



University of HUDDERSFIELD

University of Huddersfield Repository

Johnson, Sally, Leeming, Dawn, Williamson, Iain and Lyttle, Steven

Maintaining the 'good maternal body': Expressing milk as a way of negotiating the demands and dilemmas of early infant feeding.

Original Citation

Johnson, Sally, Leeming, Dawn, Williamson, Iain and Lyttle, Steven (2012) Maintaining the 'good maternal body': Expressing milk as a way of negotiating the demands and dilemmas of early infant feeding. *Journal of Advanced Nursing*. ISSN 0309-2402

This version is available at <http://eprints.hud.ac.uk/13566/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Maintaining the ‘good maternal body’: Expressing milk as a way of negotiating the demands and dilemmas of early infant feeding

Johnson, Sally; Leeming, Dawn; Williamson, Iain and Lyttle, Steven

Abstract

Aim. This paper is a report of a descriptive study of early infant feeding experiences focusing on accounts of women who expressed milk extensively in the first few weeks postpartum.

Background. Relatively little is known about the reasons for expressing milk following healthy term births. Evidence indicates it is an increasingly common practice during early infant feeding in Westernised countries. A more comprehensive understanding of this practice will help midwives and nurses assist mothers negotiate early feeding challenges.

Method. Audio-diary and semi-structured interview data from seven British women who extensively expressed milk in the first month postpartum were analysed. These data were drawn from a larger qualitative longitudinal study which took place in 2006-2007. Themes, discursive constructions and discourses are identified through the use of a feminist informed analysis.

Findings. The practice of expressing was employed as a solution to managing the competing demands and dilemmas of early breastfeeding and ensuring the continued provision of breast milk thereby deflecting potential

accusations of poor mothering. In addition, the practice may afford a degree of freedom to new mothers.

Conclusions. The need to maintain the 'good maternal body' can account for the motivation to express milk, although there may be reasons to be cautious about promoting expression as a solution to breastfeeding difficulties.

Education for health professionals which emphasises the complexities and contradictions of mothering and which challenges prescriptive notions of 'good mothering' could better support new mothers in their feeding 'choices'.

Keywords: Expressing milk, breastfeeding, discourse analysis, midwives, nurses

Summary Statement

What is already known about this topic

- Expressing breast milk and feeding it to an infant via a bottle following healthy term births is a common practice in developed countries.
- The practice of expressing seems to be more common in the first few weeks postpartum and decreases with infant age.
- Little is known about the reasons for expressing milk extensively in the first few weeks postpartum.

What this paper adds

- The practice of expressing extensively seems to be used primarily as a solution to managing competing demands and dilemmas of early breastfeeding.
- Because of dominant moral messages about the importance of breastfeeding, mothers seem to express to ensure the continued provision of breast milk.
- Women may view the practice of expressing as enabling a degree of freedom and convenience in early infant feeding.

Implications for practice and/or policy

- Promoting expressing as a simple solution to breastfeeding difficulties should be treated with caution.
- Education for nurses and midwives should enable support for women in attaching their baby to the breast and emphasise the complexities of early

infant feeding in a non-judgmental way.

- Nurses and midwives can help to challenge prescriptive notions of 'good mothering' by exploring infant feeding solutions with mothers and making them aware of why they may experience dilemmas.

INTRODUCTION

Expressing breast milk and feeding it to an infant via a bottle following healthy term birth is becoming an increasingly common practice in developed countries (Labiner-Wolfe et al. 2008, Clemons & Amir 2010). The focus of much of this literature has been on expressing as a means of managing the return to paid work after maternity leave (Ortiz et al. 2004, Payne & Nicholls 2010) or as a way of feeding pre-term infants human milk (see, for example, Sisk et al. 2010). Little appears to be known, however, about the reasons for, and experiences of, this practice particularly during early infant feeding in healthy, close to term or term infants (Clemons & Amir 2010). Although evidence from some studies indicates it is a practice which can assist the continuation of breastfeeding (Binns et al. 2006, Labiner-Wolfe et al. 2008, Win et al. 2006), further understanding is needed to help mothers negotiate early feeding and parenting.

