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GUEST EDITORIAL: BREAST FEEDING AND HOSPITAL PRACTICES

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INTRODUCTION

Human milk is best suited to the human infant and there is no substitute which is equal to it. Nutritionally it provides optimal nourishment for growth including brain growth and causes minimal stress upon the immature systems of the young infant. Immunologically, it protects the infant against infections and allergy during the period of physiologically transient immune deficiency state. Early, frequent and prolonged breast feeding fosters maternal-infant bonding which is essential for the optimal development of the infant (Sosa, 1978). Although some present day infant formulas overcome some of the nutritional difficulties associated with cow's milk feeding, such as higher content of protein and phosphorus and lower content of lactose and poly-unsaturated fatty acids, the cost of such formulas is too high for the majority of people livng in Malaysia. Besides, manipulation of infant formulas may lead to new problems, such as Vitamin E deficiency anaemia in preterm infants fed on high polyunsaturated infant formulas (William *et al.,* 1975). Therefore it is essential that all newborn infants, as far as possible, should be breast-fed. Because of the importance of breast feeding, the medical profession is concerned with the decline in the incidence and duration of breast feeding, both in the rural and urban areas of Malaysia (McArthur, 1962, Dugdale, 1970, Teoh, 1975, Balakrishnan, 1977 and Chen, 1978). A few concerted efforts to reverse this trend were carried out recently, for example the Breast-Feeding Campaign of 1976 and the Code of Ethnics for Infant Formula Products in Malaysia, June 1979. However there is very little change in most hospital practices in Malaysia to actively support breast feeding.

STUDIES ON PROGRAMMES DESIGNED TO IMPROVE BREAST-FEEDING

Studies have shown that minor modification, in the functions and regimen of hospitals requiring little or no additional expense, has resulted in an increase in the incidence and or duration of breast-feeding (Slope *et al.,* 1977, De Chateau, 1976, Jepson *et al.,* 1976, Gueri *et al.,* 1977 and Salariya *et al.,* 1978). For example, Salariya *et al.,* (1978) have shown that mothers, who breast-fed their infants within 10 minutes after delivery and at 2 hourly intervals, had a longer duration of breast feeding compared with those who breast-fed 4-6 hours after delivery and at 4 hourly intervals. Of the 2 factors, the early initiation of breast-feeding had a greater effect on the duration of breast-feeding. However 2 hourly feeding induced lactation at least 24 hours earlier than did 4 hourly feeding. Table I lists some of the studies. Studies have also shown that a number of traditional hospital practices have adverse effects on breast feeding. For example, Gueri *et al.,* (1977) demonstrated the adverse effect of prelacteal bottle feeding on the duration of breast-feeding. Chen (1978) in a study of babies born in hospital in Kuala Lumpur and Petaling Jaya, found that most of the babies were put to the breast more than 24 hours after delivery and that babies were given bottle feeding before the initiation of breast-feeding. Consequently, 70% of these mothers breast-fed partially resulting in lactation failure in a short time (51.6% stopped breast-feeding by one month). Table II lists some of the hospital practices that interfere with the prolactin and let-down reflexes which are essential for successful lactation.

SUGGESTION FOR MODIFICATION IN HOSPITAL PRACTICES TO PROMOTE BREAST-FEEDING

To encourage parents to breast-feed and ensure successful lactation, hospital practices must plan their activities with breast feeding in mind. They should adopt minimal bottle feeding policy and practical health education concerning biological breast-feeding (as opposed to token breast-feeding). All categories of staff, dealing with mothers and children, should encourage, motivate and support mothers to breast-feed. They should avoid promotion of unwanted commercial infant foods such as distribution of samples, brochures and calenders and display of posters.

