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EXPERIENCE OF EXCLUSIVE BREAST FEEDING IN TERTIARY CARE HOSPITALS.

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ABSTRACT

Objective:
1 To determine frequency of mothers who are not exclusive breast feeding.
2 To determine factors preventing to not exclusively breast feeding in infants (0-6 month) presenting to tertiary care hospitals.

Study design: Cross sectional Descriptive

Place and duration of study: Study was performed in Children Hospital Chandka Medical College Larkana and Ghulam Muhammad Mahar Medical College Hospital Sukkur from January 2009 to June 2009.

Patient and Methods: This is a prospective, a cross sectional descriptive study, including 100 breast feeding mothers (0-6 month age), and to determine the frequency of not exclusive breast feeding and the factors preventing to not exclusive breast feeding.

Results: Exclusive breast feeding in tertiary care hospitals is 20% and factors preventing from exclusive breast feeding were, working mother 40%, to familiarize baby to bottle feeding 22.5%, perceived insufficient milk 17.5%, real insufficient milk 7.5%, parental pressure 3.75%, and preterm babies 3.75%, and Cesarean delivery 2.5%, lactation failure 1.25%, and next pregnancy 1.25%

Conclusion: Exclusive breast feeding is 20% in mothers. Mostly mothers use to give mixed feeding and small percentage gives exclusive bottle feeding. Most common factors associated with failure of exclusive breast feeding are working mother, false insufficient milk, to familiarize baby to bottle feeding by working mother. Among less common factors are true insufficient milk, preterm babies, parental pressure, lactation failure, caesarean section delivery and next pregnancy.

Key Words: Exclusive breast feeding, insufficient milk, working mother.

INTRODUCTION

Exclusive breast feeding is defined as infant's consumption of human milk with no supplementation of any type (water, juice, non human milk and no other foods, not even dummy or pacifier) except for vitamins, minerals, and medications[1]. Partial breast feeding is defined as infant's consumption of some breast feeds and some artificial feeds either milk, cereals or other food[2].

A world study indicates that only less than 35% of infants are exclusive breast feed even for the 1st four months of life[3]. Contrary to the belief, exclusive breast feeding is fast deteriorating in Pakistan, only 16% of babies are exclusively breast feed for 1st 6 months of life, while 84% are not exclusive breast feed[4]. WHO recommends exclusive breast feeding for 1st 6 month of infants' life and continued breast feeding with adequate complementary foods for up to 2 years of age[5]. UNICEF states that"If every baby were exclusive breast feed from birth, about 1.5 million lives would have saved each year[6]. Exclusive breast feeding on demand provides all nutrition a baby needs in 1st 6 months. This is not true for any breast milk substitute. Giving milk with bottle is not a simple, straight forward or safe procedure as is commonly believed. Hazards of bottle feeding include over dilution of milk with resultant malnutrition. There is increased susceptibility to diarrhea and other infections[7, 8]. In addition, breast feeding decreases chances of

allergies in 25%[9], asthma 27%[10], cancer 8%[11], diabetes 34%[12], and obesity 43% of babies as compared to bottle fed babies[13]. Women least likely to breastfeed are, those who are young, having false belief of insufficient milk, unsupported from family members, when breast feeding mothers return to work, having breast/ nipple problems or having low confidence in their ability to breast feed[14]. Insufficient milk supply is one of the most commonly cited reasons for early cessation or decreased exclusivity in women who have initiated breast feeding. This study was conducted to determine the frequency of mothers not exclusively breast feeding and its factors, so that we can prevent bottle feeding and promote exclusive breast feeding by overcoming the factors.

PATIENTS and METHODS

This is a prospective, a cross-sectional descriptive study conducted in 100 mothers (we agree this is small number and in future it need extensive study but for convenience we included 100 mothers) at the departments of Paediatric Chandka Medical college Larkana and Ghulam Muhammad Mahar Medical college hospital Sukkur from January 2009 to June 2009.

Inclusion criterion

1. Mothers with age between 16-40 years with < 6 month old term infant.
2. This study will include indoor patients of paediatric departments CMC and GMC Sukkur coming to us for any presenting complain other than exclusion.