Background

Although large scale surveys such as the UK's Infant Feeding Survey (Bolling et al. 2007, IFF Research & Renfrew 2011) do not necessarily provide data on the expression of milk separately from feeding at the breast, some evidence indicates that rates of expressing breast milk following healthy term birth have been increasing. For example, in an Australian study, Binns et al. (2006) report a doubling in rates between 1993 and 2003 and in a recent US study, Labiner-Wolfe et al. (2008) noted that 25% of their sample expressed regularly whilst in Clemons and Amir's (2010) study 36.2% of their sample reported

expressing several times a day during the first month postpartum. It seems that expressing is more common in the first few weeks postpartum and then decreases with infant age (Binns et al. 2006, Clemons & Amir 2010, Labiner-Wolfe et al. 2008). The few studies that have investigated the practice of expressing milk in healthy term or close to term infants, have identified several reasons for this. These include enabling someone else to feed the infant breast milk; ensuring an emergency supply of breast milk; facilitating return to work; or because of engorgement (Clemons & Amir 2010, Labiner-Wolfe et al. 2008). It should be noted that participants' responses in the studies by Labiner-Wolfe et al. (2008) and Clemons and Amir (2010) were limited by the requirement to select reasons mainly from a pre-given list. In addition, data from these studies were collected up to nine and 12 months postpartum respectively, when reasons for early expression, might be viewed differently. Elsewhere we have reported reasons for expressing milk identified from a sizable amount of data collected during an inductive longitudinal qualitative study which aimed to explore the early lived experiences of breastfeeding in the first month postpartum (reference to authors 2009/in press). From exploring talk about expressing breast milk from 16 participants in the first one-two weeks postpartum, we found that expressing was constructed as a way to manage the realities of modern motherhood including facilitating shared parenting, the 'bonding' between the baby and others, feeding in public and returning to work and as a way to negotiate some independence. It was also discussed as a way of managing breastfeeding pain, feeding difficulties and the perceived inefficiencies of the maternal body, thus ensuring the continued provision of breast milk (reference to authors 2009). This analysis included a

heterogeneous sample of mothers with some expressing extensively or occasionally, some who had tried and were unsuccessful, and some who were considering expressing in the future.

In a subsequent discussion of the implications of expressing for public health interventions we drew on three case studies of women in our sample who extensively expressed milk during the first few weeks postpartum, to provide some illuminating illustrations of key ways in which individuals constructed their reasons for this practice (see reference to author in press). These related to concerns about the baby, 'bonding' with others, insufficient milk and the perceived demands of breastfeeding. Although these case studies give an indication as to some of the reasons for extensive milk expression in early infant feeding, the substantial amount of data collected warranted further exploration of all women who had expressed extensively in order to understand better the range of issues involved and implications for practice. This would be enhanced by investigating beyond the first week postpartum.

There is little theorising surrounding the practice of expressing milk. We have argued in detail elsewhere (see reference to authors 2009) that the literature on breastfeeding has resulted in a somewhat decontextualised understanding because it focuses, for example, on individual experiences (Nelson 2006) or variables which predict initiation and duration of breastfeeding (e.g. Dennis 2002, Swanson & Power 2005). In contrast, the growing feminist infant feeding literature explores contemporary Westernised contexts in which women's experience is situated. Feminists have identified a number of

historically located socio-cultural discursive constructions which women face when negotiating infant feeding. For instance, breastfeeding is associated with 'good' mothering (Carter 1995), with a moral dichotomy between breast milk as 'good' and formula milk as 'bad' (Bartlett 2003/2005, Murphy 2000). Additionally, there is a juxtaposition between breastfeeding as a mechanical process (Dykes 2005) yet essential for 'bonding' between a mother and baby (Schmied & Lupton 2001). In particular, feminist analyses have brought into focus the problematic nature of concentrating on feeding 'decisions' as individual, autonomous choices. They highlight the complex, and often contradictory, environment in which new mothers find themselves (Bartlett 2003, Carter 1995, Murphy 2000).

The limited theorisation in relation to expressing milk is somewhat contradictory. We have argued elsewhere that expressing has been conceptualised as leading to both regulation and empowerment (see reference to authors 2009/ in press). Briefly, expressing is seen as a type of regulation placed upon breastfeeding because it imposes a form of 'control' while continuing to feed human milk (Dykes 2005). On the other hand, expressing has the potential to be empowering, in that it allows for increased freedom for women (Dykes 2006, Morse & Bottorff 1992).

In order to explore further women's accounts of expressing milk and the context surrounding these we draw upon feminist poststructuralist theorisation (Gavey 1989, Weedon 1997) to guide our analysis and interpretation. Within this perspective it is argued that subjectivity is constituted by and within

cultural discourses and power relations. However, possibilities for agency and change remain where there are competing and contradictory ways of constructing subjectivity (Weedon 1997). Therefore a feminist poststructuralist analysis can enable an examination of how mothers adopt, negotiate and rework dominant discourses and practices in relation to infant feeding and the implications of doing so. This approach to analysis contributes to the recent and burgeoning feminist analysis of breastfeeding more generally and expressing milk in particular.

