

## EXCLUSIVE BREAST FEEDING; DURATION AT NORTHERN AREAS OF PAKISTAN; A HOSPITAL BASED STUDY

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### Article citation:

Aslam S, Sultan M, Akram F. Exclusive breast feeding; Duration at Norther Areas of Pakistan a hospital based study. Professional Med J Jun 2010; 17(2): 286-290.

**ABSTRACT... Objective** To study the duration and factors influencing exclusive breast feeding practice. **Design:** A cross sectional descriptive study **Setting:** A primary care hospital Gilgit, northern area of Pakistan. **Period:** Ten months from March 2007 to December 2007. **Material & Method** This study include 125 mothers with mean age of 24.3 years (SD 4.8), 37% were illiterate while only 14% were matriculate or above among 125 babies (male 61%: female 39%). **Results** Out of total 125, eighty one (64.8%) babies were exclusively breast fed (EBF) for first six months of life and only five(4%) infants were not given breast milk at all . among 76 male infants ,52 (68.4%) were EBF for six months in comparison to 29 female (59.2%) out of 49. among 36 first born infants only 15 (41.7%) were EBF for six months in comparison to 66 (74.2%)out of 89 not first born( $p<0.05$ ). **Conclusion:** Exclusive breast feeding for complete 6 months is still not routinely practised by most of mothers and first born are deprived of this right in majority lower socioeconomic group and illiterate mothers are more likely to breast feed, gender bias was also observed as a significantly high percentage of male babies were observed to be breast fed as compared to females. More efforts are required by health depart. And NGO's to promote good breast feeding practices in our setup.

**Key words:** Infant ,exclusive breastfeeding practice

### INTRODUCTION

Breast feeding (BF) is one of the extraordinary gifts of nature and rewarding for both babies and mothers in many aspects<sup>1-3</sup>. Breast milk is not only the best nutrient for babies but also contains certain antibodies that can guard infant from various infections<sup>4</sup>. Research indicates that woman who breastfeed may have lower rates of certain breast and ovarian cancers. The American academy of paediatrics recommends that an infant be breastfed without supplemental food or liquid for the first six months of age, known as exclusive breastfeeding (EBF)<sup>1</sup>. EBF is the most natural and scientific way of feeding in the first six months of life, not only for term but also for preterm babies<sup>5-6</sup>. In developing countries like ours, breast feeding can contribute in many ways to better

health of children as well as mothers .EBF can prevent under nourishment, infections and mortality in young infants. But in spite of continuous education regarding BF, most mothers don't adhere to these practices. The purpose of this study is to determine BF practices, especially the duration and various factors influencing EBF in northern areas of Pakistan.

### MATERIAL AND METHODS

This study was conducted at a primary care hospital at

Article received on: 06/06/2008  
Accepted for Publication: 07/08/2008  
Received after proof reading: 29/03/2010  
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Gilgit, northern area of Pakistan. Northern areas of Pakistan are one of beautiful areas of the world, yet underdeveloped and pose many troubles to the poor people including extreme cold and snowfall. After taking unwritten consent, we included 125 uninterrupted mothers, attending child OPD or vaccination centre. Only those mothers were included in the study that were having babies of ages 7-12 months. Proforma was filled by direct interviewing the mothers. Questions asked included maternal age, parity, maternal , education and family type on breast feeding beliefs in mothers were analysed, data from the survey was statistically analysed using computer software SPSS10.

