

## EVALUATION OF BREASTFEEDING PRACTICES IN THE COMMUNITY ATTENDING A TERTIARY CARE HOSPITAL

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### ABSTRACT

#### Objectives:

To evaluate the breastfeeding practices in the community.

#### Methods:

This was an Out Patient Department (OPD) based cross sectional study conducted at pediatrics department of Madina Teaching Hospital, Sargodha Road, Faisalabad, in 4 months period starting from September 2009 to December 2009. Four hundred women attending the pediatric OPD having children between one to five years of age were included.

A questionnaire was prepared regarding the breastfeeding practices. The data was analyzed statistically by using SPSS version 17 using chi-square as test of statistics. P-value <0.05 was considered significant.

#### Results:

Total 400 mothers of children were interviewed, minimum age of child was 12 months, and maximum age was 60 months with mean age of 33 months (SD 13.4). Minimum maternal age was 18 years; maximum age was 45 years with mean age of 29 years (SD 5.3). Most of the mothers belonged to lower socioeconomic status, had low literacy status, and were housewives. Breastfeeding initiated in 90% of cases, but exclusive breastfeeding till 6 months was given only in 23% of cases ( $p=0.055$ ). About 51% of women included in the study started topfeeding their children before 6 months of age. Many mothers believe in giving breastfeed on 3<sup>rd</sup> day. Topfeeding was diluted cows milk and insufficient milk production was the most common cause of cessation of breastfeeding.

#### Conclusion:

The risk factors need to be determined that lead to inadequate breastfeeding practices in the community in order to improve the nutritional status of infants in Pakistan.

**Keywords:** Breast feeding, neonatal feeding, childhood nutrition

### INTRODUCTION

Breast-feeding is an important contributor to overall infant health<sup>1</sup>. Human milk is the most appropriate milk for human infants and

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uniquely adapted to the infants need.<sup>2</sup> Studies have provided strong evidence that breast-feeding decreases the incidence and/or severity of a wide range of infectious diseases among children.<sup>1</sup> Breast-feeding has been

shown to reduce the risk of respiratory infections<sup>3</sup>, diarrhea<sup>4</sup> and neonatal sepsis.<sup>5,6</sup> A pooled analysis of data from 3 countries has shown that either predominately or exclusively breast-fed infants are at substantially lower risk for infant mortality than non-breast-fed infants.<sup>4</sup>

Evidence from experimental studies or sibling analyses also shows that prolonged breast-feeding improves cognitive development among children and adolescents.<sup>7,8</sup> Keeping in view the advantages of breastfeeding, the American Academy of Pediatrics and the World Health Organization (WHO) strongly adhere to the belief that breast-feeding is the optimal infant feeding practice.<sup>9,10</sup> Furthermore, the WHO recommends exclusive

breast-feeding for 6 months and continued breast-feeding for up to 2 years and beyond.<sup>11</sup> Maternal colostrum, produced during the first days after delivery, has long been thought to confer additional protection because of its immune and nonimmune properties.<sup>12</sup> Despite the unequivocal benefits of colostrum, the practice of withholding it from the newborn is widespread and variation exists between countries regarding length of time and reasons for withholding colostrums.<sup>13</sup>

There has been a general decline in the practice of breast feeding both in terms of prevalence and duration in the past few decades and exclusive breast feeding does not even seem to be the norm in any part of the world.<sup>14</sup> The increasing use of infant formula and substitutes too early in a baby's life contributes to the high degree of under development and malnutrition in our children. Babies given cow's milk and formula early in their lives have over 60% more risk of being malnourished.<sup>15</sup> As stated earlier, exclusive breast feeding for 4 to 6 month is very important and it is sufficient for every child. Most common cause of decline in exclusive breast feeding is mother perception about insufficient breast milk. Variation in breastfeeding practices is usually influenced by socioeconomic status, cultural issues, literacy status and other factors.<sup>16</sup> The factors that are associated with overall decline in breastfeeding include social factors, practice in health care facilities, advertising and promotion of infant feeding products. Duration of breastfeeding is also low in working mothers.<sup>14</sup>

Keeping in view these factors, the present study was conducted to determine the breastfeeding practices in the community attending the tertiary care hospital that usually belonged to middle and lower class. The objective was to identify various risk factors for improper breast feeding, so that proper breastfeeding practices can be promoted.