THE STUDY

Aim

The aim of this study was to describe understandings of breast milk expression amongst women who performed this practice frequently in the first few weeks postpartum.

Design

Audio-diary and semi-structured interview data were drawn from a larger study of the lived experience of breastfeeding (for findings from this study, in addition to those noted above, see reference to authors 2011). The larger study was conducted in two phases. Participants were asked to keep an audio-diary about their breastfeeding experiences for approximately seven days following the birth of their baby or discharge from hospital. They were then invited to take part in a follow-up interview in their own home (Phase 1). This process was then repeated approximately three weeks later (Phase 2).

Participants

Thirty two women who intended to breastfeed were recruited to the larger study from maternity services connected to a hospital in central England. Inclusion criteria were that participants were first time mothers intending to breastfeed their baby; they had a singleton delivery at, or close to, term; were at least 16 years of age; and were free from significant child or maternal illness and medical complications.

Of interest was that a substantial number of participants reported expressing milk as part of their early infant feeding practice, with nearly a quarter (7 out of 32) expressing extensively and it is these women we consider in this analysis (see Table 1). We have defined extensive expression as expressing milk for half or more of infants' feeds, although this may only have continued for a few days as part of a temporary feeding strategy.

Insert table 1 about here

Data collection

Participants were provided with guidelines for completing the diary. They were asked, to make recordings about a minimum of two feeding sessions per day over each of the seven day periods, as they happened or as soon as possible afterwards. They were given a number of open-ended prompts focusing on both experiences of feeding and more general adjustment to motherhood but were informed they were not restricted to these. The interviews included

questions about how they were currently feeding their infant, their experiences of feeding to date and their future feeding intentions. The larger study took place over a ten month period in 2006-2007, with data collection for this sample occurring over a four month period in 2006.

Ethical considerations

The study was approved by a university ethics committee and a National Health Service Regional Ethics Committee. Where possible, potential participants were informed about the research via general practitioner surgeries and ante-natal classes and clinics and asked to register an initial interest several weeks before the birth. A few women, however, were approached on the ward shortly after giving birth and provided with an information sheet. The latter group of participants was given at least 24 hours to consider participation. Names used are pseudonyms to protect identity.

Data analysis

A thematic discourse analysis (Braun & Clarke 2006) was initially used to identify patterns in the data. This form of discourse analysis is situated within a social constructionist epistemology in that it is assumed that the patterns identified are socially produced. Analysis was further informed by a feminist poststructuralist perspective (Gavey 1989, Weedon 1997). This involved identifying different discursive constructions surrounding infant feeding, links between these constructions and wider discourses, the subject positions that these constructions and discourses made available and their implications for action and subjectivity (see Willig 2008).

Rigour

Meyrick's (2006) review of rigour in qualitative research underpins the way we conducted and report this study. This review centres on transparency and being systematic at all stages of the research process. We have addressed these by including clarity about the epistemological stance; detailing the study's aims and focus of analysis; using appropriate methods of data collection and analysis; providing detail about sampling and a rationale for this; providing details about data collection; using the research team to confirm the analysis; reporting all cases of women who expressed milk extensively and highlighting in the analysis those that counter key patterns; using two data collection methods (audio diaries and semi-structured interviews) to add to the confirmability of interpretations; providing clear links between results and conclusions; providing detail about the participants and the context; and providing links to other appropriate literature to assist extrapolation and the identification of implications for practice.

FINDINGS

Participants were aged between 19 and 36 years. Seven women described themselves as White British, and one as Black Caribbean. They were from a range of backgrounds (representing diversity in occupation, class, household income and qualifications - see table 2).

Insert table 2 about here

The themes identified and discussed in the following section are *expressing as: a 'desperate' solution in difficult times; a way of deflecting accusations of poor mothering; a way of monitoring and improving the efficiency of the provision of human milk; and a door to freedom.*

Expressing as a 'desperate' solution in difficult times

A prominent explanation given for expressing milk and feeding it via a bottle was to manage a range of early and often interrelated breastfeeding difficulties including pain and discomfort, problems latching the baby onto the breast and the baby not feeding very well at the breast. For example, Arabella relayed a graphic account in her Phase 1 diary and interview of 'struggling' with the pain she was experiencing when breastfeeding. She described it as 'the most painful thing ever'. She anticipated breastfeeding sessions with 'dread' and felt 'nauseous' when feeding. By day five of her diary she reported expressing a substantial amount of milk and feeding it to her infant via a bottle:

this [expressing] is much more pleasant... not half as painful as trying to have him on there [the breast].

