

# Perceptions of mothers expressing breast milk on the neonatal unit following preterm delivery

It can take many weeks before babies who are born early are ready to start feeding from the breast. Maintaining lactation until their infant is ready to breastfeed can prove problematic for some mothers. This study explores the feelings and experiences of mothers who give birth to preterm infants towards expressing and maintaining breast milk while their infant is cared for in the neonatal unit. It highlights the challenges for mothers wishing to express breast milk for their newborn preterm infant and recommends areas of practice that could be improved.

## Deb Wilson

MA, BSc (Hons), RN (Child)  
Neonatal Unit, St Georges Healthcare NHS  
Trust, London  
deb.wilson@nhs.net

Unit where study took place:  
Neonatal Unit, Royal Victoria Infirmary,  
Newcastle upon Tyne

The World Health Organization (WHO) and the UK Department of Health (DH) recommend that every infant should be exclusively breastfed for the first six months of life<sup>1,2</sup>. Breastfeeding is an unequalled way of providing the perfect nutrition for the healthy growth and development of infants<sup>1,2</sup>. Human milk is species-specific and has adapted throughout evolution to meet the nutritional requirements of the infant<sup>3</sup>. Its unique composition, particularly its immunological properties, cannot be replicated by artificial milk<sup>4,5</sup>.

It can take many weeks before infants who are born preterm are ready to start feeding from the breast. Maintaining lactation can be problematic, particularly for those mothers of very preterm infants who may need to sustain a milk supply for many weeks before their infant is ready to breastfeed. Expressing breast milk is seen by many mothers as something positive and something that only they can do for their infant<sup>4,6,7</sup>, however it can also be distressing when they are unable to continue because their milk has 'dried up'.

This study was designed to gain an insight into the feelings and experiences of mothers who give birth to preterm infants, towards expressing and maintaining breast milk while their infant is being cared for in the neonatal unit. Ethical approval was obtained from both the Local Research Ethics Committee and Trust Research and Development Department.

There is extensive evidence surrounding the benefits of breastfeeding and breast milk, however women who choose to

breastfeed their preterm infant have difficulties that mothers who give birth at term do not encounter. Complications during pregnancy, labour or post-delivery may leave the mother unwell and most preterm infants will be too small or sick to consider breastfeeding. This often requires the use of milk expression techniques for initiation and maintenance of the mother's milk supply. It is acknowledged in the literature that mothers of preterm infants experience both physiological and emotional challenges, which can adversely affect breastfeeding<sup>6,8-11</sup>. Expressing as soon as possible after delivery is recommended and adopting a pattern of frequent expression is essential during the early weeks post-delivery when lactogenic hormones directly influence milk production<sup>7,9,11</sup>. Unfortunately, women who need to express milk for prolonged periods frequently report diminishing milk volume<sup>11</sup>.

## Methodology and design

A qualitative approach was identified for this study with data collection in the form of semi-structured interview. Descriptive phenomenology was chosen as the research methodology; facilitating the concept that only those who experience phenomena are capable of communicating it to the outside world. It is a method not intended to generate theory, but to be descriptive and provide an insight into the lived experience with the purpose of enhancing knowledge<sup>12,13</sup>.

Participants were chosen by purposive sampling. Eight women were interviewed, of whom six had successfully left hospital

## Keywords

preterm; neonatal unit; breastfeeding; expressing; breast milk

## Key points

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1. Where a mother stays as an inpatient following the birth of her preterm infant needs consideration as staying on the postnatal ward proves difficult for most.
2. Professionals should ensure all mothers are helped to start expressing breast milk as soon as practically possible and that this support is tailored to meet their individual needs.
3. Support needs to be consistent and maintained throughout the mother's journey; from expressing to breastfeeding and through discharge into the home environment.

breastfeeding their infant. The sample reflected cultural diversity: white British (n=4), black African (n=2), white other (n=1) and other (n=1). The age range of participants was also wide and ranged from 21-37 years.

The interviews took place in each mother's home 1-3 weeks following discharge. All the interviews were recorded and subsequently transcribed. A copy of the transcript was returned to each participant for verification.

To provide structure and guidance, analysis was based on Colaizzi's procedural steps<sup>14</sup>. Following the first stage of analysis there were 59 themes. These themes were subsequently placed into five categories: provision, emotions, environment, complications and breastfeeding.

## Findings

The findings are predominantly quotes from the transcripts making it descriptive rather than explanatory, in keeping with descriptive phenomenology. This not only ensures the true feelings of participants are portrayed, but that the conclusions are determined from the data and not from the interpretation imposed by the researcher, which is in keeping with phenomenological methodology.

