

Barriers to Exclusive Breastfeeding in Children Under 6 Months of Age in District Kasur

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ABSTRACT

Objectives: The objectives of my study were to identify major factors which prevent mothers to breastfeed their infants in the first six months and to analyze the behavioral constraints to develop a suitable strategy for strengthening the practices of exclusive breastfeeding. **Study Design:** Descriptive Study. **Methodology:** The study was conducted on 37 subjects, who were mothers with young children under six months of age and were not breastfeeding their children due to any reason. The study was based on direct interview taken at DHQ Hospital Kasur and BHU Rao Khan Wala in the district Kasur. The interviews lasted for about half an hour with each subject. Subjects who were breastfeeding regularly or who were HIV, Hepatitis and other diseases positive were not included. The interviews were conducted in a separate room with least disturbance. Quantitative data like age was presented by mean and standard deviation while qualitative data education, profession were presented by frequency and percentages. SPSS (version 20) software was used for data analysis. **Results:** The mean age of infants of group (62.1%) was of 2.2 months \pm 0.7 and other group of infants (37.9%) was of mean age 5.2 months \pm 0.6. The mean weight (kg) and standard deviation of the index children at birth was 3.1 (kg) \pm 0.2. Among index infants 37.8% were male infants and 62.2% were female infants. By place of birth of children, 75.6% births took place in a health facility. 32.4% mothers were illiterate. 13.5% mothers were on job. Only 83.7% females had fed colostrum to their infants. 62.1% mothers were those who never fed their infants. 27.0% were those who initially fed their infants for short period of time and then stopped feeding who fed irregularly was 10.8%. Important factor identified was insufficient milk production (65.2%) with significance of p-value = <0.05 and Sickness of mothers and consequently advised by doctor to avoid breastfeeding to their infants, was contributing (52.1%) with significance value $p = <0.05$ among mothers who never breastfed their infants under six months of age. **Conclusion:** Inadequate milk production and mothers' sickness were most commonly stated factors.

Keywords: Exclusive breastfeeding, barriers, insufficient milk production.

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INTRODUCTION

Breastfeeding is a process of giving food to the young infant¹. It is an unmatched way by which an ideal food can be provided to the infants during their first six months for the healthy growth and development. It is also an essential part of the reproductive process and is strongly connected with the health of mothers². Exclusive breastfeeding of infants is very essential for the first six months of life to bring about the development, an optimal growth and health³. At the age of six months weaning must be started. Weaning is a process of gradually introducing an infant to the foods nutritionally adequate and safe while carrying on breastfeeding to a child not more than two years of age. Uninterrupted breastfeeding results in sufficient milk production.^{4, 5, 6}

It was revealed in a survey conducted in Pakistan that the rate of breastfeeding practices is very low among mothers and these mothers unnecessarily added supplements and/ or stopped breastfeeding. The research conducted in UK had indicated the factors responsible for low breast-feeding rate. These factors included cultural norms and attitude, lack of knowledge of benefits of breastfeeding, promotion of bottle feeding by media.^{5,6}

In African countries the prevalence of exclusive breastfeeding is very low in the children under the age of six months. For example, Zimbabwe, 17%, Zambia, 23%, South Africa, 29%, Tanzania 19%, Uganda 48%. The prevalence of exclusive breastfeeding in East Asia, Pacific and Eastern regions is a little high in the first six month of age that is 43%. Globally, the exclusive breastfeeding rate for 6 months in USA was 49% in 2011, in India the rate was 33% in 2012. The rates were 16% in Urban China and 30% in rural China in 2014.⁶

The advantageousness of exclusive breastfeeding for both infant and mother cannot be overruled. Breast milk contains balanced nutrients required by infants in their first six months of life. Exclusive breastfeeding means that the infant only gets breast milk excluding water, other liquids or solids with the exception of oral rehydration solution, drops/syrups of vitamins, minerals or medicines.³

The valuable health benefits of breastfeeding are protection against diarrhea, pneumonia infections and other childhood illnesses. Breastfed infants have minimal risk of obesity in childhood and adolescence, less prone to diabetes, high intelligent quotient (IQ) and visual acuity, better digestive system, better immunity, better muscle development, and better respiratory function.^{7, 8} World health organization (WHO) says

breastfeeding saves lives and money in both developed and under developed countries equally.⁷

In Pakistan infant mortality rate is 76 per 1000 live births showing that about 400,000 babies are anticipated to die during first year of life every year.¹⁰ The infant mortality rate of the world is 49.4 according to the United Nations and 42.09 according to the CIA World Fact book. It is 66 per 1000 live births according to World bank. The United Nations International Children Emergency Fund (UNICEF) has determined that exclusive breastfeeding can reduce under-five mortality rate by 13% in developing countries. Pakistan demographic and health survey 2012-13 says that the exclusive breastfeeding is done in only 38% children for the first six months of life while bottle feeding rate is 41%.¹³