Expressing was seen as a strategy that could be used in order to relieve and have more control over pain and discomfort. As Imogen put it, 'cos he's got such a strong suck on him that I've found that at least if I am expressing, I can control how hard the suck is...' (Interview, Phase 1).

The related issue of not latching on properly was frequently cited as a reason for expressing milk. For instance, Queenie spoke at length in her Phase 1 diary and interview about the difficulties she was experiencing getting her baby to latch on. She spoke about considering expressing as a solution:

My husband and I have been discussing, if he [the baby] doesn't go on the breast... maybe to as soon as possible start expressing it and getting that down him rather than formula milk [*Queenie crying*] (Diary Phase 1, day 3)

By the time she was interviewed at the end of Phase 1 she reported expressing a substantial amount of milk and feeding it via a bottle.

As well as pain and problems with latching on, participants frequently described their babies as not being 'interested' in or feeding much at the breast; some describing them as 'lazy' or 'sleepy'. For instance:

I know he won't have drained it all [milk out of the breast] cos he's too lazy for that so I'll express off this, then he can have that colostrum as his feed (Arabella, Diary Phase 1, day 2)

Expressing was thereby constructed and deployed as a solution to the reported difficulties of early breastfeeding. Here, the 'problem' identified was the transfer of sufficient nutrients rather than the establishment of feeding at the breast, as emphasised by phrases such as 'getting that down him' and

'then he can have that colostrum'. Therefore, the solution was the provision of a 'supply' of milk through expressing, thus prioritising a biomedical discourse of nutrition over a nurturing one. Furthermore, the baby's disposition was enrolled as an additional justification for resorting to expressing.

Expressing as a way of deflecting accusations of poor mothering

Using expressed milk as a solution to difficulties was spoken about as a better option than resorting to feeding formula milk. Expressing was placed within a hierarchy of methods, with breast feeding seen as 'best', expressing as 'next best' and feeding formula milk as a last resort.

If there was expressed milk there to have, then he'd have it but if there was no express milk, then he'd have to have formula. So formula's the last solution (Imogen, Interview, Phase 2)

Therefore, expressing rather than using formula enabled the women to better deflect potential accusations of poor mothering. For example, in her first phase interview, Faith spoke about the 'stigma' that might be experienced if she was not able to feed breast milk by whatever means:

That would be a big, big, big issue for me if I couldn't breastfeed him through expressing milk or normal breastfeeding. Cos I think there's such a stigma attached to it. Such as 'you should breastfeed your baby' and if you're seen to be using formula it's... I think I'd feel like I'd let him down.

Most of the women spoke of being able to feed milk by expressing as 'still' giving their baby the 'best start', or giving them the 'goodness, 'nutrients' or 'antibodies' they need. By deploying the practice of expressing milk these mothers were able to successfully negotiate the moral dichotomy between breast milk as 'good' and formula milk as 'bad' (Bartlett 2003/2005, Murphy 2000). Within the context of a biomedical discourse which prioritises optimal nutrition, this allowed them to align themselves with 'good' mothering because they were able to position themselves as striving to do their best to fulfil the moral duty of a 'good mother' by ensuring that health outcomes are maximised for a baby.

Expressing as a way of monitoring and improving the efficiency of the provision of human milk

Uncertainties about the amount of food their baby was getting was another concern cited as motivation to express as this enabled intake to be monitored. For example, Imogen said:

I think the main worry was just that he wasn't getting enough... to eat. And the thing with breastfeeding is you can't see how much they're having...,I can see how much I've expressed. (Imogen, Diary Phase 1, day 7)

Hannah was not confident her baby was getting enough milk as he was not

always latching on or sucking properly. This was exacerbated because her baby was born slightly early and was relatively small.

Feeding expressed milk via a bottle is easily quantified, enabling new mothers to be certain their baby is getting 'enough' sustenance. This seemed to be a particular concern for those with smaller babies or babies born slightly early such as Faith and Hannah, though some of the other mothers gave similar accounts. Dykes (2006) notes that mistrust in the body's abilities to produce milk is the most common reason given for giving up breastfeeding in the UK and that it appears to be a feature of Western cultures dominated by biomedical values and a 'supply' and 'demand' approach to breastfeeding. Here, however, rather than resorting to feeding formula milk, expressing was seen as a solution which matched this mechanistic view of infant feeding whilst ensuring the continuation of good mothering.