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Table I

Results from selected hospital or practice-based programmes designed to improve breast-feeding (from Jelliffee & Jelliffee, 1978)

Author	Method	Results
Waller (1946)	Antenatal: Woolwich nipple shield, expression colostrum in late pregnancy Puerperal: avoid overdistension	Percentage breast-feeding at 6 months 42% (controls): 83% (regimen)
McBryde (1951)	Rooming-in	Percentage breast-feeding on discharge 35% (controls): 58.5% (rooming-in)
Blaikely *et al.* (1953)	Antenatal: Woolwich nipple shield, expression Puerperal: avoid overdistension	Percentage breast-feeding at 6 months 26% (controls): 51% (regimen)
Rawlins (1961)	Prenatal: reading material, demonstration of breast-feeding prenatally by lactating mother	Percentage breast-feeding at 5 months (1958) (1961) 17% : 57% (Multips.) 13% : 44% (Primips.)
Sloper *et al.* (1975)	Minimal education of midwifery staff	Percentage breast-feeding on discharge 27% (before) : 40% (after.)
De Chateau (1976)	No weighing or complementary feeds. Information to mother and father. Naked skin-skin contact and immediate suckling.	Length of breast-feeding 60 days (before change) 170 days (after change)

During antenatal clinic sessions necessary information regarding breast-feeding, maternal nutrition and labour should be given for both wife and husband. It is especially useful to have practical demonstration by those who are successfully breast-feeding their babies.

In puerperal care, practices, which may interfere with prolactin or let down reflexes should be avoided (see Table II). For example, avoid maternal anxiety by having a relaxed atmosphere and allowing liberal visiting by relatives. On the other hand, those practices which will promote lactation should be actively encouraged. For example, stimulation of lactation by putting baby to the breast as soon as possible after delivery. When baby and mother are fit, the first breast-feeding should be within 20-30 minutes after delivery. There are distinct advantages with early breast-feeding. Firstly, suckling increases further secretion of oxytocin, which helps the uterus to contract and reduces postpartum bleeding. Secondary, the baby's sucking and rooting reflexes are strongest shortly (20-30 minutes) after birth and hence early suckling, which stimulates prolactin reflex and milk production, provides an excellent start to breast-feeding. Besides, early contact between the infant and mother fosters maternal-infant bonding which is critical for the infant's survival and well-being, as he is entirely dependent on his mother as a source of nourishment, emotional support and protection. Finally colostrum is rich in antibodies and anti-infective factors which will protect the infant against infection.

In the postnatal wards, avoid unnecessary separation of mother and newborn and "rooming in" is the best arrangement. Mothers should be encouraged to breast-fed frequently. Baby should be allowed to suckle on both breasts as often and for as long as he desires, usually every 2 to 3 hourly or more often.

Table II

Puerperal practices interfering with lactation via the prolactin and let-down reflexes (from Jelliffe & Jelliffe, 1978)

Practice	Effect on lactation (via maternal reflexes)
Delaying first breast-feed	
Sedated newborn (excess maternal anaesthesia)	
Supplying prelacteal and complementary feeds	Limitation of suckling and prolactin secretion
Regular, limited feeds (4 hours) (with no or limited night feeds)	
Mother and infant separated ('nurseries')	
Uninformed, confused mother	
Tired mother (no food or drink in labour)	
Routine episiotomy (pain)	
Weighing before and after (test feeds)	Anxiety and interference with let-down reflex
Restricting visitors	
Unsympathetic or ambivalent health staff ('anti-doula effect')	
Lack of privacy	

Early and frequent suckling encourages early milk production, sometimes within 36 hours, and prevents breast engorgement. There should be no prelacteal, complimentary or supplementary bottle feeding and hence no routine bottle rounds in the post-natal wards. Water may be necessary and this should preferably be given by spoons because the sucking mechanism of bottle feeding and breast-feeding are different. For successful lactation it is important that constant encouragement and help be given to the mothers, preferably by staff, who have successfully breast-fed previously.

Special care nurseries for sick or premature babies

Accommodation should be available nearby so that mothers can establish contact with babies and to feed babies with fresh expressed breast-milk with earliest return to direct breast-feeding.

Children's hospitals

These hospitals should be a centre for health education, not only on breast-feeding but also on various aspects of child care. Accommodation should be available for mothers to continue breast-feeding. "Hospitalization induced lactation failure" should be prevented.

CONCLUSION

Mothers can be motivated to breast-feed and maintain successful lactation through health education and modification in the activities of hospital practices dealing with mothers and children. Such hospital practices should plan their activities with breast-feeding in mind.

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