## Provision

The provision category comprised the themes of advice, communication, privacy, support and technique. Technique refers to expressing breast milk, for example:

"When she showed me how to do it properly I was getting that little bit more." (Interview 3 No: 11)

Support was a common theme but unfortunately a large majority of the discussion around support was negative with mothers feeling they did not receive a lot of support:

"... I felt I was just expected to cope, whereas I felt I was going through a lot worse than anybody else because I didn't have my baby and I needed the support more." (Interview 7 No: 205)

"I think it's (postnatal ward) just really busy and intended for people who are well and just going to go home. So in terms of support then ... not really." (Interview 8 No: 259)

Reliance on close family members for support when expressing was obvious:

"I got a grip of it on my own with the help of my sister." (Interview 2 No: 112)

"He (partner) would do anything that needed doing while I was expressing." (Interview 7 No: 248)

Lack of specialist advice has been cited in many studies as the largest barrier to breastfeeding initiation<sup>9,15</sup>. A BLISS survey also found support to be inconsistent<sup>7</sup>. Although this study was small in number it highlights confusion over who should take responsibility for advising mothers on expressing breast milk, which BLISS also describes in a much larger study<sup>7</sup>.

"I think the postnatal girls expect the special care girls to go through it with you and I think special care expect the midwives." (Interview 5 No: 139)

One mother discussed how:

"Many people make you feel that it would be so much easier all round if you went onto bottle feeding."

(Interview 5 No: 151)

This again is not a unique experience, as 5% of the women who took part in the BLISS survey also reported experiencing pressure to move onto bottle feeding<sup>7</sup>.

Inevitably many mothers discussed receiving conflicting advice:

"You do not know what to do, you don't know who to listen to. But I read the BLISS publication and they said get up through the night to express and so I did my own thing in the end. I felt I did it all on my own." (Interview 5 No: 144)

The conflicting advice does not stop within the unit; when a mother is discharged home she is still confused with differing opinions. One mother who was discharged successfully breastfeeding her baby with a nipple shield says:

"... but the health visitor was like 'you're not using those are you, they're a disaster for breastfeeding.'" (Interview 8 No: 312)

A lack of privacy has previously been highlighted in the literature<sup>9,16,17</sup>. Mothers identified a lack of personal privacy both on the postnatal ward and the neonatal unit:

"There is not really any privacy, obviously you pull the curtains round ... no-one ever knocks or says 'can I come in' so anyone could walk in, so you just feel on edge, you can't relax doing it (expressing)." (Interview 8 No: 265)

"I was just behind the screen, and there was gaps and people could still see between the gaps." (Interview 3 No: 37)

When discussing the use of designated rooms for breast milk expression:

"Sometimes you go in and about five different people would come in, in the time you were in there, and invariably they don't knock." (Interview 8 No: 287)

"So people would just come in and leave the door open, and you think well I'm a

bit stuck here, I can't get up and close the door." (Interview 8 No: 293)

## Emotions

The general perception of pregnancy is that you will have a normal healthy full term baby. Unfortunately this is not always the case, as one mother describes her experience:

"It's harsh, the whole experience was the worst of my life, obviously you never expect that you are going to have a preterm baby." (Interview 7 No: 236)

The birth of a preterm baby has been acknowledged as an extremely difficult time for a mother<sup>6</sup>. Mothers appear to find it particularly difficult and emotional as an inpatient on the postnatal ward.

"It's really disheartening as you see all the other mams, lying on the bed getting skin contact and you just think, oh my God this is horrible."

(Interview 6 No: 182)

"You've just been separated from yours over in special care and you are walking past every one else with their babies and their car seats getting ready to take them home and it's really hard, it's torture."

(Interview 7 No: 243)

## Environment

The environment category comprises themes discussing the physical environment, including the postnatal ward, home and the infant's environment – the incubator. One mother acknowledged how much of a barrier an incubator can be between mother and baby:

"Midwives were like, 'oh yeah, just try and have skin contact with your baby', but she was in an incubator – I couldn't."

(Interview 6 No: 181)

While acknowledging that the postnatal ward was trying to keep her out of the main ward, the following quote provides food for thought:

"They put you right at the back, and although they are trying to do their best by putting you in a room on your own, they're make you walk past every single mother and baby when you go to your room." (Interview 7 No: 242)

Home is acknowledged as a more relaxing environment than hospital and one mother advised that she could produce double the amount of milk when expressing at home:

"You feel like you can't do anything (on the ward), everyone can see what you are doing. It's a bit like you can't really relax until you come home and do normal stuff with them." (Interview 8 No: 321)

## Complications

The complications category comprised problems that were perceived to be difficult. Some themes were felt to be close in meaning, such as control and permission, but as the emphasis within phenomenological analysis is to keep true to the words of the participants, they were individually identified.