Even when participants did not emphasise the need to monitor the adequacy of *supply*, expressing was in itself sometimes seen as a more efficient means of providing breast milk because it was quicker. In Phase 1 Yvonne reported she was getting on well with breastfeeding saying that she was exclusively breastfeeding, but by the end of Phase 2 she was mainly expressing and feeding via a bottle. The central reason she gave for this change was that it was taking her baby a long time to feed as he frequently came off the breast and needed to be latched on again.

The only reason that I've been doing that [expressing milk] is because I

find that when baby's on the breast, he takes such a long time to feed.

He can be on the breast for up to like an hour and a half, two hours

(Phase 2 Diary, day 1)

Yvonne described her baby as being 'constantly on the boobs, non stop'

whilst Faith stressed the greater efficiency of feeding expressed milk:

Cos you express into a bottle and in fifteen minutes I could have eight fluid ounces but I can't imagine with fifteen minutes on the breast he'll have had eight ounces. I know that I've sat and breastfed him for twenty minutes and he's sucked all the time but then an hour and a half later he's screaming the house down because he's hungry (Interview Phase 1)

Using a breast pump and feeding expressed milk via a bottle was even portrayed as quicker than breastfeeding:

I find the breast pump easy to use... it is actually quicker [than breastfeeding] to sterilise the equipment, express the milk.... (Yvonne, Phase 2 Diary, day 1)

Although expressing was sometimes viewed as 'hard' and 'more difficult' (Queenie) than breastfeeding, several of the women reported experiencing their breastfeeding bodies as not particularly efficient at meeting the needs of their child. In these instances, feeding was constructed as a matter of 'getting

milk into babies' rather than a process of 'nursing'. This reflects Western mechanistic views of infant feeding reinforced by the medicalisation of breastfeeding which also implies, as Bartlett (2003) argues, that lactating bodies should be constantly available. In this context, expressing milk is a practice that seems to be recognised as offering some retention of a sense of control over what is seen as the otherwise inefficient, and hence constantly required, breastfeeding body. For most women in our study, except Yvonne and Faith, however, expressing appeared to be a relatively short-term strategy for monitoring and improving the efficiency of the provision of human milk as most were not expressing milk at Phase 2 (see table 1). When interviewed in Phase 2 Faith evaluated her feeding method (half expressed and half formula milk) as successful:

The health visitor's happy with him, he's putting weight on, he is thriving... he's happy most of the time and that's all that's important.

Therefore for some women expressing was constructed as giving an on-going sense of control and successful nurturing, while for others expressing appeared to be an early feeding strategy that was not sustainable in the longer-term.

Expressing as a door to freedom?

Expressing was seen as a way of dealing with feeling uncomfortable or not confident about feeding in public or in front of others, particularly where women were not finding breastfeeding straightforward. For instance, in Phase

2 Hannah reported that she had moved on to exclusively breastfeeding:

I feel much more confident now about going out in public and feeding because I don't have to fuff about getting the nipple shield out and making sure it's in the right place and holding that on while I latch him on. So I feel that I can now feed discreetly so I'm not as uncomfortable about feeding in public now as I was before (Phase 2 Diary, day 3)

Similarly, others reported that expressing or feeding formula milk via a bottle while out, or in front of others, was related to difficulties breastfeeding which meant that they could not feed 'discreetly'. Feminist scholars have long argued that because of the sexualisation of the breast in Western societies, breastfeeding in public can be difficult for women (see, for example, Carter 1995, Stearns 1999). When experiencing difficulties in establishing breastfeeding, however, modesty is even harder to achieve and could be a further reason for resorting to expressing milk.

Some described expressing as giving flexibility in that others could feed their baby; giving them a break if they were tired or wanted to do something else, and it also allowed others the opportunity to bond with the baby, particularly husbands or partners.

I mean it's given my partner and him [their baby] bonding time cos you see he can give him bottle whereas he can't breastfeed (Faith, Interview Phase 1)

Arabella said:

But at least now, if we want to go anywhere, it's much easier. Not that that was a factor for doing it [expressing], but I mean obviously the bottles are already made up, so somebody else can feed him...if I want to nip out anywhere. (Interview Phase 1)

However, Arabella's comment, 'not that that was a factor for doing it [expressing]' and Yvonne's that 'I think it's mainly to do with time [the time it was taking her to breastfeed]' indicate that there might be something problematic about being perceived to value increased freedom and convenience. Indeed, in light of the dominant moral message that 'breast is best', and cultural representations of ideal mothers as selfless, it seems that it might be difficult for women to claim freedom and convenience as legitimate reasons for expressing. Therefore, participants may have placed less emphasis on self-interest by citing other reasons in line with expectations about 'good' mothering. Benefits associated with freedom were therefore conveyed as being less important than finding a solution to the difficulties of breastfeeding (outlined earlier).

