

Personal practice

Establishing breast feeding in hospital

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SUMMARY The experience and practice of the author is described in her appointment as a breast feeding advisor to the paediatric and obstetric units at University College Hospital with special responsibility for supervising infant feeding, especially breast feeding in the maternity unit. During 1980–5 there were 13 185 mothers whose babies fed. The feeding method of 12 842 mothers was recorded on discharge from the postnatal wards and 77% were breast feeding; only 3% of these mothers gave complement feeds of infant formula. The practices in the maternity wards to enable mothers to establish successful breast feeding and the methods of dealing with common problems of breast feeding are described.

Breast feeding has undoubted nutritional advantages. The composition of human milk cannot be bettered by manufactured artificial feeds. It also helps to protect the infant from infections by passing on immunoglobulins, the iron binding protein lactoferrin, living cells, other bacteriostatic and antiviral factors from the mother. It may have a role in reducing allergies in fully breast fed infants. Successful breast feeding is immensely satisfying to both mothers and babies, and the emotional benefits cannot be ignored. It is a long standing government health policy to encourage all healthy mothers to breast feed their babies.^{1–3}

The incidence of breast feeding in England and Wales was 51% in 1975,⁴ 67% in 1980,⁵ and 65% in 1985.³ (Incidence of breast feeding is defined as the proportion of babies put to the breast even if on one occasion only.) Half in 1975 and one third in 1980 and 1985, however, had stopped breast feeding by the age of 6 weeks. Many mothers who would like to breast feed either never get started properly or stop very quickly (12% in one week, and 37% by six weeks).⁵ Almost 50% of 'breast feeding' mothers had given bottles of infant formula by the time they left hospital and so did not establish full breast feeding. Breast feeding rates in the United Kingdom are higher in social classes I and II, first babies, and in mothers educated beyond the age of 18 years. Events around the time of birth—for example,

caesarean section and postnatal ward practices—also influence it.^{4 5}

University College Hospital unit

The University College Hospital unit is a teaching hospital obstetric unit (but not a midwifery training school) so that obstetric cases are referred to it for specialist care. It includes the North East Thames regional neonatal unit. Locally it serves an inner city area with complex social and housing problems. The population is multiethnic and a large proportion do not speak English. Until 1986 there were about 2000 deliveries a year, but after reorganisation there are now over 3000.

Between 1980–5 the method of feeding by 13 185 mothers was recorded on discharge from the postnatal wards at the hospital. A total of 343 (3%) mothers were excluded as their method of feeding was unknown. The breast feeding rates of 12 842 mothers whose method of feeding was known between 1980–5 is shown in the table.

During 1980–5 out of a total of 10 597 mothers, 1676 (16%) had a caesarean section; of these 1309 (78%) were breast feeding on discharge. (The 1981 figures were not available.) The usual length of stay in hospital after a vaginal delivery was seven days for primiparas, 48 hours to seven days for multiparas, and 10–14 days after caesarean section. In 1986

Table *Population of the University College Hospital maternity unit and breast feeding rates (1980–5)*

	<i>No (%) from each population group</i>	<i>No (%) who were breast feeding on discharge</i>
Total mothers	12 842 (100)	9956 (77)
Ethnic origin:		
White/European	10 524 (82)	8023 (76)
Afro-Caribbean	723 (6)	654 (90)
Indian/Pakistani/Bangladeshi	797 (6)	624 (78)
Chinese/Japanese	118 (1)	86 (73)
Other	680 (5)	569 (84)
Social class (n=10 566*):		
I, II, III non-manual	5450 (52)	4662 (86)
III manual, IV, V	3679 (35)	2467 (67)

*Social class figures for 1983 unavailable.

there was a change towards earlier discharge for all mothers. A total 1104 (9% of 12 842) babies had a birth weight of 2500 g or less.

