

ORIGINAL ARTICLE

Factors Affecting Non Compliance with Exclusive Breastfeeding Among Mothers: A Survey at District Hospital DaduALMA KHALID¹, SUHAIL AMAN², IRFAN JHATIAL³, WASHDEV TALREJA⁴, WAJID HUSSAIN⁵, SASUI WADHO⁶, MUHAMMAD PARIAL SHAHAN⁷^{1,2}Lecturer, Department of Community Medicine CMC, SMBBMU Larkana³Senior Registrar, Department of Pediatrics, United Medical and Dental College, Karachi, Pakistan⁴Pediatric Consultant, Taluka Headquarter Hospital Rohri, Sukkur, Pakistan⁵Assistant Professor, National Institute of Child Health, Karachi, Pakistan⁶District Program Coordinator. Provincial TB Control Program CDC III⁷Assistant Professor, Department of Community Medicine CMC, SMBBMU LarkanaCorresponding author: Muhammad Parial Shahani, Email: drmpshahani@gmail.com**ABSTRACT**

Background: According to standard guideline for breastfeeding, it is mandatory to practice exclusive breastfeeding during the first six months of a baby's life to provide the finest physiological support for all neonates. In Pakistan there is visible underuse of exclusive breastfeeding among lactating mothers. This study aims to assess the variables affecting the non-compliance to exclusive breastfeeding among mothers at a district hospital in Pakistan.

Materials and methods: A descriptive cross sectional study design was conducted to in Pediatric OPD at the district hospital Dadu from January to June 2022, breast feeding mothers were the study population, Using a total population sampling method, 224 breastfeeding mothers were interviewed regarding their practice towards exclusive breast feeding. Chi square test of association was used to evaluate the association of variables.

Results: We observed that only 29.5% mothers practiced exclusive breast feeding. All the mothers in the study had a breastfeeding child. Most of the mothers in this study were aged between 20 to 40 years (62%). Nearly 2/3rd of the mothers in the study had no formal education, only 5.8% mothers had higher secondary education. More than 1/5th of the mothers had more than 5 children. The most common reason for non-compliance with the exclusive breastfeeding was the use of formula milk by the mothers followed by insufficient breast milk

Conclusion: Inclination to use formula milk, insufficient breast milk, early weaning and lack of the education among mothers were most common causes of non-compliance towards exclusive breastfeeding. Maternal education level was significantly associated with exclusive breastfeeding. Mass level health education for maternal and child health are recommended.

Keywords Breast feeding, Exclusive breastfeeding, Neonate, Maternal factors,

INTRODUCTION

The American Academy of Pediatrics reiterates its advice to breastfeed exclusively for around six months before introducing weaning or complementary foods for the infant. Breastfeeding should continue for a year or more, provided if both the mother and the child desire it.¹ Despite the advantages and initiatives to support breastfeeding, exclusive breastfeeding is practiced sub-optimally in low- to middle-income nations. Studies have observed that if 90% of infants exclusively breastfed could lower child mortality rates by 11.6% in low-income countries²⁻⁴. It is reported that only 35% of infants are exclusively breastfed around the world⁵. In sub-Saharan Africa, a region with high infant and child mortality rates, only 33% of infants are exclusively breastfed^{5,6}. In Pakistan there is visible underuse of exclusive breastfeeding among lactating mothers. There are a number of causes for this, the most important of which are those that discourage mothers from continuing the practice of exclusive breastfeeding on a social, cultural, and economic level⁷. According to statistics, just 18% of Pakistani women initiate their first breastfeeding and only 37.7% of them continue the practice⁸.

With more than five million children born each year, Pakistan has one of the biggest birth cohorts in the world⁹. Nearly 50% of all under-five deaths are attributed to undernutrition, making malnutrition one of the major underlying causes of child mortality^{10,11}. According to a national nutrition survey, Pakistan's child nutrition is in appalling shape, with one-third of kids underweight, 40.2% stunted, and 17.7% wasted¹². In Sindh province, where the proportion of underweight, stunted, and wasted children is 41.3%, 45.5%, and 23.3%, respectively, the situation is considerably worse¹².

The World Health Organization (WHO) recommends exclusive breastfeeding (EBF), which is regarded as one of the most important and economically advantageous therapies to combat global childhood undernutrition. Additionally, it can reduce illness burden in children under the age of five by 10%¹³. However, Pakistan's EBF implementation has not been up to comparable standards. Only 48% of infants younger than six

months old are exclusively breastfed, while 53% of infants breastfeed until age two, according to the Pakistan Demographic and Health Survey (PDHS)¹⁴.

This study aims to assess the variables affecting the non-compliance to exclusive breastfeeding among mothers at a district hospital in Pakistan. Since the non-compliance towards the exclusive breastfeeding is one common problems among lactating mothers at the study settings, therefore we have analyzed the first hand data regarding breastfeeding practices and associated factors. The mothers were purposefully chosen to discuss their experiences, challenges related to breastfeeding in the first six months after delivery. Though the results can be generalizable to the population yet again we encourage to conduct community based studies on the subject.

METHODOLOGY

A descriptive cross sectional study was conducted to in Pediatric OPD at the district hospital Dadu from January to June 2022, breast feeding mothers were the study population. Using a total population sampling method, 224 breastfeeding mothers were interviewed regarding their practice towards exclusive breast feeding. Socio-demographic factors affecting the breast feeding were also recorded. Chi square test of association was used to evaluate the association of variables. Data was entered and analyzed in g Statistical Package for the Social Sciences version 26.

RESULTS

We observed that only 29.5% mothers practiced exclusive breast feeding (Fig. 1).