While not acknowledged by all participants, a feeling of lack of control was identified, having to ask permission to do the simplest, most natural tasks and feeling like everyone else is looking after their baby.

“It is not even my decision, it’s theirs, everyone is looking after your baby for you.” (Interview 5 No: 166)

“Even when you hold her, you need to ask permission from the nurses to hold her.” (Interview 5 No: 160)

“She was only allowed out, not even an hour a day ... I couldn’t have much contact with her and it was horrible.”

(Interview 6 No: 187)

“She was just so tiny and I wasn’t able to hold her very much.”

(Interview 3 No: 23)

“Having quite limited time for cuddles, everything is a bit of a military operation.” (Interview 1 No: 105)

Lack of control has previously been acknowledged<sup>6</sup>; mothers may find themselves and their infant in a public and medically orientated setting where the focus is on the infant’s physical needs and survival. Keeping siblings occupied on the ward can be difficult, particularly in the intensive care environment with lots of machinery to tempt small children.

“It was hard for her. Going to the hospital every day trying to sit quiet so that she didn’t disturb the other babies.”

(Interview 7 No: 249)

## Breastfeeding

The most relevant category for this project was breastfeeding. There are 10 themes relating to breastfeeding, which include breastfeeding, breast milk, supply and expressing. Following a preterm birth, providing breast milk becomes an important part of the baby’s care and a mother will often welcome the chance to express milk as something positive she can do for her baby<sup>7</sup>. It is an opportunity for the mother to participate in the care of her baby and make a unique contribution to her baby’s health<sup>8</sup>.

“Expressing, although difficult, was a good thing because you feel that you are bringing something to your baby.”

(Interview 1 No: 103)

However expressing did not come easy to some mothers:

“I kept on encouraging myself to do it.” (Interview 4 No: 47)

“You sort of think, is anyone else finding this a bit of a pain?” (Interview 8 No: 332)

And perhaps not very glamorous, with analogies from three participants to a dairy farm:

“It’s not particularly glamorous and you are obviously a bit like you’re attached to a milking machine but it serves a purpose doesn’t it?” (Interview 8 No: 279)

“You just feel like a robot going to the milking shed as I called it.” (Interview 6 No: 193)

“My mam would call us Daisy the cow.” (Interview 7 No: 248)

Finding time to express breast milk for some mothers can be problematic; there is little time left for anything else, travelling backwards and forwards to the hospital twice a day or picking other children up were given as examples:

“You feel like you have no life because we couldn’t go anywhere because by the time you go out it’s time to express.”

(Interview 5 No: 145)

One of the participants commented on the valuable time taken expressing breast milk in the breastfeeding room, and would have appreciated the opportunity to express by the cot side:

“Time, at least for me, was quite precious and quite limited to see ‘Baby’, so I didn’t want to spend any time in another room expressing spending another half hour without seeing her.” (Interview 1 No: 85)

Being able to express breast milk close to the baby can also help with milk production<sup>6,7</sup>.

Kangaroo care or ‘skin-to-skin care’ was a positive intervention and all but one mother (who found the lack of privacy difficult) looked forward to her special time with her baby. Skin-to-skin contact between mother and baby can stimulate milk production and forms an important part of the transition process from expressing breast milk to breastfeeding. Some women did report an increase in milk supply after having kangaroo care but unfortunately this was not experienced by all women:

“When I express it would take a good two or three minutes to start to get my milk coming out, but when I did kangaroo care I had to use a towel because the milk would just drop.”

(Interview 5 No: 149)

“I enjoyed it, but I can’t really say it helped the milk flow because I expressed after one of the days but I didn’t notice any significant difference.”

(Interview 2 No: 120)

Sadly maintaining their milk supply is a common worry for most mothers and unfortunately for some mothers, their milk supply does deteriorate:

“The period when it wasn’t coming out, most of the time I feel discouraged, why has my milk suddenly gone, what happened to it?” (Interview 4 No: 60)

“When you hear people say you’re staring to run out, you think oh no, what am I going to do, but there is nothing you can do is there really?”

(Interview 8 No: 328)

“I even had a bib from her incubator for her smell, but it didn’t work.”

(Interview 3 No: 30)

“It dried up and I didn’t have anything left to do for her.” (Interview 2 No: 22)

Mothers certainly compare how much milk they are able to produce:

“I was always looking to see how much everyone else had ... it was nice to see that other people had about the same amount in their bottles.”