Antenatal support for infant feeding

Only 33% of women have decided how to feed their baby by the time they become pregnant.⁴ At University College Hospital the mothers who attend classes on infant feeding tend to be those who have decided to breast feed. The antenatal class covers the practical aspects of how to breast feed, what problems may arise, who will help, advice on appropriate family diet, smoking, alcohol, contraception, and the basics of bottle feeding and weaning. All mothers are given the author's practical written notes 'How to feed your baby' (also translated into Bengali) at the 28 week antenatal visit or at the class and in the postnatal wards. Methods of encouraging breast feeding among those who do not attend classes need to be found and evaluated.³

Many women are not ready psychologically to absorb much information about the care of the baby until movements are felt or the baby is seen on an ultrasound scan. Once the baby is born feeding becomes the focus of concern! Postnatal care concerned with establishing breast feeding is of paramount importance to mothers and this time in the ward provides a marvellous opportunity for health education and emotional support.

Before discharge from the postnatal ward, the sister from children's outpatient department visits each mother to give her the telephone number of the children's outpatient clinic and any follow up appointment. The community midwife is informed by telephone of each mother and baby's discharge, the mother is given a discharge letter to the community midwife, an obstetric summary is sent to

her general practitioner, and the method of feeding recorded.

Sound breast feeding practice

Can all mothers breast feed? Most mothers can breast feed. At some periods 96% of mothers of social class I and 95% of African mothers were breast feeding on leaving the hospital. Antenatal examination of the breast is important to exclude any pathology. It also allows a woman to voice any anxieties she may have about her breasts and to discuss feeding her baby. Inverted nipples can cause difficulties in latching the baby to the breast but I do not advise Waller shells; they cause oedema of the areola, and there is no evidence that they aid protractility, which usually improves towards the end of pregnancy. It is very rare indeed for a skilled midwife to be unable to fix a baby soon after delivery, when the breast is still soft. Many women who have had breast surgery can still breast feed. Any mother who wishes to breast feed should be allowed to try.

Can all babies be breast fed? Any baby who can suck can be breast fed and milk can be expressed for those who cannot. Colostrum varies in amounts from a few drops to 45–50 ml or more and a mother will produce milk, however prematurely her baby is born. Poor sucking should always alert staff to the possibility of hypoglycaemia or hypothermia, prematurity, or hypotonia so that paediatric advice is sought. At University College Hospital many babies of 34–36 weeks' gestation are cared for by their mothers in the postnatal ward so that they can breast feed more easily. Twins can be breast fed. Offering one breast each ensures that both babies get their fair share of fore milk (containing more water and protein) and hind milk (containing more fat). If a

mother is short of milk, she breast feeds one baby at one feed and the other one next feed and alternates breast and bottle for each baby.

Mothers are more likely to produce enough milk if they breast feed on demand in the initial stages. A hungry baby has an active rooting reflex which is lost when the baby has fed enough. In practice, if a baby has fed on delivery, another feed may not be needed for up to six hours. Thereafter, most babies feed at intervals of two to four hours, but often increase the frequency to 10–12 feeds on the 3rd or 4th day for 24 hours. But as the milk comes in and the baby begins to regain his birth weight, the feeds space out to intervals of three to four hours. The frequent feeding period is a physiological response of the baby to the initial average 5% weight loss and ensures that the mother makes enough milk for her baby's individual needs. A mother and the staff need to know this, because complement infant formula feeds are often offered in the mistaken belief that there is insufficient milk.

How long should a baby suck? There is great variability in sucking times, and little benefit in timing sucking. Babies on the breast suck in bursts of sucking with light 'flutter' sucking followed by long swallowing sucks as the baby gets milk, and then pause. The light sucks seem to evoke the milk flow reflex, which is a conditioned response to the baby's cry for a feed or to warming of the nipple in the baby's mouth or in a warm bath.

To encourage breast feeding, babies should be beside the mother and should be breast fed by the mother at night as well as during the day. Breast fed babies should not be given artificial feeds in the night. Every milking or suckling stimulus causes a rise in plasma prolactin necessary for the initiation and maintenance of breast feeding.⁶

If a baby is hungry, frequent feeds will stimulate the breast to produce more milk, whereas unnecessary complement feeds will inhibit this. Night feeds will be demanded for six to 10 weeks depending on the size of the baby, and nothing is to be gained by offering drinks of water instead.

