

BREAST FEEDING; FACTORS INVOLVED IN AVOIDANCE

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ABSTRACTS...Objective: To study the causative factors responsible for avoidance of Breast Feeding in post-partum women attending the post-natal OPD in MH Rawalpindi. **Design:** Comparative cross sectional study. **Setting:** Dept of Gynae and Obstetrics, Military Hospital, Rawalpindi. Tertiary care centre from all the Pakistan dealing with other ranks of Pak Army. **Duration:** Nine months (From 01.01.2007 to 1.10.2007). **Materials and Methods:** Study was done on 1000 patients at post-natal Gynae OPD. Patients were divided into two groups of 500 each. Those patients who were exclusively breast feeding their babies were included in group-II while group-I included those patients who were not breast feeding their babies at all. Patients demographic data was entered on questionnaire and factors involved were interpreted. The most important causative factor responsible for avoidance of breast feeding in group-I were noted down. The mothers in group-II were enquired about that problem. Data was analyzed by using computer software programme SPSS version 11. Chi square test was used to see the significance of difference between group-I and group-II and results were considered significant if P value is less than 0.05. **Results:** The study showed that as compared to group-II causative factors involved in avoidance of breast feeding in group-I were pain at operated site 148, working women 38, Sick baby 26, Cracked nipples and mastitis 59, Breast abscess 4, Social Myths 58, Multiple Births 2, Inverted Nipples 5 and failure of proper counseling 160. **Conclusions:** Most of the factors responsible for avoidance of breast feeding are preventable and treatable. General population should be educated regarding the benefits of breast feeding in the mother and baby. Thus reducing mortality rate in woman and infants.

Key words: Breast feeding, Lactation.

INTRODUCTION

Allah, The Almighty in His unlimited wisdom has created a unique and un-replicable relationship between mother and child. This relationship is in form of a bond which starts developing from inception and continues throughout the life with an important stage being the breast-feeding stage. Nature has made human milk in a form that provides developmental, nutritional, and immunologic benefits to the infant. These benefits cannot be duplicated by formula feeding. Scientific evidence continues to mount regarding the value of breastfeeding for both women and their infants. Breastfeeding is the normal method of infant feeding, but many people choose to feed their newborn babies on infant formula. While babies grow and develop with either method of feeding, there is evidence of disadvantages for infants who are not breastfed¹⁻³, and for their mothers⁴⁻⁶.

During pregnancy hormonal changes in the females prepare the breast to produce milk. After parturition, when the baby suckles on the mother's breast, the nerves in the areola stimulate the pituitary gland to release the hormones prolactin and oxytocin. Prolactin

stimulates the lobules, the milk-producing cells, to secrete milk. Oxytocin causes the smooth muscles surrounding the lobules to squeeze the milk into the breast's ductal system, a response known as let-down or milk ejection. The ductal system carries the milk to the nipple where the baby suckles.

The Mother's milk has a special advantage of changing its composition in early post-natal period to cater for the needs of the neonate. It enhances feeling of attachment between mother and child. For the first three to four days after the baby's birth, the milk released from the mother's breast is known as colostrum, which is a thick, yellowish fluid rich in protein, antibodies, and other infection-fighting agents that is more concentrated than mature breast milk. It is also lower in fats and carbohydrate contents. Colostrum, gives a high level of immune protection, due to the presence of immunoglobulin A (IgA). The mother of a premature infant has milk higher in protein and salt concentrations that meet her baby's special needs. During the first post-natal week constituency of the fluid changes, whereby protein and mineral concentrations decrease and water, fat, and

lactose enhance. Mother's milk also contains numerous substances with antimicrobial properties, which act as a source of protection against various infections. Studies indicate that the breast fed child has fewer illnesses⁷.

Oxytocin, a hormone of lactation, is released during the milk let down in the immediate postpartum period. It increases uterine contractions which in turn decrease postpartum blood loss in the mother. Oxytocin and prolactin, both hormones of lactation, contribute to feelings of relaxation and attachment⁸. Breast feeding also delays postpartum ovulation, which helps in contraception and birth spacing. It is also suggested that breastfeeding women are at a lesser risk of developing ovarian and premenopausal breast carcinomas. Some studies suggest a lower incidence of postmenopausal osteoporosis and hip fracture along with reduction in the incidence of pregnancy-induced long-term obesity. Some studies have indicated that breastfeeding has economic, social and environmental benefits⁹. These benefits have been recognised by the World Health Organization (WHO) and UNICEF who jointly launched a new international initiative aimed at protecting, promoting and supporting breast feeding in 1991¹⁰.