(Interview 8 No: 331)

“This other mum came in ... with two bottles of milk and said ‘I only did one side’ and we were there with our little piddly bits and I just thought God if I could get that much I would completely relax about it.” (Interview 8 No: 326)

## Conclusion

The findings of this study are not contradictory to the literature and mostly reaffirm the findings of previous studies. However, despite previous research, practice does not appear to have changed. Collaboration between postnatal and neonatal wards is essential if service improvements are to be made. The challenge for professionals is to ensure all mothers are supported to start expressing breast milk as soon as practically possible and that this support is tailored to meet their individual needs. The support needs to be consistent and maintained through-out their journey, from expressing breast milk to breastfeeding and through discharge into the home environment. Support must then be followed into the home, either by a specialist community neonatal team in collaboration with the health visitor, or by encouraging a stronger link between health visitors and the neonatal unit.

At a local level, a temporary breastfeeding co-ordinator post was initially created to support new mothers with expressing breast milk and infant feeding. This role proved extremely successful, not only in maternal satisfaction but also breastfeeding initiation and discharge rates. The post has since been made permanent by the Trust.

It is common practice for mothers to be cared for on the postnatal ward while their infant is admitted to the neonatal unit. However, where a mother stays while they remain an inpatient following birth also needs consideration; staying on the postnatal ward proves difficult for most. The mothers see other new mothers holding their newborn infants and families with car seats getting ready to take their newborn infants home. Mothers with infants on the neonatal unit are likely to leave the postnatal ward without their infant while their child remains a patient on the neonatal unit. Finding an alternative area for these mothers to be cared for would alleviate some of their emotional distress. This was not possible at the author's hospital although the antenatal ward was discussed.

As the findings from this study comple-

ment the findings of others, it is not felt that further research in this area is needed at this time. However, future research is needed to look at how best the multidisciplinary professionals can work together to provide specialist and comprehensive breastfeeding support to mothers of pre-term infants to ensure their specific needs are met through their breastfeeding journey from birth to discharge and beyond.

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### References

1. **World Health Organization.** *Nutrition: Infant and Young Child.* www.who.int/child-adolescent-health/NUTRITION/infant\_exclusive.htm. [Online] 2004.
2. **Department of Health.** *Education and Training for NHS Staff. Breastfeeding: Good Practice Guidance to the NHS.* HMSO; 1995.
3. **Jones E., King C.** *Feeding and Nutrition in the Preterm Infant.* Elsevier, Churchill Livingstone; 2005.
4. **Warren I., Choo Tan G., Dixon P.D., Ghaus K.** Breastfeeding success and early discharge for preterm infants: the results of a dedicated breastfeeding programme. *JNN* 2000;6:43-48.
5. **Ritchie J.F.** Immature sucking response in premature babies: cup feeding as a tool in increasing maintenance of breast feeding. *JNN* 1998;4:13-17.
6. **Spicer, K.** What every nurse needs to know about breast pumping: instructing and supporting mothers of premature infants in the NICU. *Neonatal Network* 2001;20:35-41.
7. **BLISS.** *Breastfeeding and Expressing for a Sick or Premature Baby.* BLISS; 2008.
8. **Flacking R., Ewald U., Hedberg Nyqvist K., Starrin B.** Trustful bonds: a key to becoming a mother and to reciprocal breastfeeding. Stories of mothers of preterm infants at a neonatal unit. *Soc Sci Med* 2006;61:70-80.
9. **Jones E., Spencer S.A.** Why is preterm milk expression so difficult? *Infant* 2005;1:77-80.
10. **Lang S.** *Breastfeeding Special Care Babies.* Elsevier, Bailliere Tindall; 2005.
11. **Brown L.P., Spatz D. L., Hollingsworth A.O., Armstrong C.** Promoting successful breastfeeding for mothers with LBW infants. *J Perinat Educ* 1992; 1:20-24.
12. **Corben V.** Misusing phenomenology in nursing research: identifying the issues. *Nurse Res* 1999; 6:52-66.
13. **Smith, P.** *Research Mindedness for Practice.* Churchill Livingstone; 1997.
14. **Colaizzi P.F. In: Valle R.S., King M.** *Existential Phenomenological Alternatives for Psychology.* Oxford University Press; 1978.
15. **Jones E., Jones P., Dimmock P., Spencer A.** Evaluating preterm breastfeeding training. *Pract Midwife* 2004;7:19-23.
16. **Jaeger M.C., Lawson, M., Filteau S.** The impact of prematurity and neonatal illness on the decision to breastfeed. *J Adv Nurs* 1997;25:729-37.
17. **McInnes R. J., Chambers J.** Infants admitted to neonatal units – interventions to improve breastfeeding outcomes: a systematic review 1990-2007. *Matern Child Nutr* 2008;4:235-63.

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