and explaining breastfeeding behaviour among low-income women.

The aim of this paper is to present the findings of the qualitative interviews and to explore the experiences described by the women from low-income groups within the explanatory framework of the self-efficacy theory (Bandura 1982).

Methods

Qualitative methods were used in this study to explore support for breastfeeding and the experiences of breastfeeding women in the post-natal period.

Ethics approval was granted by the Local National Health Service (NHS) Research Ethics Committee within both health organizations.

The study was funded by the DH for England.

Setting

The study was conducted in two similar geographical areas defined by the Jarman Index (Jarman 1991). The women were cared for by midwives both in the hospital and community environment; they provided midwifery-led care where appropriate and, as a team, supported continuity of care for the women.

Sample

This was a convenience sample of two geographical areas. Women were selected from two busy obstetric maternity units delivering around 5500 babies a year. Women were identified by the midwives taking part in the study during the antenatal period. All women were informed about the study and given an information leaflet; at the following antenatal visit, they were asked if they would consent to take part and were then recruited into the study. The sample included women expecting their babies between 1 June and 31 December 2002. The total number of women consenting to take part in the main study was 204. A small purposive subsample of women was asked to take part in a face-to-face qualitative interview post-natally.

Entry and exclusion criteria

The midwifery teams were chosen because they worked with women from low-income areas, as defined by the Jarman Index (Jarman 1991).

Women who have little or no understanding of English were excluded, but English as a second language was not an issue for the target population. It was considered appropriate and sensitive to exclude women where infant morbidity or mortality might affect breastfeeding outcome.

Participants

Twelve women who had consented to the interview were purposively chosen from the women's survey

data sheet dependant on their Jarman Index. They were contacted by phone to see if they were still willing to take part in an interview. Three did not respond to the phone call, one had declined to be interviewed and eight agreed to the interview. However, one woman was not at home at the arranged interview time, and it was presumed that she had decided not to take part. Seven women were finally interviewed.

The interview

The women were interviewed by the lead researcher between 10 and 18 weeks post-natally in their natural surroundings. In-depth, open-ended interviews were used to explore and understand the meanings, experiences and views of all the participants. The women's interviews were used to seek the private, often contradictory and complex beliefs women hold about breastfeeding.

Each woman was contacted by telephone to arrange a mutually convenient time for the interview, re-affirming her consent to be interviewed and giving her the opportunity to 'opt out'. By entering the woman's natural environment and by being a guest in her own home, the researcher entered the informant's world where she could speak her own words, in her own space and in her own time (Creswell 1994). Open-ended questions were used to guide the women in a conversational approach, being careful to bring them back to the topic area by recalling something they may have said earlier (Burns 2000). Verbal and non-verbal cues were given to encourage the interviewee and give positive encouragement. To help the woman to be open and honest, the interviewer was aware that she needed to handle the topic area sensitively (Denscombe 1998). As a midwife with a particular interest in breastfeeding, the interviewer was aware of the 'interviewer effect', biases, values and judgements, and these were explored reflexively prior to the interview (Creswell 1994; Denscombe 1998).

Each interview ended on a positive and completed note. Each woman was thanked and confidentiality was re-affirmed.

Analysis

All the interviews were tape-recorded and transcribed verbatim. A process of thematic analysis was used (Aronson 1994). The transcripts were coded to identify reoccurring words, phrases and concepts emerging from the data. These were then analysed to create emerging themes in relation to the self-efficacy theory. The transcripts were then given to the second researcher to increase the reliability of the findings (Appleton 1995).

Findings

Profiles of the participants

Seven women were interviewed and the profiles of the women were explored (Table 1). Two women were still breastfeeding at the time of the interview.

Thematic analysis

Four common themes emerged from the data; the key areas were the following: the woman's self-confidence with breastfeeding, her social environment, her knowledge of breastfeeding and the influence of maternity services on breastfeeding outcomes. The themes that emerged were discrete, but how each mother reported each theme was distinct and individual. As a result, the themes that emerged built a picture of factors that were consistent with a mother who breastfeed her baby in the short term and the mother who was still breastfeeding at the time of the interview. We drew on the self-efficacy theory as a way of interpreting and understanding these themes as an approach to conceptualizing what the key issues might be when promoting breastfeeding within this harder to reach group.