Exclusion criterion

1. Baby with congenital diseases like cleft palate, congenital heart disease (B/C babies with these problems are unable to suckle properly).
2. Mothers with any chronic disease like hypertension, heart disease, diabetes mellitus, tuberculosis or thyroid problems, breast cancer, or cytotoxic drugs (B/C in these chronic diseases there can be insufficient milk so we can not differentiate between real insufficient milk and perceived insufficient milk, so excluded).
3. Mothers with any breast or nipple problem e.g abscess, mastitis. Confirmed on physical examination.
4. Mothers who had a breast operation in the past and thus breast removed.

SUBJECTS

Mothers were placed into 4 groups (B/c we were willing to see what is relation of education to exclusive breast feeding is). Doctors, Teachers, Nurses and House wives. Each group consists of 25 mothers. Separate proforma was filled for each mother.

Data was collected by using following variables:

Baby is exclusively breast feed or not exclusively breast feed?

If exclusively breast feed for how long? (Measured in months)

If not exclusively breast feed whether bottle or mixed feed?

What was factor for not exclusively breast feed?

As this is descriptive type of study so frequencies and percentages was computed for categorical variables like exclusive breast feeding or not exclusive breast feeding, mixed feeding or bottle feeding. Mothers who gave insufficient milk as a reason for not exclusively breast feeding were diagnosed by using following points for real insufficient milk, to rule out whether they are really suffering from insufficient milk or this is their false perception.

Points for real insufficient milk diagnosis.

	Perceived insufficient milk	**Real insufficient milk.**
A) The baby breast feeds 8 times in 24 hours	Yes	No
B) Baby is gaining weight or not (500 g /month or 18-30 g daily)	Yes	No
C) How many times baby passes urine?	> 6	<6
D) How many times baby passes stools?	> 3	<3

When the baby was not gaining weight and was passing the urine < 6 times and stools < 3 times inspite of breastfeeding 8 times then the mother was labeled as having real insufficient breast milk.

RESULTS

Ninety percent of mothers started breastfeeding but continued for variable period of time. Breast feeding and bottle feeding was practiced exclusively by 20% and 12% respectively, while 68% practiced mixed feeding as shown in Table -1

There were very small percentages (working as well as house wives) of exclusively breast feeding to their babies. It was reported by 3 (12%) of doctors, 4 (16%) of teachers, 5 (20%) of nurses and 8 (68%) of housewives as shown in figure 1

Major reasons cited for initiating bottle feeding was working mothers 40% , familiarize to bottle 22.5%, perceived insufficient milk which was seen in 17.5%, followed by real insufficient milk 7.5%, parental pressure 3.75%, preterm babies 3.75% ,cesarean delivery 2.5%, lactation failure 1.25% and next pregnancy 1.25 % as shown in Table 2

Major factors cited for initiating bottle feeding among working mothers were work, 40% and familiarize to bottle feeding 22.5%

TABLE 1
Prevalence of breast, bottle, and mixed feeding.

Type of feeding	No, of mothers	Percentage of mothers
Breast	20	20%
Bottle	12	12%
Mixed	68	68%

TABLE 2

Factors	%
Working mother	40%
Familiarize	22.5%
Perceived insufficient milk	17.5%
True insufficient milk	7.5%
Preterm	3.75%
Parental pressure	3.75%
C/section delivery	2.5%
Next pregnancy	1.25%
Lactation failure	1.25%

TABLE 3
DEMONSTRATES DISTRIBUTIONS OF VARIOUS FACTORS AMONG DIFFERENT GROUPS OF MOTHERS. (THIS IS PERCENTAGE OF NOT EXCLUSIVE BREASTFEEDING. MOTHERS WHO EXCLUSIVELY BREAST FEED ARE NOT INCLUDED IN THIS TABLE).