## PATIENTS AND METHODS

This was an out patient department based cross sectional study conducted at pediatrics department of Madina Teaching Hospital, Sargodha Road, Faisalabad, in 4 months period starting from September 2009 to December 2009. Four hundred women attending the pediatric OPD having children

between 1-5 years of age were included in the study. Most of these children were suffering from some acute illness like diarrhea or sore throat. The children who attended the OPD with some chronic illnesses like tuberculosis, congenital heart diseases, cerebral palsy and those in which breastfeeding was contra-indicated strongly were excluded from the study.

A questionnaire was prepared evaluating the maternal practice regarding initiation of breastfeeding, duration of exclusive breastfeeding and causes of cessation of breastfeeding. The women answers were recorded on the proforma. The data was tabulated and analyzed statistically by SPSS version 17 using chi-square as test of statistics. P-value <0.05 was considered significant.

The variables in the study were; age and sex of children, maternal age, parity, parents' education, socioeconomic status, time of initiation of breastfeeding, duration of exclusive breastfeeding and age of addition of topfeeding.

## RESULTS

Our study highlighted the breastfeeding practices in the community, regarding time of onset of breastfeeding, duration of exclusive breastfeeding, time of initiation and type of topfeeding and causes of stoppage of breastfeeding. Total 400 mothers of children were interviewed, minimum age of child was 12 months and maximum age was 60 months with mean age of 33 months (SD 13.4). Minimum maternal age was 18 years; maximum age was 45 years with mean age of 29 years (SD 5.3). Most of the mothers belonged to lower socioeconomic status, low literacy status, and were housewives (Table 1). Breastfeeding initiated in 90% of cases (Table 1), but exclusive breastfeeding till the recommended age i.e., 0-6 months was given only in 23% of cases (Table 2)(p=0.055).

**Table 1. Demographic characteristics of participating mothers n=400**

Duration of exclusive bf	Percentage of children
0-4 months	27
0-6 months	23
0-12 months	21
> 1 year	29

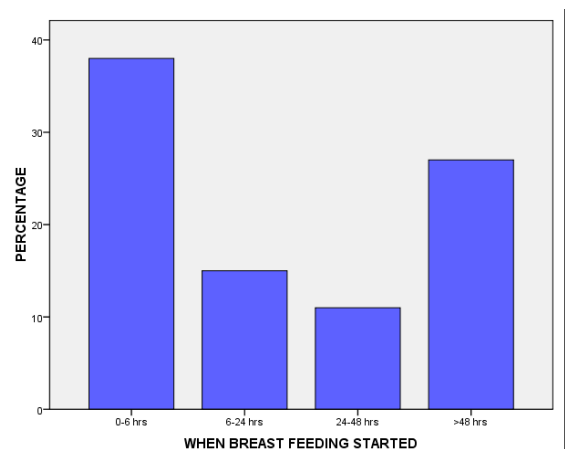
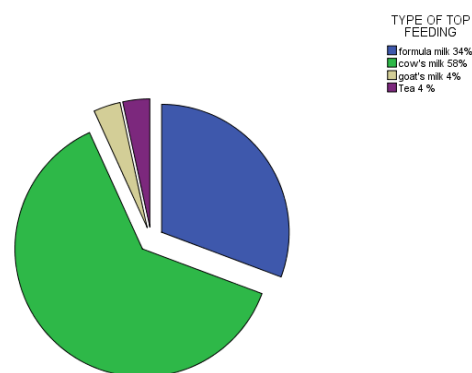
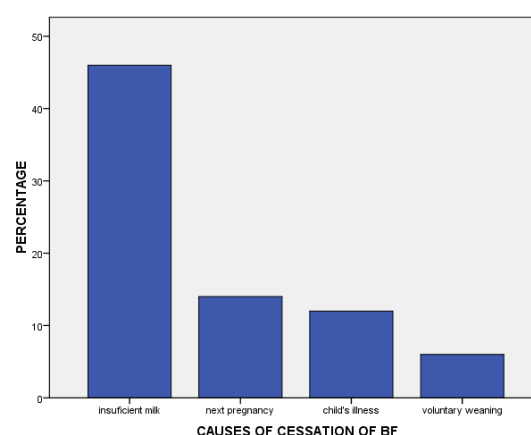
**Table 2. Duration of exclusive breast-feeding**