## RESULTS

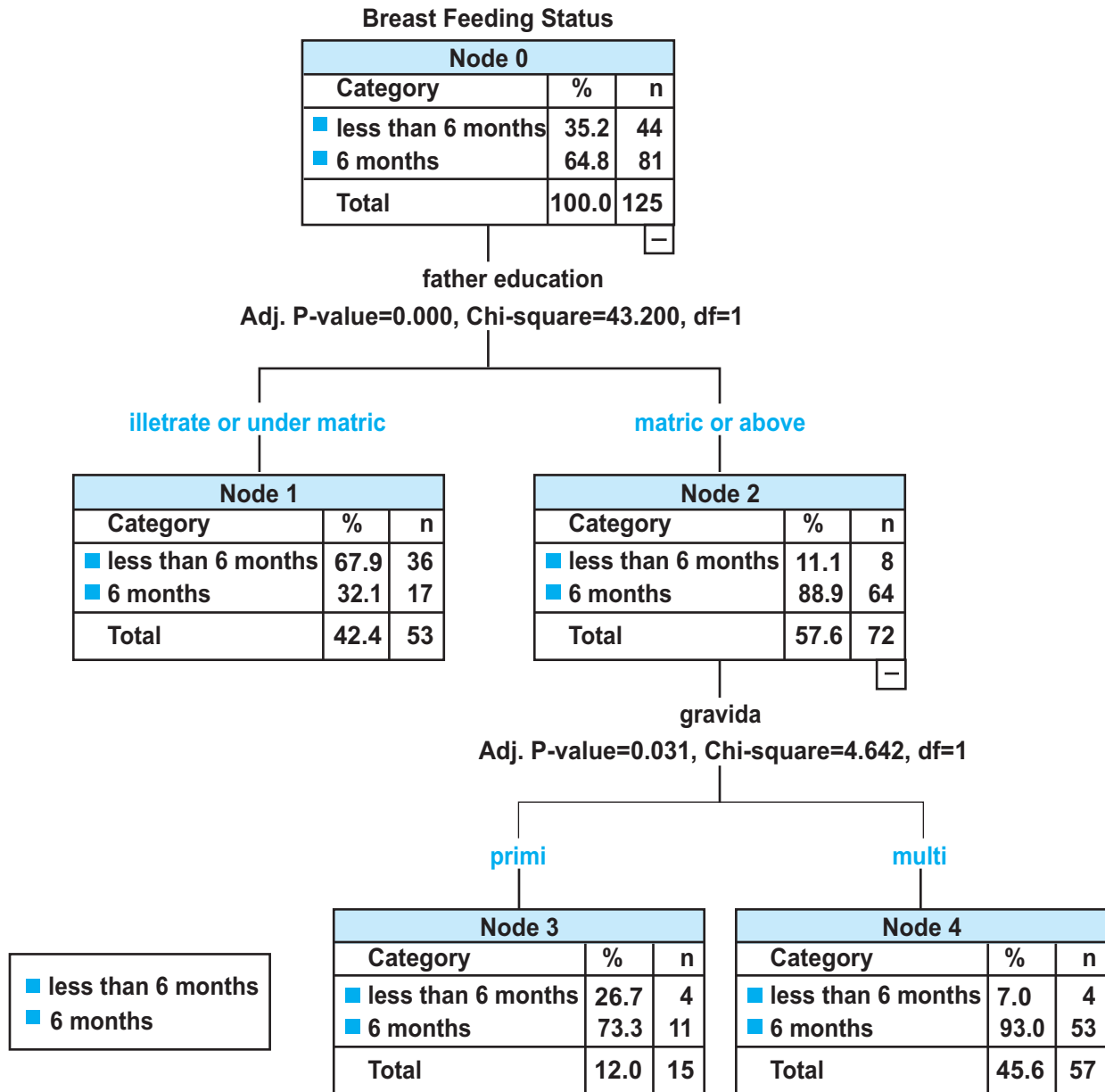
This study include 125 mothers with mean age of 24.3 years (SD 4.8),37%were illiterate while only 14% were matriculate or above (table-I) among 125 babies (male61%: female39%) 81(64.8%) babies were exclusively breast fed for the first six months of life, whereas05(04%)were exclusively top fed. in remaining infants,03(2,4%), 03(2.4%).11(8.8%),15(12%0,07(5.6%) were exclusively breast fed for one, two, three, four and five months respectively, before introduction of other milk or weaning foods (Fig -1).

Among 89(71.2%) mothers who were nursing second or more time , 66(74.2%) were exclusively breast fed for six

Table-I. Basic statistics of the study

Parameter	Status	Total no.	No. Of mothers who EBF	P-value
Parity	First born	36	15 (41.7%)	0.001
	Not first born	89	66 (74.2%)	
Income (Rps per month)	< 10,000	104	71 (68.3%)	0.083
	> 10,000	21	10 (47.6%)	
Maternal education	Illiterate or under matric	107	72 (67.3%)	0.186
	Matric & above	18	9 (50%)	
Gender of infant	Male	76	52 (68.4%)	0.339
	Female	49	29 (59.2%)	
Family status	Joint family	89	57 (64.0%)	0.838
	Nuclear family	36	24 (66.7%)	
Father Education	Illiterate or under matric	53	17 (32%)	0.000
	Matric & above	72	64 (89%)	
Maternal age	Up to 20	21	9 (42.9%)	0.067
	21 to 30	80	55 (68.8%)	
	above 30	24	17 (70.8%)	

Fig-1. Classification and regression tree



months as compared to only 15(41.7%) out of 36 in first born group, with p-value 0.001. In respect to maternal education, 67% of illiterate and undermatric mothers and

only 50% of matriculate mothers exclusively breastfed. Among 89(71.2%) mothers who were nursing second or more time, 66(74.2%) were exclusively breast fed for six

months as compared to only 15(41.7%) out of 36 in first born group, with p-value 0.001. In respect to maternal education, 67% of illiterate and undermatric mothers and only 50% of matriculate mothers exclusively breastfed.