The following analysis demonstrates some of the characteristics shown by the women within each theme and is summarized in Table 2.

Breastfeeding related to the woman's self-confidence

How the women reported their self-confidence in their ability to succeed at breastfeeding was a key

Table 1. Demographic profile of the women interviewed

Profile Jarman	Lyn 1.2853	Suzie 0.3369	Jemma 3.5777	Mel 10.743	Joanne 10.9788	Fiona 15.2922	Lauren 15.2922
Age of baby at interview	13 weeks	12 weeks	10 weeks	11 weeks	10 weeks	14 weeks	18 weeks
Primigravida	Yes		Yes			Yes	
Multigravida		Yes		Yes	Yes		Yes
First child from this relationship	Yes	Yes	Yes		Yes	Yes	Yes
Normal delivery	Yes	Yes			Yes	Yes	Yes
Caesarean section			Yes	Yes			
Breastfed before		No		Yes	Yes		Yes
Breastfeeding this baby (short-term)	4 days	7 + 3 weeks of BM in bottle	2 weeks + top ups		1 + 2 weeks of BM in bottle		4 + 8 weeks top ups
Breastfeeding at the time of interview	No	No	No	Yes	No	Yes	No
Baby girl	Yes	Yes	Yes			Yes	
Baby boy				Yes	Yes		Yes

BM, breast milk. Key: shading denotes two different geographical areas.

theme. For some women, breastfeeding was central to the task of being the prime caregiver. Breastfeeding provided adequate nutritional needs for their baby and was seen as a way of getting to know and bond with their newborn child. For others, lack of confidence led to an overpowering sense of responsibility that they could not cope with, and this became a barrier to success.

Mel expressed a relaxed confidence in the whole process of breastfeeding:

I think if you just put him up against here (points to her chest) he drifts off because that's his zone. They say they can smell the breast milk as well so he knows it's on hand somewhere so he goes to sleep. . . . (Mel)

Whereas Lyn's anxiety and lack of confidence were related to her previous experience of miscarriage, which she described as a rejection of her babies. She viewed her confidence in breastfeeding in the same light:

I just had this real fear that I wouldn't [be able to] feed her and I'd reject her. I could just see me just putting her in a room and leaving her and I didn't want to do that and I thought it's not worth it [breastfeeding] it's just not worth the thought of rejecting her. (Lyn)

Conversely, Jemma described her lack of self-confidence in her ability to breastfeed that was reinforced by her husband and mother. She began to see breastfeeding as a big psychological hurdle; she wanted to continue but it became harder and harder:

. . . I think with my husband and my mother, having had this discussion again and again and again about breastfeeding, I was almost embarrassed to say well I'm going to keep going at it, Maisie and I are both upset but I'm going to keep going at it and I felt that I couldn't do it while they were here and there was always someone here. (Jemma)

Some of the mothers who did not continue to breastfeed successfully expressed bonding difficulties with their baby. In two of these cases, women also expressed personal relationship difficulties with their own mothers. Suzie felt that she got 'the bond' from the breast milk, not from breastfeeding. She went on to say that she did not like to make eye contact with her baby when she was feeding:

In the books, you position them in a certain way. Apparently their eyesight when they are first born is just enough where they can see into your eyes and they can see you. I didn't do it. I couldn't see into her eyes, she was sort of looking that way. . . . I'd just sort of have my clothes down here so you'd just see her head. (Suzie)

When asked 'So, did you hide her from your eyes?', she said:

Table 2. Summary of the findings and relevance of categories for each interviewee