Age of start of topfeeding	Percentage of children
At birth	27
1-6 months	26
6 months onwards	39
2 years onwards	8

Only 29% of women could continue exclusive breastfeeding to their kids beyond one year of age, without the addition of complementary feeding (Table 2). About 51% of women included in the study started topfeeding their children before 6 months of age (Table 3). Although majority of mothers started breastfeeding their child within 6 hours of birth but still many people (24%) believe that proper breastfeeding should be given on 2<sup>nd</sup> or 3<sup>rd</sup> day, without knowing the importance of colostrums (Figure 1). Many of these infants (24%) were kept on prelacteals like arq, ghutti, honey, and glucose water which needs further research. These practices are attributed to their lower socioeconomic status (82%). Among the various causes of cessation of breastfeeding, insufficient milk production was the most common (Figure 3).

**Table 3. Age of start of topfeeding**

Charecteristics	Percentage
Residence}	
Rural	58
Urban	42
Mothers occupation:	
Housewife	77
Working women	23
Socio economic status:	
Lower	82
Lower middle	18
Father's literacy status}	
Illiterate and <Matric	69
>Matric	31
Mother's literacy status:	
Illiterate	43
Primary	27
Matric	20
Intermediate and above	10
Breastfeeding initiated:	
Yes	90
No	10

**Figure 1. Age of the child at onset of breastfeeding****Figure 2. Type of top feeding given****Figure 3. Causes of cessation of breast-feeding**

## DISCUSSION

Our study points towards an important health issue regarding breastfeeding practices in infants. Breastfeeding was initiated in 90% of babies but very few mothers continued with exclusive breastfeeding. Most of the mothers started complementary topfeeding at birth 27%, 26% started at 6 months of age and 39% mothers started topfeeding from 6 months onwards. Breastfeeding is declining all over the world in terms of initiation of breastfeeding, duration of exclusive breastfeeding and cessation of breastfeeding. These suboptimal practices have been reported from rural areas of India, Bangladesh and Srilanka.<sup>17,18</sup> Studies from Turkey have reported a decreasing duration of breastfeeding related to maternal employment and formula supplementation.<sup>19</sup> The factors responsible for inadequate breastfeeding practices need further to be evaluated in our community.

The beliefs of people from many asian countries that colostrum is not as healthy for the baby does not seem to have been changed by the strong evidence of its benefits, discarding colostrum or delaying breast-feeding remains common in many settings.<sup>(20,21)</sup> About 50% of women in our study started giving breastfeed their infants after 24 hours, this finding is comparable to a study conducted in Vietnam, where the newborn is fed rice water or other liquid while the colostrum is expressed and discarded and the baby is then put to the breast around day three.<sup>19</sup>

Breastfeeding has been associated with slightly enhanced performance on tests of cognitive development of infants.<sup>22</sup> The important components of breast feeding promotion include perinatal support, hospital management and subsequent pediatric and maternal visits.<sup>23,24</sup> Therefore, health professionals should have the necessary knowledge and skills for managing the different stages of lactation, to communicate the health message to the community.

As far as the type of topfeeding is concerned, most of the children were given diluted cows milk, followed by formula milk, and few children were being given tea as their complementary feeding. The most common

cause of cessation of breastfeeding reported was insufficient milk production, the remaining being next pregnancy, illness of the child and in few cases voluntary weaning. These results are comparable to the study conducted in India.<sup>16</sup> These inadequate feeding practices contributed towards undernutrition and growth retardation in children.<sup>25</sup>

## CONCLUSION

It is strongly recommended that further in depth studies must be carried out in all the sections of community to determine the breastfeeding practices in our developing country. Furthermore the risk factors must also be determined that contribute towards inadequate feeding practices. Nutritional knowledge of mothers and caregivers is already low in low socioeconomic population; strict cultural beliefs of elders further impede the quality of feeding practices (e.g., discarding colostrums, initiation of breastfeed on 3<sup>rd</sup> day, giving diluted cows milk, and giving tea as complementary feed to infants). These areas need further to be emphasized in order to improve the current nutritional status of Pakistani children. Health care provider workers, doctors, midwives and media can play an important role in this regard.

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