ORIGINAL ARTICLE

Factors Associated with Cessation of Breast Feeding

Shaheena Hanif,[1] Ghulam Murtaza[1] and Muhammad Hanif Memon[2]

ABSTRACT

Objective: To determine factors associated with cessation of breast feeding in children.
Methodology: This was a cross sectional study carried out at Lyari general hospital from 1st January to 30th June 2009. Children up to two years of age were included. Information entered in a pre-designed proforma.
Results: Total of 543 children included. Maternal factors were insufficient milk secretion 57% and insufficient rest during first six weeks of post partum 43%. Among factors in children, formula feeding 41% and disruption during feeding 36% were common. No enough milk during first few days after birth 64% and baby remains hungry after breast feeding for enough time 62% were common myths.
Conclusion: The major maternal and child factors and myths responsible for termination of breast feeding were insufficient milk secretion, breast problems, maternal stress, bottle feeding and initial breast milk is harmful to the babies. These misconception must be addressed during antenatal visit.

Key words: Cessation breast feeding, maternal factor, infant factor, myths.

INTRODUCTION

Human breast milk is the best source of nourishment for human infant[1] and it helps in preventing disease, promoting health and reducing feeding cost.[2] It also prevents allergic and infectious diseases by giving necessary immunological protection.[3-4] In both developing and developed countries artificial feeding is associated with more deaths from diarrhea in infancy.[5] WHO recommends exclusive breast feeding for the first six months of life and then breast feeding up to two years or more. Exclusive breast feeding for first six months of life provides protection against diarrhea and respiratory tract infection which are common in babies who fed supplementary milk.[6] Although a majority of mothers start breast feeding at birth, a large percentage discontinue during early months.[7-9] In developing countries like Pakistan and India exclusive breast feeding is only 37%, and 46% respectively where as in developed countries like China it is 51%.[10] Several factors are associated with cessation of breast feeding like twins, low birth weight baby, prematurity, interruption during feeding, long separation from mother, difficulty in latching on to the breast, poor stamina of mother, severe maternal psychological stress and insufficient rest of mother during first six weeks postpartum.[11-14] There are a lot of practices in our society which interfere with early initiation of breast feeding like various pre-lacteal feeds, mother's milk is not enough during first few days after birth, mother should stop breast feeding if she get pregnant and breast feeding is not possible after cesarean delivery.[15] The rationale of this study is to find out the factors in our society which result in cessation of breast feeding.

METHODOLOGY

This was a cross sectional study carried out at OPD of pediatric department of Lyari general hospital, Dow Medical College, Dow University of health sciences from January 2009 to June 2009. Majority of patients came in OPD belonged to Lyari town.

All children up to two years who attended the OPD for vaccination and minor ailment were included after taking verbal consent. Children who received breast feed, formula feed or both breast and formula, were included in the study. Children who needed hospitalization, congenital anomalies, neuromuscular disorders, children of non co-operative mothers, children accompanying by other than mother and adopted child were not included in study. Pre-designed proforma which included age of child, age of mother, parity, mode of delivery, educational status of mother and maternal and child factors presumably interfere with breast feeding like insufficient milk secretion, breast engorgement, poor stamina, insufficient rest during first six weeks postpartum, working women with early

1 Department of Paediatrics, Dow Medical College and Dow University of Health Sciences, Karachi, Pakistan.

2 Department of Paediatrics, Hamdard College of Medicine and Dentistry Karachi, Pakistan.

Correspondence: Dr. Shaheena Hanif, Department of Paediatrics, Dow Medical College and Dow University of Health Sciences, Karachi, Pakistan.

Email: mhmemon_9@hotmail.com

return to work, cesarean section, formula feeding, twins, difficulty in latching on the breast, premature and low birth weight babies, disruption during feeding, hospitalization due to any reason and nose block. The myths prevalent in society which interfere with breast feeding like ghutti, gripe water, honey and butter should be given at birth, milk is not enough during first few days after birth, baby remains hungry even after giving breast milk for enough time, breast feeding need extra water in hot weather, mother should stop breast feeding if she get pregnant and breast feeding is not possible after cesarean section were also endorsed. The proforma was filled by a medical officer who has pediatric experience of more than one year. Collected data was analyzed by using SPSS version 15 and frequency and percentages were calculated.

RESULTS

Out of 543 children, 262 (48%) were up to six months of age, 178 (33%) were 7 to 12 months and 103 (19%) were 13 to 24 months of age. Out of 543 mothers 216 (40%) were less than 25 years of age, 308 (57%) were between 26 to 35 years of age and 19 (3%) mothers were between 36 to 45 years old. Primigravida mothers were 175 (32%) and multigravida 368 (68%). Male children were 263 (48%) and female 280 (52%). Working mothers were only 72 (13%) where as all others were house wives. Regarding maternal education only 22% were educated. Exclusively breast fed children were 219 (40%) and rest having bottle feeding along with breast feeding as mentioned in Table 1.