	Lyn	Suzie	Jemma	Mel	Joanne	Fiona	Lauren
Breastfeeding related to the woman's self-confidence							
Would breastfeed in public	No	No		Yes	No	Yes	No
Attachment difficulties	Yes	Yes	Yes				Yes
Felt out of control	Yes	Yes	Yes		Yes		Yes
Worried with the amount of breast milk	Yes		Yes		Yes		Yes
Permission to stop	Yes		Yes				
Breasts not for breastfeeding		Yes					
Wanted to breastfeed longer	Yes	No	Yes		Yes		Yes
Would breastfeed again	Yes		Yes	Yes		Yes	
Individual needs met	No	No	No	Yes		Yes	No
Baby's sex					Yes		Yes
Baby's size		Yes		Yes	Yes		Yes
The social environment in which the woman lived							
Partner support	No	No	No	Yes		Yes	No
Mother breastfed her	No	No	No	Yes	No	Yes	No
Mother-in-law breastfed	No		No	Yes	No	Yes	No
Peers breastfed	No	No	No	Yes	No	Yes	No
Extended family	No	Yes	Yes	Yes	No	Yes	Yes
Could ask for help	No	Yes	Yes	Yes	Yes	Yes	Yes
Going back to work	Yes			Yes			Yes
Knowledge of breastfeeding							
Breastfeeding natural	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knew health benefits	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antenatal education	Yes	Yes	Yes		Yes	Yes	
The influence of maternity care on breastfeeding outcomes							
Skin to skin	No	Yes	No	No	No	Yes	Yes
Breastfed at birth	No	Yes	No	Yes	Yes	Yes	Yes
Practical breastfeeding help	No	No	Yes	Yes	Yes	Yes	Yes
Long periods of no breastfeeding	Yes		Yes				
Top ups of artificial feeding	Yes		Yes				
Breast milk via bottle	Yes	Yes	Yes	Yes	Yes	Yes	
Knew MW on community	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knew MW in labour	No	No	No	Yes	Yes	Yes	No
Traumatic delivery		Yes	Yes		Yes		Yes
Health-care assistant	Yes						
MW too busy	Yes	No	Yes				

'Yes', specifically mentioned; 'No', specifically mentioned as not applicable; 'blank', not mentioned; MW, midwife. Key: shading denotes two different geographical areas.

Yes and I had more contact with her doing it by bottle . . . the main reason for me breastfeeding is for the health benefits. (Suzie)

All the interviews demonstrated that, whether negative or positive, the mothers' own childhood experiences influenced their breastfeeding confidence. Where the mother lacked self-confidence in her ability to breastfeed, she looked for support from the health professionals. However, for some women, this constituted permission to stop breastfeeding instead of practical support to empower them to continue. As Lyn describes:

So the midwife came back the next morning and she looked at the situation and said "What do you want to do?" and I said "Well I'd like to continue feeding if I can" and she said "Well I think you can probably do it but it will require a lot of perseverance" and she said "You've got to enjoy your baby" and this was something that was quite . . . I almost felt like I needed permission to stop breastfeeding because it's hammered home to you, I felt like the only woman in the

world who didn't breastfeed. . . . and the second midwife . . . said "You don't want to dread feeding time, you want to enjoy your baby" she said "That's the most important thing . . . ". (Lyn)

Where the individual breastfeeding needs of the women were not met, the women generally felt less satisfied with their care, and while they thought the midwives were very 'nice', they also said that they did not give them strategies to cope with their breastfeeding difficulties. This is supported by other research that found that the midwives did not provide adequate practical breastfeeding support to help women continue breastfeeding (Dykes 2005).

In terms of the self-efficacy theory, we have interpreted this theme in relation to the way in which Bandura argues that success or self-mastery in a particular behaviour will inform an individuals' self-efficacy expectations and that they will be more or less confident in that behaviour depending on the self-mastery experience. So, for example, Mel, who was confident in just putting her baby to the breast, was experiencing a sense of success or mastery that informed her continuing confidence to breastfeed. Other women had not had such positive experiences as shown by Lyn, Jemma and Suzie, where factors such as the inability to bond with the baby and the overwhelming negative influence of family had interrupted the sense of mastering breastfeeding. As Bandura emphasizes the significance of self-mastery in informing self-efficacy expectations, it seems prudent that health professionals should support success. But Lyn described how a midwife undermined her expressed desire to succeed by offering her permission to stop, demonstrating how understanding the concept of self-efficacy might be an important factor in the way that health professionals support and enable mothers to breastfeed successfully.