MATERIALS AND METHODS

A randomly selected group of one thousand mothers reporting in Gynae OPD MH Rawalpindi, was interviewed in this study. All post-natal mothers regardless of their age, who delivered vaginally were included in the study. Only primiparas were included. Multiparas, patients who had C-sections, women suffering from any medical disorders were excluded. Patients with history of pregnancy induced hypertension, anaemia or HIV were excluded. Mothers with infants having galactosemia were also excluded. Mother with active untreated tuberculosis were in the exclusion criteria. The patients were divided into two groups. Group I included the patients who were not breast-feeding their babies at all. They were given a questionere to find out the main cause which inhibited them from breast-feeding. The causes that were found in group-I included sick mother (pain at operation site), social myth, sick baby, cracked nipples, breast abscess, multiple births, inverted nipples, mastitis, working mother. Group-II in the

study was taken to include mothers who exclusively breast-fed their children. The causes found in group-I were given in form of a questionnaire to mothers in group-II to assess the frequency of the above mentioned problems in Group-II.

RESULTS

It was found that in most of the patients of group-II there was no significant pain at the operation site and patient had been given adequate analgesics after discharge from the hospital. Nursing staff and elders in the family had taught the correct feeding technique to avoid cracked nipples and breast abscess. Although in some mothers some myths like "bad milk" or inadequate milk supply were there but proper counseling by the nursing staff had allayed such fears. Working mothers did not have prolonged working hours and could take leave easily. Although some of the babies stayed in nursery but the provision of giving expressed breast milk to the neonates did not hamper the feeding. Some of the patients in group-II had twin deliveries but education and support by the staff and family members allowed them to take adequate diet and feeding both the twins. Patients with inverted nipples managed to breast-feed the babies with the use of nipple shields.

Chi-Square Tests			
	Value	df	Asymp.Sig (2-sided)
Pearson Chi-Square	561.551(a)	9	.000
N of Valid Cases	1000		

Chi-square test was used, because the P-value is less than 0.05, we conclude that the significant difference between group-I and group-II

DISCUSSION

To teach a nursing mother the correct technique of breast feeding is an important part of post-natal care. Latch-on is one of the most important steps to successful breast feeding. The newborn should take a large amount of breast into his or her mouth, generally an inch or more of the areola with the nipple pointing toward the soft palate. The mother may hold her breast to facilitate this position, using a hand position comfortable for her. The nipple and

Case processing summary						
Cases						
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Causes * group	1000	100.0%	0	.0%	1000	100.0%

Causes * group Crosstabulation						
				Group 1	Group 2	Total
Causes	Failure of counseling	Count		160	-	160
		% within group		32.0%	-	16.0%
	Pain	Count		148	88	236
		% within group		29.6%	17.6%	23.6%
	Working mothers	Count		38	26	64
		% within group		7.6%	5.2%	6.4%
	Sick baby	Count		26	36	62
		% within group		5.2%	7.2%	6.2%
	Cracked nipples	Count		59	5	64
		% within group		11.8%	1.0%	6.4%
	Breast abscess	Count		4	-	4
		% within group		0.8%	-	0.4%
	Social myths	Count		58	20	78
		% within group		11.6%	4.0%	7.8%
	Multiple births	Count		2	4	6
		% within group		0.4%	0.8%	0.6%
	Inverted nipples	Count		5	8	13
		% within group		1.0%	1.6%	1.3%
	No cause	Count		-	313	313
		% within group		-	62.6%	31.3%
Total		Count		500	500	1000
		% within group		100.0%	100.0%	100.0%

the areola elongate into a teat, and the baby's tongue should be slightly cupped beneath it. The mother should adopt a comfortable position and draw the baby to the breast. The newborn should be held close, facing the mother, with his chin and the tip of his nose touching but not completely occluded by the breast. Usually, it is wise to alternate the breast used to initiate the feeding and to equalize the time spent at each breast over the day. The mother can break the suction by gently inserting her finger in the newborn's mouth before taking him off the breast. On average, it is estimated that women will need approximately 500 kcal per day more than non-pregnant and non-lactating¹¹. So an adequate diet in a nursing mother should be ensured.

Regular breast feeding generally ensures adequate milk supply. As the baby grows and requires more milk, the woman's supply, which is demand driven, increases to accommodate the baby's needs. During the separation, regular pumping of the breasts should be sufficient to maintain the milk supply. Having sore nipples is a common problem for the breast feeding woman. It usually results from poor positioning or latch-on. The first-line treatment should be counseling about these basic techniques. Purified lanolin cream and breast shells (to protect the nipples from friction between feedings) may be initiated to facilitate healing.