According to analysis of data the major maternal factors for termination of breast feeding were insufficient milk secretion 310 (57%), insufficient rest during first six weeks of post-partum 233 (43%), poor stamina 135 (25%), breast engorgement 138 (25%), working mothers 72 (13%) and cesarean section 101 (19%) (Table 2). The child factors which cause termination of breast feeding were formula feed 225 (41%), disruption or interruption during breast feeding 194 (36%), difficulty in latching on to the breast 145 (27%), premature and low birth weight 133 (24.5%) and twin pregnancy 32 (6%) (Table 3). Various myths of mothers which interfere and ultimately result in cessation of breast feeding were ghutti, gripe water, honey or butter should be given at birth 355 (65%), milk is not enough during first few days after birth 346 (64%), baby remains hungry even after giving breast milk for enough time 338 (62%), breast fed child need extra water in hot weather 295 (54%), mother should stop breast feeding if she becomes pregnant 340 (63%), breast feeding is not possible after cesarean section 220 (41%) and modern formula milk is as good as breast milk 201 (37%) (Table 4).

Table 1: Epidemiological data of mothers and children

S/No	Variables	No of Cases (N=543)	% of cases
1	**Age of children**		
	Upto 6 months	262	48
	7 to 12 months	178	33
	13 to 24 months	103	19
2	**Sex**		
	Male	263	48
	Female	280	52
3	**Parity**		
	Primigravida	175	32
	Multigravida	368	68
4	**Age of mother**		
	Upto 25 years	216	40
	26 to 35 years	308	57
	36 to 45 years	19	3
5	**Feeding pattern**		
	Exclusive breast feeding	219	40
	Exclusive bottle feeding	95	18
	Breast + bottle feeding	229	42
6	**Occupational pattern**		
	House wife	471	87
	Working women	72	13
7	**Educational status of mother**		
	Illiterate	426	78
	Literate	117	22

Table 2: Maternal perceptions affecting breast feeding. (N=543)

S/No	Maternal factors	No	%
1	Insufficient milk secretion	310	57
2	Insufficient rest during 1st six weeks of postpartum	233	43
3	Breast engorgement	138	25
4	Poor stamina	135	25
5	Breast pain	126	23
6	Severe maternal stress	107	20
7	Cesarean section	101	19
8	Mother on medicine	95	18
9	Hypoplastic breast	75	14
10	Nipple pain	73	13
11	Working women with early return to work	72	13
12	Overactive lait-down reflex	43	8
13	Hyperlactation syndrome	35	6.4
14	Maternal diabetes	29	5.3
15	Mastitis	25	4.6
16	Candidiasis	9	1.65
17	Others	13	2.4

Table 3: Mothers perception about child factors:(N=543)

S/No	Infant factors	No	%
1	Formula feed	225	41
2	Disruption during feeding	194	36
3	Difficulty in latching on to breast	145	27
4	Incoordination of sucking/ swallowing reflex	144	26.5
5	Hospitalization	139	26
6	Premature & low birth weight	133	24.5
7	Poor sucking reflex	122	22.4
8	Oral thrush	119	22
9	Long separation from mother	57	10.5
10	Pacifier	56	10
11	Rhinorrhea	56	10
12	Nose block	55	10
13	Respiratory distress syndrome and other illness	48	9
14	Twin pregnancy	32	6

Table 4: Myths about breast feeding in mothers (N=543)

S/No	Myths about breast feeding	No	%
1	Ghutti, gripe water, honey or butter should be given at birth	355	65
2	Milk is not enough during 1st few days of life	346	64
3	Mother should stop breast feeding if get pregnant	340	63
4	Baby remains hungry even after given breast milk for enough time	338	62
5	If mother has infection she should stop breast feeding	310	57
6	Many women do not produce enough milk	294	54
7	Breast fed child need extra water during hot weather	294	54
8	Diet of mother affects nursing infant	283	52
9	Breast feeding is not possible after cesarean section	220	41
10	Modern formula milk are as good as breast milk	201	37
11	After 12 months breast milk looses its nutritional value	188	35
12	If baby has diarrhea/vomiting, mother should stop breast feeding	188	35
13	Breast feeding infants need vitamins & iron in 1st six months	163	30
14	Mother can't take any medication during breast feeding	156	29
15	Breast feeding is pain full	153	28
16	Mother should wash her nipple each time before breast feeding	148	27

DISCUSSION

Exclusive breast feeding is optimal for infant health.[15] Breast fed children are known to grow optimally, perform better on developmental assessment task and have lesser allergies and infections as compared to formula fed children.[17-18] Despite its known advantages breast feeding rates are sub-optimal world over. The focus of a large number of workers has been on factors that lead to lower breastfeeding rates. There is enough evidence to show that lack of information for mothers; poor knowledge amongst health workers; under qualified health workers providing advice and the use of didactic lectures adversely affects breastfeeding.[19-21] In Pakistan unfortunately exclusive breast feeding rates are much lower than what it should ideally be.[22]

Current study showed 40% exclusive breast feeding, 18% bottle feed and 42% mixed feeding while Shiva et al[23] showed 68% exclusive breast feeding, 17% bottle feed and 14% mixed feeding.