The first feeds

The first feeds are of vital importance for the initiation of lactation and should be started on delivery or within the first four hours of birth. Delays of 24 hours make a good supply of milk less likely.⁴ With help mothers who have undergone a caesarean section can breast feed immediately after delivery. I find that shortage of milk in later lactation or damage to the nipples can often be traced back to problems with the first feeds. Conversely, if a baby has fed well at this stage, it is a

virtual guarantee that the mother will produce enough milk, and that even if she has difficulties later with full breasts or an unwell baby, she will be able to continue breast feeding.

Latching babies to the breast

Learning to feed involves calling up a reflex response and initiating a change of behaviour evoked by a pattern of stimuli—for example, the shape of the nipple and areola. It is the feel of the nipple against the palate which makes the baby suck. 'Subsequent reinforcement leads to increased eagerness of the baby when put to the breast once it has had that experience. If the shape of the breast makes this difficult, the successful taking of the breast waits on skilled positioning so that the nipple goes further into the baby's mouth.'⁷

Damage to the nipples is prevented by latching the baby to the breast properly. The chin must drive into the breast to enable the nipple to reach the palate, so the baby needs to put its head back and up. 'If the baby's head becomes too flexed, the nipple touches the lower jaw and tongue and the nose gets too close to the breast. Helping the chin to thrust forward and the head to tilt back is hindered by pressure on the back of the head but helped by supporting the baby's back at shoulder level, with the baby facing the mother, chest to chest.'⁷ Failing to position the baby correctly damages the nipple, causing a stripe of bruising across it.

Colostrum provides all the nutrients and water that a term baby needs, and has large amounts of secretory IgA in it. The practice of saying 'that the milk doesn't come in until the fourth day' is to be deprecated. It reinforces a mother's feeling that there is nothing there, and leads to offering complements or supplements of water, dextrose water, or infant formula feeds, all of which are entirely unnecessary for a healthy infant.

Complement feeds of infant formula

The practice of giving infant formula feeds to breast fed babies at night should cease. In the 1980 survey of the office of Population, Censuses and Surveys (OPCS), 50% of breast fed babies received complement feeds.⁵ My experience is that they are very rarely needed by term babies. Complement feeds of infant formula interfere with breast feeding by: (a) reducing suckling, prolactin secretion, and the milk supply; (b) reducing suckling, oxytocin secretion, and the release of milk; (c) undermining a mother's confidence in her ability to produce milk; (d) possibly sensitising the infant to cows' milk protein; (e) altering the infant's gut flora: and (f) teaching a

baby bottle sucking rather than breast sucking technique.

Weaning from the breast

Many mothers enjoy breast feeding their babies into the second year, and provided that weaning foods are introduced from 4 to 6 months, they can continue to breast feed as long as they wish. Particular attention needs to be given to some Asian mothers, to ensure that appropriate foods are introduced at 4 to 6 months because it is common for breast feeding to continue until 2 years of age without supplements of weaning foods. Vitamins A, D, and C may be needed by both mothers and babies. Weaning from the breast should always be a gradual process, a feed at a time to avoid leaving the breast overfull, when mastitis is more likely to develop. A bottle or cup is given instead.

Common breast feeding difficulties and their management

(1) DAMAGE TO NIPPLES

Every doctor, midwife, and health visitor looking after mothers and babies should be able to deal with the common problems of breast feeding. Bruising or blistering of the nipple is always a consequence of misfit between the baby and areola, sometimes due to inexperienced positioning of the baby on the breast. Healing occurs by resting the nipple, expressing milk by electric pump, and the correct positioning of the baby. If milk is not expressed or the baby is given infant formula feeds instead, the breasts receive insufficient stimulation and the milk supply is jeopardised. A melolin dressing can be used to prevent the nipple becoming adherent to a breast pad. A fissure of the nipple occurring after the puerperium is often caused by thrush infection of the baby's mouth and the mother's nipple. It is best treated with miconazole gel or nystatin application to both until four days after it appears to be clear.