DISCUSSION

The aim of the larger study was to explore the lived experience of breastfeeding, rather than expressing in particular. Therefore, some opportunities to ask further questions which might have illuminated the

reasons for expressing extensively might have been missed. In addition, the diary method, while useful for accessing events as they occurred (Ferguson 2005) and issues of salience to the participant with minimal prompting (Breakwell 2006), did not allow issues of interest to be followed-up immediately (although the research assistant listened to the recording prior to follow-up interviews and this informed lines of enquiry). Furthermore, although the sample size was appropriate for the analysis undertaken, we cannot be certain that data saturation was achieved. Therefore, further research which specifically aims to explore the practice of early milk expression in mothers of healthy term infants is warranted.

While expressing could be conceptualised as a form of regulation placed on breastfeeding (Blum 1993, Dykes 2005/2006, McCarter-Spaulding 2008, Van Esterik 1996), it appears to be more about women balancing different sets of demands and exerting a degree of control (Bartlett 2003, Carter 1995, Murphy 2000). It has been argued that breastfeeding can devastate women's sense of control and challenge notions of individuality and choice (see Bartlett 2003) and here expressing is seen as a solution. However, in extending general feminist theorisation, this valuing of control could in itself also be conceptualised as a form of regulation in that in neoliberal societies the desire to gain control over the body is linked to notions of ourselves as rational, autonomous, independent beings (Bartlett 2003, Schmied & Lupton 2001). Therefore, expressing cannot be fully conceptualised as a 'door to freedom' (see Dykes 2006, Morse & Bottorff 1992). Although elements of the

'expressing providing freedom' construction were present in our participants' accounts, these appeared to be presented as secondary to expressing as a solution to difficulties and dilemmas. This might be because self-interest goes against dominant constructions of mothers as selfless. This relates to mothers being held morally accountable for ensuring they provide optimal physical and psychological health outcomes for their children. In this case, expressing was deemed to be an appropriate response rather than resorting to feeding formula, as found in Murphy's study (2000). The women in the present study were therefore able to align themselves more closely with the dominant 'breast is best' moral imperative than if they had resorted to formula feeding. Our analysis therefore emphasises that feeding choices are not made freely but constrained by dominant constructions of motherhood and the maternal body.

A better way to understand the practice of expressing in early infant feeding is that it facilitates the maintenance of the 'good maternal body' (Stearns 1999, reference to authors 2009). Expression of milk seemed to be used to manage breastfeeding pain, discomfort, inefficiencies and other perceived difficulties, in order to ensure the continued provision of human milk. In addition, indiscretion when feeding in front of others because of difficulties, uncertainties and inefficiencies was a further key reason identified in this subgroup which has not been identified elsewhere. As such, assumed benefits of milk expression which featured strongly in our previous analysis (authors,

2009), such as returning promptly to 'normal' activities, seemed a less central concern for the women who extensively expressed milk.

CONCLUSIONS

Because of the time limit of the study it is not clear what the longer-term outcomes were in terms of the relationship between expressing and the continuation of breastfeeding. The data we have indicate the picture is mixed (see Table 1). It would therefore be premature to suggest that expressing could be used as a way to encourage/promote the provision of breast milk. In addition, there are reservations about the use of expression as an alternative or supplement to breastfeeding. For example, the practice does not address more fundamentally some of the socio-cultural factors which can make expressing seem attractive to breastfeeding women, such as the sexualisation of the breast and the quantification and medicalisation of infant feeding. It has also been suggested that the biologic properties of the milk may degrade with storage (Francis et al. 2010), that suckling at the breast might provide jaw and oral musculature developmental advantages and that if breast pumps are used they should be able to empty the breast efficiently and should ideally not be used to avoid emptying the breast at night when pumping or suckling have the greatest effect on prolactin levels and hence on milk supply (see Geraghty et al. (2005), Walker (2010) and reference to authors (in press) for a fuller discussion of reservations). Therefore, promoting expressing as a simple solution to breastfeeding difficulties should be treated with caution.