Among maternal factors insufficient milk secretion was most common 57% while it was 71% in study done in Karachi.[24] One of the study conducted in Australia found that for termination of breast feeding was maternal perception of insufficient milk, the real number of women who experience this is extremely low.[25]

Insufficient rest in the first six weeks postpartum was the second most common reason for termination of breast feeding observed in 43% cases as mother tired due to household work. If time spent on house hold work is reduced then mother will have enough rest and successfully and frequently feed their baby. The improvement in maternal nutrition both in quantity and quality throughout pregnancy and during lactation increases breast feeding duration.[26]

In our study, 25% mothers experienced breast pain, breast engorgement and poor stamina during lactation which is contributing factor of introducing formula milk while Siddiqa et al[24] observed this problem only in 2.6% mothers. Other problem like mastitis and hyperlactation were observed only in 4.6% and 6.4% mothers respectively.

Maternal illness, cesarean delivery and mother taking medication were observed in 20% mothers while other studies showed maternal illness in 3.6%[22] and 2.9%[26] respectively. Cesarean delivery is major contributing factor of introducing formula feed due to uncomforted position and stitch pain.

In our study, 18% of mothers could not continue breast feeding due to their jobs. Other studies observed mother employment 10%[23] and 11%.[24] It was noted that though the mothers were well informed and counseled of benefits of exclusive breast feeding but the constrain of employment forced them to start bottle feeding as well.[24,27]

In order to promote the practice of exclusive breast feeding prolonged maternity leave should be given to working mother after the delivery. They should be taught to express and store their breast milk which can be given to the infant with cup and spoon in their absence. Large institution where many women are employed should be provided a separate space to keep and breast feed their baby.[24]

Maternal psychological factors like lack of confidence, anxiety, stress, worry and dislike for breast feeding are also contributing factors for termination of breast feeding in our study. Lack of confidence in a lactating mother leads to initiate bottle feed which further reduces her confidence.[15]

Among infant factors which are responsible for termination of breast feeding like early introduction of formula feed was the most common in our study. The strong predictor of formula feeding was the time between birth and initiation of first breast feeding. Similar factors were found in other studies[24,28] and introduction of bottle feed was due to mother's perception of inadequate weight gain of baby on breast milk.[24]

Excessive crying of baby for various reasons like difficulty in latching on to breast and disruption during feed experienced by 27% and 35% of mothers which is considered by them as baby is not satisfied because of insufficient milk production. With correct knowledge, emotional support and encouragement mother's confidence can be enhanced and she can breast feed her child exclusively. Improvement in maternal diet and reduction in time spent on household chores by lactating mother will have positive effect on breast feeding. The best time to motivate and prepare mother for breast feeding is during her antenatal visits.[24,26]

Faulty technique of breast feeding i.e. difficulty in latching on to the breast was another common contributing factor in this study. When the baby is poorly attached, breast milk is not effectively transferred; it may seem that milk is not enough. Use of bottles or soothers/pacifiers may lead to nipple confusion and baby sucks in poor position.[15]

One-fourth (26%) mothers of our study could not initiate breast feeding either due to hospitalization of infant in neo-natal care unit or maternal hospitalization due to illness which leads to mixed and formula feed later. The similar reasons was found in another study.[23] Use of expressed breast milk in NICU and counseling regarding disadvantage of formula feed can solve this matter.

Other factors negatively impact on prolonged duration of breast feeding are premature and low birth weight infants, in coordination of sucking and swallowing reflex observed in 25% mothers, twin baby 6% and use of pacifier10%. These factors were also observed in another study.[23]

There are certain myths which exist in our society and they interfere with exclusive breast feeding as well as result in termination of breast feeding are prelacteal feed like ghutti, gripe water, honey and butter should be given at birth, breast milk is not sufficient during first few days of life, baby remains hungry after sucking at breast for sufficient time, diet of mother affects nursing infant, breast fed child need extra water during hot weather, breast feeding is not possible after cesarean delivery and breast feeding should be stopped if mother get pregnant. About 60% to 65% of mothers of this study had these misbelieves. Water and sugar was used to alleviate thirst and to relieve abdominal colic in one study,[23] and in another study honey and water was used as first feed.[26]

CONCLUSION

Prelacteal feed is most common reason for not initiating the exclusive breast feeding while inadequate milk production is common reason for not continuing breast feeding up to 2 years of age.

Disruption during breast feeding due to burden of household work and mother employment are major factor for introducing formula feed.

Prematurity, low birth weight and twin babies are responsible for formula feeding.

Various myths of mothers which interfere and responsible for cessation of breast feeding.

RECOMMENDATIONS

The peripartum policies and practices that optimize breast feeding initiation and maintenance should be encouraged.

Good antenatal care and screening of high risk pregnancies and measures to prevent premature deliveries.

Education of both parents before and after delivery of the child is an essential component of successful breast feeding.

Educate the mother about the proper breast feeding technique and managing problems of lactation to enhance the mother's confidence.

Promote breast feeding through electronic media.

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