Observed	Predicted		
	less than 6 months	6 months	Percent Correct
less than 6 months	36	8	81.8%
over all Percentage	17 42.4%	64 57.6%	79.0% 80.0%

## DISCUSSION

Breast milk is recognised universally as the best nutrition for infants<sup>7</sup>. Exclusive breastfeeding is ideal for first six months of life and continued breastfeeding complemented by solid foods is recommended throughout the baby's first year preferably longer<sup>4</sup>. In our society, both religious as well as cultural traditions encourage breast feeding and it is greatly advocated that the breast milk is the best nutrition for an infant, yet it is not provided to hundred percent of the children. Lack of EBF in first six months can impose certain health risks to the young infants, especially the poor hygiene conditions of bottle feeding. A study from Ghana reported that 22% of death among newborn were prevented if newborn started breastfeeding within one hour of birth [8]. In our study population almost 67% of mothers exclusively breastfed their babies for first six months which is quite contrary to reported by Afzal et al

In their study as only 16% EBF for first six months and 66% till 4 months of age<sup>4</sup>. It is worth mentioning that the study by Afzal et al was done in urban area in military setup, where socioeconomic status probably contributed to the trend of formula feed. In one of our neighbouring country India one survey reports that 96% of children are breastfed [9]. Although not as high as mentioned in other studies<sup>10,11</sup>. In our study another significant factor determining was parity. Only 42% of first born babies were EBF for first six months in comparison to 74.2% EBF babies born to multigravida mothers (p<0.05). The lack of

antenatal counselling, inexperience and non-scientific belief of inadequacy of milk supply were few important factors, which lead to deprivation of EBF for six months in first born infants.

Another factor was socioeconomic status, which contributed in an unexpected way. 71(68.3%) out of 104 mothers with monthly income of less than Rs 10,000(<170US\$) gave EBF for six months in comparison to 47.6% of mothers with monthly income of more than Rs10.000 (>170US\$). Probably lack of buying power also contributed in high percentage of EBF in low income population. The difference with regard to income is similarly highlighted by Afzal et al<sup>4</sup>. In our society of male dominance the male infants were more privilege and exclusively breast fed for six months in 68.4% as compared to 59.2% female infants. This is in accordance with Afzal et al<sup>4</sup>. Out of total 125, 33% of infants were not exclusively breast fed for six months and the reason was common, inadequate milk supply according to lactating mothers.

There are a large number of woman who perceive a reduction in milk supply. With appropriate knowledgeable advice, most are able to continue breastfeeding successfully<sup>12</sup>. If an infant is not gaining weight normally, the possibility of inadequate milk supply can be considered after through analysis of feeding techniques, environment and organic problems in mother or infant. The complex interact ional nature of the problem requires attention to history, physical examination, different ional diagnosis, and thoughtful problem solving. Supplementation should be provided only if clearly indicated; in a way that best supports continued breastfeeding to the fullest extent possible. Anticipatory guidance, early detection of problems, and prompt intervention are the keys to ensure copious milk production and normal infant growth<sup>12</sup>.

In our study five infants were not given breast feed at all and were fed with either animal milk or formula feeds. These five children were born to primigravida mothers and home delivery and were subsequently given animal milk, honey and water. Breast feeding was not attempted

very enthusiastically. In these cases there were no scientific antenatal checkups. It is quite distressing that young infants in our country are still fed with prelacteals. It is important that antenatal services to be strengthened. Although efforts are being carried out by our government as well as various other institutions, but only a few patients get proper health education from health workers, the importance of medical and paramedical personals in providing correct information to mother about proper feeding of infant and guiding them cannot be overemphasized<sup>13</sup>.

The implication of study is to improve maternal knowledge about BF, aggressive campaigning and health personnel involvement is crucial to make EBF successful. In developing countries like ours, there is need to promote successful breastfeeding, beginning with effective parental education, optimal initiation of breast feeding, supportive hospital practices and correct breastfeeding technique. The early follow up of the breast feeding infants and assessing the successful initiation and

Furthermore maintenance of breastfeeding is absolutely essential to promote health as well as to reduce infant mortality<sup>14</sup>.

## CONCLUSION

The importance of breast feeding in reducing infant mortality rate in improving the well being of infants, reducing morbidity in infants cannot be overemphasized.

Promotion of good breastfeeding practices by health department and NGO's is highly recommended. More research is required to further validate the results of this study with a large study group targeting both urban and rural areas in all four provinces.

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