The social environment

The environment in which the mother lived and the support of her partner, mother and peers had an impact on and influenced her breastfeeding behaviour.

If the mother came from an environment where breastfeeding was a 'normal' part of her learned behaviour, then she expressed self-confidence in her ability to breastfeed successfully both at home and in public. Fiona was confident in her ability not only to breastfeed, but also in how to access support:

I had lots of support and everything from Louisa's grandparents, my parents . . . my mum was helping me make sure I got the correct position and so does Guy. . . . his mum breastfed him, she breastfed both her children. (Fiona)

Her peers were also breastfeeding and her health visitor ran a post-natal support group that she attended. Fiona expressed great self-confidence and control; she knew how to ask for help and felt confident about breastfeeding in public:

I mean I think you can't tell when she's going to be hungry exactly and with these breastfeeding shirts they're very discreet and people don't seem to mind it. We go out . . . quite a lot with some of the people from the postnatal group and I breastfeed and the other girl, she does as well if necessary because otherwise you don't know when they're hungry. (Fiona)

Fiona was one of only two of the women interviewed who felt comfortable to breastfeed in public, and these were the two women who were still breastfeeding at the time of the interview.

Lyn came from a bottle-feeding environment; her mother-in-law had tried to breastfeed but did not succeed. She also felt that her husband could have been more supportive to her breastfeeding:

I think from his point of view he saw me getting very upset and he saw this hungry, screaming baby and he just sort of thought no, give her a bottle was his view. So without that support of "No, come on, you can do it", I think I probably would have benefited from that but I can see why he felt that formula feeding was going to be better for both Jasmine and myself and for him too because he was worried about both of us. (Lyn)

In contrast, Mel came from a breastfeeding environment. All her family and her husband's family had breastfed their infants; she was breastfed herself and called on her mother for support. Her husband had grown up in a breastfeeding environment and saw it as a normal process:

He's always grown up with it . . . He's very comfortable with the idea of breastfeeding which helps I think. (Mel)

Joanne, who had not been breastfed and came from a bottle-feeding environment, expressed her anxiety about how much milk her baby was getting and thought that the baby would be more content on a bottle. After the first week she describes how she never put the baby to the breast again, but expressed for a further 2 weeks and gave the baby breast milk from a bottle:

He was more content, he was getting what he wanted when he wanted it rather than sort of trying to find it sort of thing . . . , I couldn't just sit there and breastfeed him happily and then you have the school runs and everything else so it was just easier to put it in a bottle. (Joanne)

These contrasting examples demonstrated how for the women interviewed the individual environments in which they lived influenced their breastfeeding behaviour and self-confidence. In terms of self-efficacy, this can be interpreted in relation to role modelling and a vicarious experience. Bandura states that a vicarious experience is a significant source of self-efficacy information, that is, being in an environment observing others who have successfully accomplished the desirable behaviour. Clearly, Fiona felt confident about breastfeeding in public because other women around her were also successfully breastfeeding, whereas Lyn had not had this experience. Equally, role modelling within the family and friendship network is important, with examples of fathers coming from a tradition of breastfeeding in the family (interviews Mel and Fiona) and others where the mothers and/or partners were not used to a breastfeeding environment (interviews Lyn and Joanne).