(2) INSUFFICIENT MILK

The hungry baby is difficult to ignore. If a baby never settles after feeds, the baby is always crying, the feeds take a long time, with one feed running into the next, that means that the baby is hungry and needs more milk. Weigh the baby. Babies should gain 150 to 200 g per week for the first 3 months. A feed needs to be watched to see if the baby is properly on the breast and to assess the feeding situation. If 24 to 48 hours of frequent breast feeds do not increase the milk supply, the baby will need complement feeds of infant formula milk by bottle.

A complement feed is one given after the breast and the baby should take as much properly mixed formula as it wants. Usually 10 minutes a side on the breast followed by the bottle is a satisfactory compromise for the mother who wishes to continue breast feeding. Any one of the modified infant formulas may be used as a complement feed in this situation and soy milk should only be used if there is proved milk allergy in the parents or siblings. Many babies exhibiting catch up growth—for example, 'small for gestational age babies'—are often particularly hungry, feed frequently, and take large feeds. If a mother (and her helper) realise this, she can cope with the situation and continue breast feeding.

(3) ENGORGEMENT OF THE BREAST

This is unusual when babies are breast fed on demand. There is flushing and tenderness of both breasts, and though there may be fever, in contrast to acute mastitis the axillary lymph glands will not be swollen. Engorgement seldom lasts more than a few hours and is relieved by the baby feeding. Expressing some milk (preferably with an electric pump) relieves the severe pain but care should be taken not to overdo it. The more milk that is taken off, the more the breast produces.

(4) ACUTE MASTITIS

Acute mastitis occurs more commonly if the nipple is damaged. After the puerperium it may be associated with leaving the breast overfull during weaning. Symptoms of influenza, pain in *one* breast with flushing and induration, and swollen axillary glands are diagnostic. A sample of expressed milk should be sent for culture and sensitivity. The most common organism is *Staphylococcus aureus*, often resistant to phenoxymethylpenicillin. Therefore flucloxacillin or erythromycin are suitable antibiotics and will not harm the baby. Treatment should be commenced immediately. *It is important that the baby should continue to feed from the affected breast first: to empty it.* Otherwise the infection may spread and an abscess form. Massage of the breast is contraindicated for fear of spreading the infection. If the milk supply is reduced complement feeds may be needed temporarily. But the supply usually increases again as the infection resolves. Recurrent mastitis is usually a result of inadequate treatment, with either the wrong antibiotic or too low a dose for too short a time. Treatment should continue for a week. The baby may be a staphylococcus carrier and need treatment.

(5) BREAST ABSCESS

A breast abscess may result from neglect or in-

appropriate treatment of acute mastitis in lactation. The signs of acute mastitis are present, except that there is fluctuation of the indurated area. Surgical incision and suppression of lactation with bromocryptine is indicated, though the baby may feed from the unaffected side to relieve discomfort until the milk supply is reduced.

Importance of informed and consistent advice

Education of medical and midwifery staff is necessary to avoid the mistakes and misconceptions which so often result in conflicting advice. A postnatal maternity unit is absolutely dependent upon having sufficient experienced midwifery staff. Shortages lead to an immediate fall in breast feeding incidence, and a rise in breast feeding problems.

At University College Hospital a breast feeding clinic is held in the children's outpatient department so that babies can be weighed and paediatric advice sought. Appointments on a phone in basis are given on the same day if possible.

Breast feeding problems are urgent. Mothers refer themselves or are referred by the postnatal or paediatric staff, community midwife, health visitor, or general practitioner. Breast feeding consultations are time consuming because of the need to watch a feed through and this may be therapeutic in itself. The father of the baby is encouraged to be present. Parental relationships are often under stress and

need support. The father can help the mother by feeding the baby in the night with expressed milk if the mother needs extra sleep. A mother may need her confidence built up, especially if she has had conflicting advice. At the same time a short note to the general practitioner or health visitor can help avoid this.

The pleasure of breast feeding her baby successfully is, for many women, one of life's most rewarding experiences. To enable women to overcome problems in doing so is one of mine.

References

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