

FREQUENCY OF EXCLUSIVE BREASTFEEDING IN INFANTS PRESENTING TO KHYBER TEACHING HOSPITAL, PESHAWAR

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ABSTRACT

Objective: To determine the frequency of exclusive breastfeeding in infants visiting a tertiary care hospital, Peshawar.

Methodology: This cross sectional study was conducted in pediatric outpatient department (OPD) of Khyber Teaching Hospital Peshawar from July 2018 to December 2018. A total of 250 infants aged 0-6 months of either gender, brought to OPD for various illnesses were enrolled. Demographic characteristics of all patients were recorded. History of breast feeding was obtained and recorded in a pre designed proforma.

Results: Our study showed that among 250 infants, mean age was 4 ± 1.94 months. Sixty four percent babies were males and 35.6% babies were females. The frequency of exclusive breast feeding was 61.2% in these infants.

Conclusion: Our study concluded that the frequency of exclusive breastfed infants was 61.2 %.

Key Words: Breast feeding, Infants, Nutrition

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INTRODUCTION

According to American Academy of Pediatrics, breast milk is the most beneficial nutrition for infants and it recommends exclusive breast feeding for infants in the first 6 months of life¹. Human milk contains appropriate amount of fats, proteins, carbohydrates, mineral constituents and vitamins². Researches show that this particular composition of breast milk provides many advantages both to the baby and mother³ e.g. it prevents the infants from many infectious diseases like diarrhoea^{3,4}, causes better cognitive development^{3,5} as well as enhanced motor development which is also carried into later childhood and adolescence⁶. In order to assess the feeding practices of infants, World Health Organization (WHO) has recommended some indicators, out of them the two most important core indicators described are early initiation of breast feeding and exclusive breastfeeding up to 6 months⁷.

In developing countries, the rate of exclusive breastfeeding in infants under 6 months of age raised from 33 % in 1995 to 39% in 2010^{8,9}. One study in India reported the frequency of exclusive breastfed infants at 6 months as 55.9%¹⁰ while in another study from Iran, the rate of exclusive breastfeeding was reported as 53%¹¹. In the Galician area of Spain it was 50%¹². In Pakistan, The United

Nations Children's Fund (UNICEF) reported the rate of exclusive breast feeding under 6 months to be 37% in 2014 which was 26% in 1995. Very little data is available regarding exclusive breastfeeding in the different regions of Pakistan, except Gilgit district which showed the rate to be 37%¹³.

Exclusive breast feeding in infants up to 6 months can help reduce infants morbidity and mortality and can bring about the best growth potential and cognitive development in them. For this, mothers should be encouraged and educated regarding feeding practices. Locally no updated data is available. Therefore, we intended to determine the frequency of exclusive breastfeeding in infants from birth to 6 months age, which will help in finding the magnitude and appropriate consideration of developing a mass education system for educating mothers regarding the benefits of exclusive breast feeding both in communities and healthcare set ups of Pakistan.

METHODOLOGY

A cross sectional study was conducted in pediatric OPD, Khyber Teaching Hospital, after taking ethical approval from Research Evaluation Unit, CPSP, Pakistan and local ethics committee. Study duration was 6 months. Total 250 infants from birth to 6 months of both gen-

ders were included. Infants on lactose free formula, premature, above 6 months and those with developmental defects like cleft palate, were excluded. Informed consent was taken from parents/guardians. Detailed history and clinical examination was done. Demographic details like age, gender, address and contacts along with the details of exclusive breastfeeding were recorded on a predesigned proforma. Data was analyzed using SPSS 20 for windows. Frequency and percentages were calculated for categorical variables like sex, socioeconomic status, maternal education and exclusive breastfeeding. Mean \pm SD were calculated for quantitative variables like age and weight. Post stratification frequency of exclusive breastfeeding was cross tabulated with age, sex, socioeconomic status and maternal education to effect of confounders. Chi square was used to check the significance. p -value \leq 0.05 was taken significant. All the results were presented in the form of tables and graphs.

RESULTS

In this study, age distribution among 250 babies was analyzed. Out of 250, 47 (18.8%) babies were in age range 0 to 2 months, 48 (19.2%) babies were in age range of 2-4 months, 154 (61.1%) babies were in age range of 4-6 months. Mean age was 4 months with SD \pm 1.94. Gender distribution among 250 babies was analyzed as 161 (64.4%) being males. Regarding socioeconomic status, majority belonged to lower class. Maternal education was nil to low in majority of the women as given in table 1. Regarding exclusive breastfeeding, out of 250 babies, 153 (61.2%) were exclusively breastfed

while 97 (38.8%) babies were not exclusively breastfed.

Stratification of Exclusive breastfeeding with age, gender, socioeconomic status and maternal education is given in table 1.

DISCUSSION

Our study showed that among 250 babies, 61.2% were exclusively breastfed as compared to 38.8% babies who were not exclusively breastfed. This shows improved and promising situation with regards to previous practices. One previous study done in Gilgit conducted by Khan GN showed the rate of exclusive breast feeding to be 37%. Initiation of breastfeeding within 1 hour after birth was 71%, while 29% were reported to breastfeed their newborn within 24 hours. Illiterate mothers were more likely to use harmful newborn care practices¹³. Our finding was 61.2%, again revealing drastic improvement in exclusive breast feeding.

One study in India conducted by Patel DV reported the frequency of exclusive breastfed infants at 6 months to be 55.9%. More than half of the mothers (57.5%) started breastfeeding within one hour of child's birth, gave exclusive breastfeeding for recommended 6 months and continued to breastfeed in the second year of life (50.7%)¹⁰.

An advantage of this study was that breastfeeding data was collected while the mothers brought their babies to OPD and was thus not retrospectively collected or self-reported data. Thus recall bias was not an issue

Table 1: Stratification of exclusive breastfeeding with age, sex, socioeconomic status and mothers' education

Variables		Breast Feeding		Sign
		Present	Absent	
Age	0-2 Months	38	9	0.003
	>2-4 Months	23	25	
	>4-6 Months	92	63	
Sex	Male	96	65	0.493
	Female	57	32	
Socio Economic Status	Lower Class	79	54	0.487
	Middle Class	61	32	
	Upper Class	13	11	
Mother Education	No education	102	68	0.463
	Primary	12	4	
	Middle	8	5	
	Matric	16	7	
	Intermediate	9	6	
	Graduate	5	3	
	Post Graduate	1	4	

in this study.

One of the limitations of the current study was small sample size. This might be one of the reasons for the discrepancies between this study and the other studies conducted in Pakistan. It is concluded that further studies should be done on a larger sample size and at a more comprehensive level considering other relevant variables.

CONCLUSION

This study concludes that the frequency of exclusive breastfeeding in infants has increased over time.

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CONTRIBUTORS

SI conceived the idea, planned the study and drafted the manuscript. FS and SI helped in refining the initial draft, acquisition of the and statistical analysis. All authors contributed significantly to the final manuscript