Knowledge of breastfeeding

All the women knew breast milk was best for their baby, and some knew the specific health benefits of breastfeeding. They also thought that breastfeeding was a 'natural' function. Knowledge gained from antenatal education regarding breastfeeding varied. Mel understood the health benefits, wanted to breastfeed and thought that it would be natural and easy. At the antenatal classes she explained how they had all been encouraged to breastfeed for 4 days because that is when the baby would get the colostrum. She stopped breastfeeding on the fourth day, maybe feeling she had achieved a 'good enough' result. She also talked about the amount of written information she had received, but at the end of the interview talks about how she found reading hard:

My problem is I'm not a very good reader, I learn by either being shown, you know someone sitting there doing a practical demonstration or someone doing the demonstration on you, I don't like reading, I hate reading. (Lyn)

Lauren had breastfed her first child in the long term as a single mother, and 10 years later she had another child by a different partner. Her practical skills of breastfeeding her first child were excellent, however, her different circumstances – being a multigravida living in a different environment, with a different partner and a baby of different sex – seemed to have an influence on her breastfeeding behaviour. Her transferable skills and knowledge of breastfeeding did not mean that she chose to breastfed this infant in the long term.

The transfer of knowledge about breastfeeding to women is consistent with Bandura's notion of verbal persuasion. He argues that while this is the way in which self-efficacy is most frequently informed, it is not the most effective. This is supported by evidence that providing written information alone will not change breastfeeding behaviour but that support requires reinforcement face to face (NICE 2008). Similarly, McFadden & Toole (2006) argue that information on the benefits of breastfeeding is not sufficient to ensure that women choose to breastfeed. Verbal persuasion can have the reverse effect to that of supporting the desired behaviour, as seen in Lyn's experience, where the midwife was perceived effectively to give her 'permission' to stop breastfeeding when she had expressed the desire to continue.

The influence of maternity services on breastfeeding outcomes

How midwifery practice influenced breastfeeding behaviours, directly or indirectly, was another theme to emerge from the analysis.

Lyn came from a bottle-feeding culture; she described her feelings of not knowing what to do when she was in the labour room. She was left alone and was uncertain about what she should do next:

once I'd got washed and dressed . . . I mean I didn't know what to do, I didn't know whether I could pick her up off of the heater and the midwives and that were out of the room and I thought I don't know, can I pick her up or can't I? So I didn't until I was told I could. (Lyn)

Suzie had a normal delivery but describes her feelings of fear and of being out of control. Forty-five minutes after the delivery, she was moved to the corner of a bay on the delivery suite and left on her own with the buzzer. Her sister who had been with her for 18 hours went home as she had not had anything to eat or drink or any sleep. Suzie expressed feelings of being out of control:

laying there on my own and I couldn't move and I was starving hungry, starving hungry, I was so hungry and just being there on my own I just couldn't stop crying. The nurse said "If you need anything, just bleep" so I bleeped and no one came, so I bleeped again and still no one came and I was thinking I just don't want to be here. I felt like I was ten all over again, I wanted my dad, I wanted my mum, I just felt like I was ten all over again in a strange place, it was horrible, a horrible feeling. (Suzie)

Suzie 'desperately' wanted to breastfeed as she had not succeeded with her previous children. At delivery, the baby was offered to her straightaway:

they lifted the nightie thing I had on and this midwife tucked her right up into my nightie and covered her back up and they said it's bonding, it's skin to skin which I've never heard of before and they just laid her on my belly and covered her up . . . she stayed there for about ten or fifteen minutes. She was then dressed and she was tidied up. (Suzie)

She said to the midwife:

"Shall I breastfeed her now?" and they said "No, leave her, she's fine, not yet" and I thought well I've always read in books that the first thing you do when you've had a baby if you want to breastfeed is you latch them on straight away for the bond which I thought was a bit strange at the time but she said "No, no, that's fine, just leave her for a little while, she's fine." [the mother] I managed to latch her on okay myself after reading book after book after book for 9 months and determined to do it and she latched on immediately and took to it immediately. (Suzie)

Nobody actually helped Suzie in a practical way. The midwives failed to empower her with the knowledge and skills to successfully facilitate breastfeeding.