The factors which determine the mother to remain committed to exclusive breastfeeding, at least during first 6 months of infant's life, vary from country to country. Hence the health education models to maintain breastfeeding practices in different countries would vary in accordance with socio-demographic profile, literacy, religious guidance and cultural perspectives.²¹ In some places stress on economic, comfort, medical reasons and many other facets have failed to derive desired outcomes. It is imperative to address to this problem in a descriptive study design and match the constraints in a comprehensive manner.²¹

METHODOLOGY

Study Design: Descriptive Study

Place of Study: DHQ Hospital Kasur and BHU Rao Khan Wala in district Kasur

Duration of Study: 6 Months from 07-11-2016 to 26-05-2017

Methods:

The study was conducted on 37 subjects, who were mothers with young children under six months of age and were not breastfeeding their children due to any reason. The study was based on direct interview taken at DHQ Hospital Kasur and BHU Rao Khan Wala in district Kasur. The interviews taken by a specially prepared questionnaire, lasted for about half an hour with each mother who met the inclusion criteria. Subjects who were breastfeeding regularly or who were HIV, Hepatitis and other diseases positive were not included. The interviews were conducted in a separate room with least disturbance. Verbal consent was taken by respondents. Confidentiality of data was ensured that data will not be utilized except for the academic purpose. Their socio-demographic profile was recorded including literacy status, socio-economic level, profession, number of children and other family members. The current weight of children was taken by using baby scale machine.

Data was entered on a computer software SPSS version 20. Quantitative data like age was presented by mean and standard deviation while qualitative data education, profession was presented by frequency and percentages. Some of responses were analyzed by proportions while special responses were maintained as phenological data and presented descriptively.

RESULTS

The mean age and standard deviation of the entire study group were 29.3 years \pm 2.4. The largest group (40.5%) was in the younger ages of 21-26 years. By number of children the 27.0% mothers were with one child, 29.7% mothers were with two children. 43.3% were with three or more number of children. The body mass index levels of subjects were recorded by taking measurements of their heights and weights. There were only 13.5% mothers who fell under thin category of BMI ($< 18.5 \text{ kg/m}^2$) with mean BMI and S.D of $16.4(\text{kg/m}^2) \pm 0.8$. BMI of 40.5% mothers was normal with mean BMI and S.D of $22.5(\text{kg/m}^2) \pm 1.9$ and the percentage of overweight females was 45.9% with the mean BMI and S.D of $32.3(\text{kg/m}^2) \pm 4.5$. Out of total only 24.3% mothers were having more than matriculation level of education. 43.2% were up to matriculation and 32.4% mothers were illiterate. The largest group (78.3%) was with marriage duration between 1-9 years with mean of duration and S.D of 4.8 years \pm 2.1. only 13.5% mothers were doing job in schools, 67.5% mothers were house wives and 18.9% females were working as maids. Male infants were 38.7% and 62.2% were female infants. 62.1% infants were under age group of 1-3 months with the mean of age and S.D of 2.2 months \pm 0.7 and 37.9% infants under age group of 4-6 months with the mean of age \pm S.D of 5.2 months \pm 0.6. Up to 75.6% births took place in a health facility and 24.4% child delivery cases were done by midwives at home. Distribution of index children according to their weight was normal (27.0%), underweight (52.1%) and overweight (10.8%). Almost 83.7% females had fed colostrum to their infants. The largest group of children (77.7%) was with the interval range of 12-24 months from previous child. Having fallen sick 52.1% mothers were those who never breastfed to infants. Insufficient quantity of breast milk in 65.2% females was the major reason for no breastfeeding to their infants. 17.3% females who did not want to breastfeed. 30.4% females said that doctor advised them to use infant formula because of acute diseases. There were 50.0% mothers who were breastfeeding, their children, had fallen sick due to malaria, diarrhea and respiratory tract infections and stopped feeding infants. Employment was a barrier according to 75.0% mothers who were irregularly feeding their infants. Important factor identified was insufficient milk production (65.2%) with significance of p-value = <0.05 and Sickness of mothers and consequently advised by doctor to avoid breastfeeding to their infants, was contributing (52.1%) with significance value $p = <0.05$ among mothers who never breastfed their infants under six months of age.

Table 1: History of the breastfeeding practiced for the index children among mothers in district Kasur in the year 2017

Classification of practices adopted by mothers	Number of mothers	Percentage (%)
Never fed	23	62.1 ^a
Initially fed	10	27.0 ^b
Irregularly fed	4	10.8 ^b
Total	37	100.0

Different subscriptions show statistical difference at the level of 0.05%

Table 2: Distribution of index children by birth interval in months from previous child of the same mother in district Kasur in the year 2017

Birth Intervals from previous child (months)	Number of index children	Percentage (%)
< 12months	2	7.4 ^a
12-24months	21	77.7 ^b
>24months	4	14.9 ^a
Total	27	100.0

❖ 10 females were with one child only.