Mastitis occurs in 1-2% of breast feeding women. Mastitis is manifested by a sore, reddened area on one breast and often is accompanied by chills, fever, and malaise. A segment of the breast becomes hard and erythematous, the fever can be as high as 40°C, and the mother feels ill. The condition usually can be treated successfully with narrow-spectrum antibiotic therapy, hydration, bed-rest, and acetaminophen. The mother should continue to breast feed or express the milk from both breasts because it is important to empty the affected breast. In some cases, the woman may be advised to discard the milk until she has been treated for 24 hours. If mastitis is not treated aggressively, an abscess may develop. Treatment is successful in curing mastitis if started early; the most common cause of recurrent mastitis is inadequate treatment. Delayed administration of antibiotics is associated with an increased incidence of breast abscess. Abscess is diagnosed by a palpable

mass or failure to defervesce within 48-72 hours of antibiotic therapy. Generally, abscesses are treated with incision and drainage. Breast milk should be discarded for the first 24 hours after surgery, with breast feeding resuming thereafter if there is no drainage into the breast milk¹². World Health Organization recommends that all health care staff should be trained in skills necessary to implement breast-feeding policy¹³. Breast feeding and exercise reduce maternal stress and are protective of maternal mood¹⁴.

The importance of babies receiving breast milk is well documented in the literature, and supported by the NHMRC¹⁵. The NSW Health Policy Directive PD2006_012 directs that babies must only be fed breast milk from their biological mother. Mothers may need to express their breast milk for a variety of reasons, such as if their infant is sick or premature, if the milk supply needs to be increased or if mother and baby are temporarily separated¹⁶.

Maternal milk is nutritious food for infants to feed, hygienic, develops emotional bonding and prevents allergic disorders. Breastfeeding protects against several infections including diarrhea and respiratory infections, and saves lives. An exclusively breastfed infant is about 14 times less likely to die from diarrhea, 3 to 4 times less likely to die from respiratory disease and 2 to 3 times less likely to die from other infections than a non breastfed infant. Breast milk is much more economical than artificial milk or powdered milk food - the average cost of feeding a 6 month old infant for one month on infant formula may even be equal to the average monthly per capita income. "Exclusive" breastfeeding exerts strong contraceptive effect in the first 6 months post partum.

Maternal benefits include earlier termination of post partum bleeding and protective effect against breast and ovarian cancer. The expectant mothers, particularly primiparas and those experiencing difficulties with lactation management earlier should be motivated and prepared to exclusively breastfeed. This should be achieved by educating, through a personal approach, about the benefits and management of breastfeeding. In

the last trimester of pregnancy, breast and nipples should be examined and relevant advice given. During this period and later, the normal newborn should not be given any other fluid or food like honey, "ghutti", animal or powdered milk, tea, water, glucose water etc. since these are potentially harmful. It is essential that the baby gets the first breast-milk called colostrum which is thicker and yellower than later milk and comes only in small amounts in the first few days. The mother, especially with the first birth, may need help in the proper positioning for breastfeeding. Breast-milk alone is adequate to meet the hydration requirements even under extremely hot and dry summer conditions of the country¹⁷. Exclusively breast fed infants of non-anemic and anemic mothers did not develop iron deficiency or iron deficiency anemia by six months of age¹⁸.

The majority of mothers reported that they planned to breastfeed their infants until the birth of their next child. Following immigration, breastfeeding initiation rates appeared to fall off sharply. This pattern appears to reflect the Canadian experience as well (key informant interviews). Following immigration, the presence of a family member to assist the mother in the postpartum period is positively correlated with breastfeeding initiation in the postpartum period¹⁹. Existing antenatal counseling on breastfeeding is inadequate in the population studied and needs to be strengthened. Informing all pregnant women about the benefits and management of breastfeeding should be a priority during antenatal visits²⁰.

Mothers who lived in the city were least likely to be 'exclusive breastfeeding' at discharge. At six months the city infants also had lower rates of 'any breastfeeding' and 'exclusive breast-feeding'. Generally the mothers from the city had higher levels of education, a higher proportion of office employment and higher family income compared to the mothers in the suburban and rural areas²¹.

Evidence shows that breast-milk protects against infant diarrhea and respiratory infections, has positive effects on the motor and cognitive development of preschool and school aged children, and protects against chronic

diseases such as diabetes mellitus, obesity and high blood pressure in the adolescent and adult years.

CONCLUSIONS

Almost all the factors responsible for the avoidance of breast feeding in the studied population were preventable and treatable. Some of the most common flawed beliefs that negatively affect the period of exclusive breast feeding are:

- That a woman does not have enough milk to exclusively breastfeed.
- That other liquids and foods need to be given in addition to breast milk.
- That infants living in hot and humid climates need to be given water.

Other factors that negatively influence exclusive and partial breast feeding include: maternity clinics/hospitals that do not follow the Ten Steps of the "Baby Friendly Hospital Initiative". Baby food manufacturers who do not respect the Code legislation and promote infant formula, drinks or foods during the first 6 months of life. Employers who do not give women maternity leave or breastfeeding breaks to allow women to continue breastfeeding while at work.

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