Conversely, Lauren who decided to breastfeed her baby in the short term felt supported by the midwives caring for her and was given practical support:

I think one day he wasn't latching on properly and she showed me how to do it because I think like ten years ago . . . I thought he was latching on all right but he wasn't so she showed me how to do that and it was fine. (Lauren)

Five out of the seven women interviewed expressed feelings of being 'out of control' at some point; the only two women who did not were the mothers who were still successfully breastfeeding at the time of the interview. Artificial feeding by bottle was perceived as being easier and often became the problem solver to overcome post-natal difficulties. For Jemma, the trauma of an emergency Caesarean section led to her experiencing increased feelings of failure. This culminated in her subsequent feeling of failure at not being able to breastfeed successfully. She related the experience to bereavement. She says:

it was like everything I'd expected had started to go wrong and then I tried to breastfeed and she didn't . . . it just didn't seen to work. . . . it was like everything crumbled. (Jemma)

She felt frustrated because she could not pick up the baby after the Caesarean section:

I couldn't pick her up myself and she would cry and cry and cry and she would go to sleep and then I would start to cry. (Jemma)

The trauma of the birth, feelings of being out of control and then not succeeding at breastfeeding were very traumatic for her as a mother. She felt she had failed in her expectations.

Lyn felt that her husband was supportive, but he was going back to work after 2 days and she did not know how she would cope. She lived in a nuclear family and would not ask for help from her mother as

she felt this was a sign of failure. She related her insecurity and isolation to her breastfeeding experience, and there is a sense of her feeling out of control again:

> I just had this real fear that I wouldn't feed her and I'd reject her. . . . I thought it's not worth it . . . (Lyn)

That night, her husband bought some formula milk. He became the 'problem solver' by providing the only support he knew; Lyn regained her control.

> I was a different person. I just felt so much happier, more relieved, in no pain, felt love for my daughter and it was just right I can cope now. It was just the pain, that was why I gave up really. (Lyn)

According to Bandura, these findings can be explained in terms of emotional arousal. The women in this study use terms such as fear, pain and loss of control. Birth trauma also seems to be an important part of the experience. Where women had these experiences, their self-efficacy expectations in relation to breastfeeding seemed to be negatively affected. These data suggested that midwives had done little to consider the impact of these emotional events to enable women to breastfeed, but had either resorted to verbal persuasion or to doing nothing. Such (in)actions by midwives left some of these women feeling 'desperate', 'crumbled' and 'out of control', and this led them to a situation in which they were unlikely to be positive about breastfeeding.

Discussion

Key findings from these interview data suggest that although women from low-income groups are often knowledgeable about breastfeeding, they may lack the self-confidence to breastfeed. Their social environment and the varying levels of professional support may negatively affect their ability to breastfeed.

However, what these data appear to explain through the self-efficacy theory is that womens' self-confidence, knowledge, breastfeeding environment and support could all be enhanced if the sources of self-efficacy information could be drawn upon by health professionals in a knowledgeable way. The framework of self-efficacy could be used by midwives and other health professionals to understand breastfeeding behaviour among women, including those from low-income groups. The support and advice women received from health professionals were important to their own self-confidence in their ability to succeed. However, the support given was often of a verbal or written nature or provided advice that would be contrary to the notion of positive role modelling or exploration of the women's background and experience. This study supports existing findings that women find breastfeeding in public or even within the family uncomfortable (McFadden & Toole 2006) and that women's environment impact on their ability to succeed at breastfeeding (Earle 2000). Our analysis suggests that a vicarious experience and role modelling could be used to enhance self-efficacy and breastfeeding expectations. Midwives and other health professionals could achieve this by providing access to peer support for breastfeeding. Such initiatives are known to be successful (NICE 2008), but understanding how and why they might be particularly useful for women from low-income backgrounds is of special relevance here.

The impact of the psychosocial and cultural issues on breastfeeding success for this group of women should not be underestimated (Hoddinott 1998; Gutman *et al*. 2009). The profile of these women demonstrates that the cultural environment has a significant impact on a woman's breastfeeding success and duration. Only two of the women from these low-income groups were still breastfeeding their babies at the time of the interview. Only these two women who had support from their partners were breastfed themselves by their own mothers, had support from their mothers and mothers-in-law, and were happy to breastfeed in public or within the family. Women from lower socio-economic groups do not always access support even if they know about it for fear of failure and lack of self-confidence; furthermore, breastfeeding is perceived as a natural function and is therefore thought to be easy (Hoddinott & Pill 1999b). The lack of self-confidence and embarrassment at breastfeeding can be seen as an important barrier to some women (Sheeshka *et al*. 2001; Ruowei *et al*. 2002; Scott & Mostyn 2003; Stewart-Knox *et al*. 2003; Stockdale *et al*. 2008).