Factors	Doctors	Teachers	Nurses	Housewives
work	11(50.0%)	8 (38.1%)	9 (45.0%)	4 (23.5%)
Perceived insufficient milk	2 (9.1)	1 (4.7%)	5 (25.0%)	6(35.2%)
Familiarize to bottle	6 (27.3%)	8 (38.1%)	4(20%)	-
Real insufficient milk	1 (4.5%)	2 (9.7%)	-	3 (17.7%)
Preterm babies	2 (9.1%)	-	-	1(5.9%)
Parental pressure	-	-	-	3(17.7%)
Caesarean delivery	-	-	2(10%)	-
Next pregnancy	-	1(4.7%)	-	-
Lactation failure	-	1 (4.7%)	-	-
	100%	100%	100%	100%

FIGURE 1
PERCENTAGE OF MOTHERS NOT EXCLUSIVELY BREASTFEEDING

before they return to work after maternity leave. Reasons for not exclusively breast feeding among house wives were insufficient milk, and parental pressure.

DISCUSSION

As neonatal mortality rate in Pakistan is very high, 50/1000 lives births; recognition of underlying factors and diseases leading to neonatal mortality becomes very important. Malnutrition and infections are one of the most important factors which contribute to increased mortality and morbidity.

This study aimed to survey a sample of mothers, having six months old infant, to determine their current breastfeeding patterns and to compare these with previously reported findings. We found an almost universal prevalence of breastfeeding among the mothers surveyed but this was largely accompanied by additional bottle feeds of commercial infant formulae and other items.

We found breastfeeding at birth in 90.5% of cases, similar to 92% rate found by Landman and Shaw-Lyons in 1973 [15]. But higher than reported by Heinig MJ study[16] which found an initiation rate of 75%. Percentage of mothers in our study who practiced exclusive breast feeding was 20% which is comparable to results of Bahawalpur 25%[4] and as well as among urban Libyian women 18.6%[17].

Most common reason in our study for introducing bottle was working mother 40% of cases which is significantly higher than study performed by Bachrach VR et al, 11.2% [18]. International study shows that perceived insufficient milk is a most common reason given for not exclusive breast feeding and was documented by 80% of mothers[19], while local study has reported perceived insufficient breast milk in 71% mothers[20] which is significantly higher than our figures 24% . Present study found real insufficient milk in 7.5% of cases which is less than reported in previous study results of 15% [21].Compared to international and local studies we found some new factors preventing mothers from exclusively breast feeding like familiarize to bottle and parental pressure.

First factor was seen in working mother, who started bottle feeding before they return to work after maternity leave. Second factor, parental pressure was observed in housewives who were being forced by their elders. In contrast to our study some studies[18, 22] have also declared nipple problems and maternal illness as a risk factor preventing mothers from exclusively breast feeding but none of mother given this factor in our study. We also found next pregnancy as preventing mothers from exclusively breast feeding and was seen in 1.25% which is significantly low than figures of other study 9.3%[23].Some studies shown that fewer than 5% of nursing mothers are physiologically incapable to producing sufficient milk due to complete lactation failure [24]. Another factor which we had found in our study was to familiarize their baby to bottle feed before rejoin her job and was reported in 22.5% of cases which

has not been reported in previous local or international studies. In Bangladesh, Haider et al[25] elicited more detailed reasons such as too much housework and dominating grandmothers. Studies from different places including the Caribbean have found other reasons, including having to return to work, the baby rejecting the breast, the baby remaining hungry, the perception that breastfeeding is backward or for poor people, or to entice the father to bring money for formula feed. Poor weight gain during the 1st three months of life and male gender are factors known to predispose to earlier change from breast to bottle feeding[26].

CONCLUSION:

Exclusive breast feeding is 20 % in mothers. Mostly mothers use to give mixed feeding and small percentage gives exclusive bottle feeding. Most common factors associated with failure of exclusive breast feeding are working mothers, perceived insufficient milk, to familiarize baby to bottle feeding by working mothers.

RECOMMENDATIONS

1. Creation of favorable attitude is needed for working women to breast feed in place of work or they should be given lactation breaks.
2. Mothers should be assured that they can produce enough breast milk to exclusively breast feed; their milk is all that their baby needs and their breasts can produce perfect milk in sufficient quantity.
3. Mothers should be made understand that while lying down they can breast feed incase mother has caesarean delivery and it is not contraindication to breastfeeding.
4. Creating awareness for breast feeding among mothers, parents, media, schools, health care providers.

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