Different subscriptions show statistical difference at the level of 0.05%

Table 3: History of reasons for no breastfeeding among mothers (Multiple reasons given by the mothers) Number of the mothers who did not breastfeed their infants = 23

Reasons	Number of mothers who never fed	Percentage (%)	P-value
Fell sick	12	52.1	<0.05
Insufficient milk	15	65.2	<0.05
Baby did not like	2	8.6	-
Job difficulties	0	0	-
Didn't like to breastfeed	4	17.3	-
For physical beauty	1	4.3	-
Advised by doctor	7	30.4	-
Lack of awareness	2	8.6	-
Advised by family	0	0	-
Advised by friends	0	0	-

Table 4: History of reasons for just initially fed by the mothers to their infants in district Kasur in the year 2017 (Multiple reasons given by the mothers) Number of mothers who just initially fed = 10

Reasons	Mothers who just Initially fed	Percentage (%)	P value
Fell sick	5	50.0	<0.05
Insufficient milk	4	40.0	<0.05
Baby did not like	1	10.0	
Job difficulties	3	30.0	
Don't like to breastfeed	0	0	
For physical beauty	0	0	
Advised by doctor	4	40.0	
Lack of awareness	1	10.0	
Advised by family	3	30.0	
Advised by friends	3	30.0	

Table 5: History of reasons for irregular breastfeeding among mothers in district Kasur in the year 2017 (Multiple reasons given by the mothers) Number of mothers who stated reasons for irregular breastfeeding= 4

Reasons	Number of mothers who Irregularly fed	Percentage (%)
Fell sick	2	50.0
Insufficient milk	1	25.0
Baby did not like	0	0
Job difficulties	3	75.0
Don't like to breastfeed	0	0
For physical beauty	0	0
Advised by doctor	1	25.0
Lack of awareness	4	100.0
Advised by family	4	100.0
Advised by friends	0	0

*The total number of subject was very small, therefore, no significant test was necessary.

DISCUSSION

The study was conducted on 37 subjects, who were mothers with young children under six months of age and were not breastfeeding their children due to any reason. The study was based on direct interview taken at DHQ Hospital Kasur and BHU Rao Khan Wala in the district Kasur. The interviews lasted for about half an hour with each subject. Subjects who were breastfeeding regularly or who were HIV, Hepatitis and other diseases positive were not included. The interviews were conducted in a separate room with least disturbance.

In some local studies the percentage of exclusive breastfeeding was 25% in children of 6 months.²⁸ Another local study showed that 1.08 months was the mean age of exclusive breastfeeding in infants. A local study conducted in Northern Areas of Pakistan brought into light that there was no smooth practice of exclusive breastfeeding among mothers; however, the group of women with low socioeconomic profile and with low level of education was intending to breastfeed their children especially male children.³² As compared to Pakistan (46%), India was showing high rate of exclusive breastfeeding 54% as published in national family health survey 3 (NFHS 3).²⁹

The first most important factor indicated by mothers for no exclusive breastfeeding in current study was insufficient milk production (65.2%) that put the mothers feed their infants by artificial formula milk. Some mothers stated that they initially fed their infants then stopped because of the perception of inadequacy of breast milk (40.0%). The mothers stated that because of inadequate milk production they were not able to exclusively feed infants regularly. Many of them were using infant's formula and cow's milk to feed the infants. According to a study conducted in Pakistan 71% mothers had reported lack of sufficient milk production, while a cohort study performed internationally reported 80% mothers with insufficient breast milk.³¹ this was approximately greater (24%) than our local value. Inadequacy of milk production in mothers could be of reasons such as not to eat well, drink juices, milk, water and other kind of liquid diet intake. Milk production could also be

increased by feeding the child with the interval of two or three hours as documented by WHO, it might prove helpful to keep up milk production and comfort of both mother and child.²

The second factor (30.4%) that was acting as a barrier to practice of exclusive breastfeeding among the subjects was the advice given by the doctors because of some acute illness of mothers and it might be transmitted to infants. The illnesses stated by mothers were included malaria, diarrhea and respiratory tract infections, 50.0% females did irregular breastfeeding or feeding infants for a short period of time due to sickness and 52.1% females were those who never had breastfed their infants after they fell sick. Therefore, conversely, both the doctors and media were playing insufficient role with reference to the exclusive breastfeeding on the whole. There were other reasons which were acting as contributing factors and preventing mothers to practice exclusive breastfeeding to infants for at least six months. The subjects (8.6%) reported that their babies did not like their breast milk; therefore, they had to bottle fed them. About 30.1% females intentionally stopped feeding infants because of job needs. As observed 4.3% females were physical beauty conscious and were doing job. This beauty factor prevented them from exclusive breastfeeding to their children under six months of age.

Mothers becoming sick (50.0%) was another major factor preventing mothers from routinely breastfeeding practices. In a local study conducted in Islamabad this factor was contributing with just 1.9% cases.²⁸ This huge difference could be because of urban and clean settlement, better health facilities and good environmental conditions in Islamabad as compared to the District Kasur where sanitary conditions and health systems were not advanced.

CONCLUSION

Inadequate milk production and mothers' sickness were most commonly stated factors. Other factors responsible for irregular breastfeeding practices among mothers to their infants were advice given by doctors because of sickness, lack of knowledge, compromised family support and job duties. There were fewer cases in which infants were not accepting.

The problem of insufficient breastfeeding habits needs to be explored in greater depth in the rural and urban areas of District Kasur.

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