However, as it appears that women are increasingly engaging in the practice of expressing in the early feeding of healthy, term or close to term infants, it is important to understand the dilemmas and difficulties women face in breastfeeding which make expressing seem an attractive option. Education and training is needed for nurses and midwives which equips them to support women in achieving an effective attachment between their infant and breast. This kind of support can reduce difficulties such as nipple pain (Cadwell et al. 2004) which led some of our participants to express their milk. However, in addition it would also be helpful for education to emphasise the complexities of early infant feeding and the need to support new mothers through this 'moral minefield'. Health professionals can also help to challenge prescriptive notions of 'good mothering' by supporting mothers in finding the 'best' solution for them to nourish their infant, in a non-judgemental way. This could also involve increasing new mothers' awareness of the complexity and tensions involved in infant feeding 'choices' and emphasising that these do not take place in a social or cultural vacuum. They could also prepare women for some of the challenges they face (for instance, pain, lengthy feeds, difficulties in being discrete) and discuss with mothers the pros and cons of expressing as a way of addressing these potential challenges.

References

Bartlett A. (2003) Breastfeeding bodies and choice in late capitalism. *Hecate* 29(2), 153-165.

- Bartlett A. (2005) *Breastwork: Rethinking Breastfeeding*. University of New South Wales Press, Sydney, Australia.
- Binns C.W., Win N.N., Zhao Y. & Scott J.A. (2006) Trends in the expression of breast milk 1993-2003. *Breastfeeding Review* **14**(3), 5-9.
- Blum L.M. (1993) Mothers, babies and breastfeeding in late capitalist America: the shifting contexts of feminist theory. *Feminist Studies* **19**(3), 291-311.
- Bolling K., Grant C., Hamlyn B. & Thornton K. (2007) *Infant Feeding Survey 2005*. The Information Centre for Health and Social Care: London.
- Braun V. & Clarke V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* **3**, 77-101.
- Breakwell G.M. (2006) Using self-recording: diary and narrative methods. In *Research Methods in Psychology*, 3rd edn. (Breakwell G.M., Hammond S., Fife-Schaw C. & Smith J.A., eds), Sage, London, pp. 255-272.
- Cadwell K., Turner-Maffei C., Blair A., Brimdyr K. & McInerney Z.M. (2004) Pain reduction and treatment for sore nipples in nursing mothers. *Journal of Perinatal Education* **13**, 29-35.
- Carter P. (1995). *Feminism, breasts and breastfeeding*. Macmillan Press, Basingstoke.
- Clemons S.N. & Amir L.H. (2010) Breastfeeding women's experience of expressing: a descriptive study. *Journal of Human Lactation* **26**(3), 258-265.
- Dennis C.L. (2002) Breastfeeding initiation and duration: a 1990-2000 literature review. *Journal of Obstetrics and Gynecological Neonatal Nursing* **31**, 12-32.

- Dykes F. (2005) 'Supply' and 'demand': breastfeeding as labour. *Social Science & Medicine* **60**, 2283-2293.
- Dykes F. (2006) *Breastfeeding in hospital: mothers, midwives and the production line*. Routledge, London.
- Ferguson E. (2005) The use of diary methodologies in health and clinical psychology. In *A Handbook of Research Methods for Clinical and Health Psychology* (Miles J. & Gilbert P., eds), Oxford University Press, Oxford, pp. 111 – 123.
- Gavey N. (1989) Feminist poststructuralism and discourse analysis. *Psychology of Women Quarterly* **13**, 459-475.
- Geraghty S.R., Khoury J.C., Kalkwarf H.J. (2005) Human milk pumping rates of mothers of singletons and mothers of multiples. *Journal of Human Lactation* **21**(4), 413-420.
- Francis J., Rogers K., Dickton D., Twedt R. and Pardini R. (2010), Decreasing retinol and α -tocopherol concentrations in human milk and infant formula using varied bottle systems. *Maternal & Child Nutrition*. Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1740-8709.2010.00279.x/abstract>. Accessed on 1 July 2011.
- IFF Research & Renfrew M. (2011). Infant Feeding Survey 2010: Early Results. The Information Centre for Health and Social Care: London. Available at http://www.ic.nhs.uk/webfiles/publications/003_Health_Lifestyles/IFS_2010_early_results/Infant_Feeding_Survey_2010_headline_report2.pdf. Accessed on 4 July 2011.
- Labiner-Wolfe J., Fein S.B. Shealy K. R. & Wang C. (2008) Prevalence of