Studies around the world have described how women's close family members, friends and especially partners can influence breastfeeding success (Ahluwalia *et al*. 2000; Arora *et al*. 2000; Earle 2000; Schmidt & Sigman-Grant 2000; Scott *et al*. 2001; Ekstrom *et al*. 2003; Okon 2004; Rempel 2004; Wolfberg *et al*. 2004). A partner who is ambivalent or non-supportive can make all the difference to a woman's confidence in her breastfeeding ability, as can her own mother and breastfeeding friends as 'positive role models'. This is demonstrated in the responses from the women's interviews in both groups. By comparison, women who were still successfully breastfeeding describe supportive and encouraging breastfeeding environments.

Findings from other studies identify that while deprivation may impact on breastfeeding success, other risk factors also influence women's breastfeeding behaviour (McInnes *et al*. 2001; Dykes 2006). The overriding theme identified within this study is that women who feel self-confident about their ability to breastfeed successfully are better able to overcome social barriers.

The results of this study suggest that midwives need to be able to assess women's self-efficacy expectations and draw upon a range of social-learning strategies that will enable or enhance the mothers' confidence to breastfeed. This can include breastfeeding support groups, peer-to-peer support and breaking the cycle of the bottle-feeding culture through early intervention in the antenatal period.

Perhaps the failure to meet the needs of disadvantaged women lies in the training and education that is offered to health professionals on breastfeeding, or even the WHO/UNICEF's Ten Steps to Successful Breastfeeding itself. Few programmes specifically address the special biopsychosocial skills (Dykes 2006) or the knowledge that midwives need to support breastfeeding among socially disadvantaged groups. A commitment to implement breastfeeding policies and target women from disadvantaged groups requires a strategy that specifically addresses the psychosocial needs of women. The challenge now is to look critically at the Ten Steps to Successful Breastfeeding and seriously consider how it can be designed to enable health professionals to assess the psychosocial needs of women so that they can support them to become more self-confident in breastfeeding.

Conclusion

This qualitative study aimed to explore the breastfeeding experiences of women from low-income groups within a framework of the self-efficacy theory. The findings from the women's interviews demonstrate that confidence to breastfeed is a key consideration that health professionals should take into account. These findings can be explained by considering the self-efficacy theory as a framework within which women make breastfeeding decisions.

All the women and the midwives within the study understood the health benefits of breastfeeding. The women in this study knew that breast milk was best for their babies, but believing that 'breast is best' was not enough to encourage these women from low-income groups to breastfeed in the long term. The major difference in breastfeeding duration among the women within this study was defined by psychosocial influences.

Future research could focus on refining Dennis' (2003) breastfeeding self-efficacy measure for the UK context and designing studies that evaluate approaches to enhancing self-efficacy specifically among low-income women.

Three specific developments for investigation are the following:

- Further research to assess if a self-efficacy scale could be used effectively within the UK context to identify women requiring targeted breastfeeding support.
- Development of midwifery and other health-care education programmes focusing on the knowledge and skills required to enable these carers to assess and promote the self-efficacy expectations of new mothers in relation to their breastfeeding experience.
- The NICE (2008) Maternal and Child Nutrition guidelines, the DH & DCSF (2009) *Children's Strategy, Healthy Lives, Brighter Futures* and the WHO (2003) recommend that all maternity-care services implement the 'Ten Steps to Successful Breastfeeding'. However, the 'Ten Steps' does not encapsulate

the psychosocial needs of women from disadvantaged groups. Further research is necessary to explore the possibility of expanding the Ten Steps to include an 11th step specifically designed to include a psychosocial assessment as a further standard.

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Conflicts of interest

No conflicts of interest have been declared.

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