- breast milk expression and associated factors. *Pediatrics* **122**(2), S63-S68.
- McCarter-Spaulling D. (2008). Is breastfeeding fair? Tensions in feminist perspectives on breastfeeding and the family. *Journal of Human Lactation* **24**(2), 206-212.
- Meyrick J. (2006) What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. *Journal of Health Psychology* **11**(5), 799-808.
- Morse J., & Botorff J.L. (1992) The emotional experience of breast expression. In *Qualitative Health Research* (Morse J., ed), Sage, Newbury Park, CA, pp. 319-332.
- Murphy E. (2000) Risk, responsibility, and rhetoric in infant feeding. *Journal of Contemporary Ethnography* **29**(3), 291-325.
- Nelson A.M. (2006) A meta-synthesis of qualitative breastfeeding studies. *Journal of Midwifery and Women's Health* **51**, e13-e20.
- Ortiz J., McGilligan K. & Kelly P. (2004) Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program, *Pediatric Nursing* **30**(2), 111-119.
- Parker I. (1998) *Social Constructionism, Discourse and Realism*. Sage, London.
- Payne D. & Nicholls D.A. (2010) Managing breastfeeding and work: a Foucauldian secondary analysis. *Journal of Advanced Nursing* **66**(8), 1810–1818.
- Schmied V., & Barclay L. (1999) Connection and pleasure, disruption and distress: Women's experience of breastfeeding. *Journal of Human Lactation* **15**(4), 325-334.

- Sisk P., Quandt S., Parson N., & Tucker J. (2010) Breast milk expression and maintenance in mothers of very low birth weight infants: supports and barriers, *Journal of Human Lactation* **26**(4), 368-375.
- Stearns C. A. (1999) Breastfeeding and the good maternal body. *Gender & Society* **13**(3), 308-325.
- Swanson V. & Power K. G. (2005) Initiation and continuation of breastfeeding: theory of planned behaviour, *Journal of Advanced Nursing* **50**(3), 272-282.
- Van Esterik P. (1996) Expressing ourselves: Breast pumps. *Journal of Human Lactation* **12**(4), 273-274.
- Walker, M. (2010). Breast pumps and other technologies. In *Breastfeeding and Human Lactation, 4th edn.* (Riordan, J & Wambach, K., eds), Jones & Bartlett Publishers, Boston, MA, pp. 379-424.
- Weedon C. (1997) *Feminist Practice and Poststructuralist Theory*, 2nd edn. Blackwell, Oxford.
- Willig C. (2008) *Introducing Qualitative Research in Psychology*, 2nd edn. McGraw Hill and the Open University Press, Maidenhead.
- Win N.N., Binns C.W., Zhao Y., Scott J.A., Oddy W.H. (2006) Breastfeeding duration in mothers who express breast milk: a cohort study. *International Breastfeed Journal* **1**, 28.

Authors' work has been removed.

Table 1: Details of participants' method of delivery, relevant details about the birth/baby and feeding method at Phases 1 and 2

Pseudonym	Reported method of delivery	Any relevant details given about the birth/baby	Reported feeding method at the end of Phase 1 (nine to 17 days postpartum)	Reported feeding method at the end of Phase 2 (four to six weeks postpartum)
Arabella	Caesarean		Mainly expressed milk with some formula (approximately two bottles of formula per day)	Unknown as did not complete Phase 2
Faith	Vaginally	Born at 37½ weeks	Almost exclusively expressing with some attempts at breastfeeding	Half expressed and half formula milk
Hannah	Caesarean as breach	Born at 36 weeks and reported to be small (3050 grams, 6lbs 11½ oz)	Half breastfeeding and half expressed milk	Exclusively breastfeeding
Imogen	Vaginally		Mixed breastfeeding and expressed milk with occasional formula (estimated 80/20 breast milk to formula)	Breastfeeding and feeding formula milk
Queenie	Vaginally. Home birth	Swallowed amniotic fluid during the birth	Half expressed and half formula milk	Did not complete Phase 2 but the research assistant who was still in contact with her reported Queenie was exclusively breastfeeding
Samantha	Vaginally		Exclusively expressing	Exclusively feeding with formula milk
Yvonne	Vaginally. Water birth		Exclusively breastfeeding	Almost exclusively expressing with some breastfeeding

Table 2: Details of participants' age, occupation, social class, household income and highest educational qualification

Pseudonym	Age	Current or past occupation	Self-reported social class	Household income	Highest educational qualification
Arabella	29	Accounts	None	Over £40,000 pa	HND ¹
Faith	30	Nurse	Middle class	Between £36,000 and £40,000 pa	Bachelor's degree
Hannah	26	Teacher	Middle class	Over £40,000 pa	Bachelor' degree
Imogen	25	Team leader telesales	None	Over £40,000 pa	GCSEs ²
Queenie	36	Bank administration	Working class	Over £40,000 pa	Bachelor's degree
Samantha	19	Shop assistant	None	Under £10,000 pa	GCSEs
Yvonne	26	Social worker	Working class	Over £40,000 pa	Bachelor's degree

¹ A UK qualification roughly equivalent to the second year of a university undergraduate degree

² UK qualification usually taken at 16 years of age when finishing compulsory education