All the mothers in the study had a breastfeeding child. Most of the mothers in this study were aged between 20 to 40 years (62%). Nearly 2/3rd of the mothers in the study had no formal education, only 5.8% mothers had higher secondary education. More than 1/5th of the mothers had more than 5 children (Table I). The most common reason for non-compliance with the exclusive

breastfeeding was the use of formula milk (47%) by the mothers followed by insufficient breast milk(21%) (Figure II).

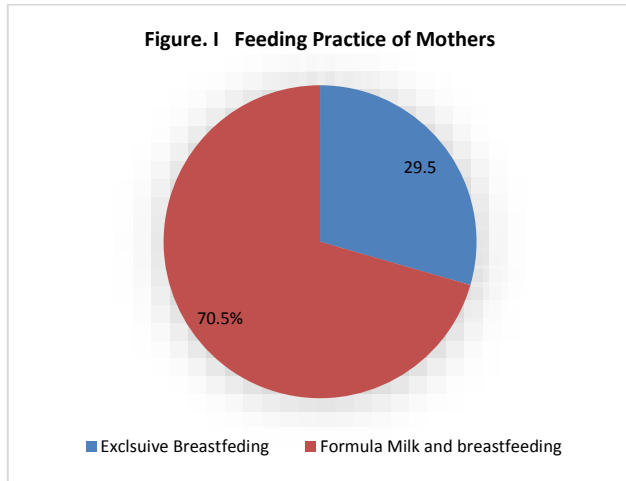
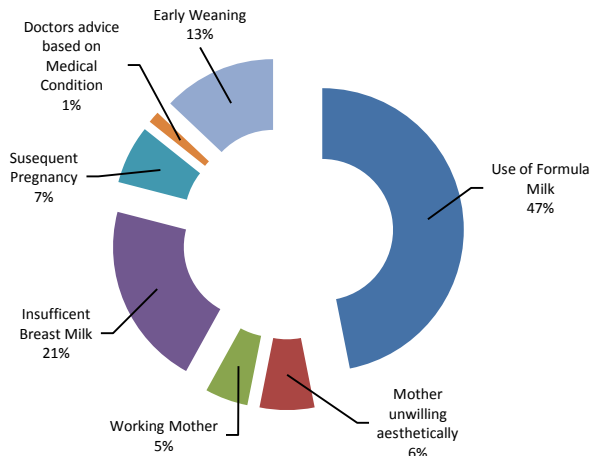


Table 1: Socio-demographic Determinants

Variable	No.	%
Age of the Mother		
<20 years	18	8.0
20-40 years	139	62.1
> 40 Years	67	29.9
Does the Mother have a breastfeeding Baby		
Yes	224	224.
No	0	0.0
Education of Mothers		
No Education	143	63.8
Primary Education	47	21.0
Secondary Education	21	9.4
Higher than Secondary Education	13	5.8
Parity of Mothers		
1 to 2	58	25.9
3 to 4	117	52.2
5 or more	49	21.9
Feeding Practice of Mothers		
Exclusive Breastfeeding	66	29.5
Formula Milk and breastfeeding	158	70.5

Figure. II Factors Affecting Non Compliance with Exclusive Breastfeeding



The Chi Square test of association revealed that the maternal education and parity were significantly associated with exclusive breastfeeding with (p=0.02) and (p- <0.001) however, maternal age didn't appear to have significant association Table II.

Table 2: Chi Square Association between Exclusive Breastfeeding Socio-demographic Determinants

Determinants	No.	Exclusive Breastfeeding		Chi Square p-Value
		Yes	No	
Age of the Mother				
<20 years	18	6.0	12	0.35
20-40 years	139	31.0	108	
> 40 Years	67	29.0	38	
Does the Mother have a breastfeeding Baby				
Yes	224			
No	0			
Education of Mothers				
No Education	143	29.0	114	0.02
Primary Education	47	21.0	26	
Secondary Education	21	8.0	13	
Higher than Secondary Education	13	8.0	5	
Parity of Mothers				
1 to 2	58	9.0	49	<0.001
3 to 4	117	22.0	95	
5 or more	49	35.0	14	

DISCUSSION

The findings of this study demonstrate the demographic, social, and economic variables that have a major impact on non-compliance towards exclusive breastfeeding practices in district Dadu, Sindh, Pakistan. Maternal age, education, parity, early weaning, and insufficient breast milk are among the relevant variables noted in this study. In the present study 29.5% mothers reported to practice exclusive breastfeeding, findings stands in line with several studies reporting that exclusive breastfeeding rates are low in the rural districts of Sindh province^{3,15,16}. In our study, mothers reporting insufficient breast milk were 21 %, However Nasrullah M et al reported higher figures and reported that that insufficient milk production was (65.2%)¹⁶. The medical consultants and antenatal doctors may play their role to counsel mothers regarding dietary practices to improve their breast milk production immediately after delivering the baby.

In our findings the maternal education level was significantly associated with exclusive breastfeeding. Our finding is in line with reported research that women having higher education and knowledge of the benefits of exclusive breastfeeding, and the hazards of bottle-feeding were more likely to practice show greater compliance with exclusive breastfeeding¹⁷. According to findings of this study parity of mother was significantly associated with exclusive breastfeeding. The explanation to this finding is understandable as with passage of time mothers become more experienced in breastfeeding besides understanding the importance of exclusive breastfeeding.

Insufficient breast milk is a frequently reported barrier. In our study, insufficient breast milk was the second most common reason for non-compliance to exclusive breastfeeding. Insufficient milk was identified as the most important obstacle in a hospital-based research in Kasur, Pakistan¹⁸. Perception of having insufficient breast milk has been widely reported as a barrier to exclusive breastfeeding in local and international studies ^{19,20}. These factors affecting non-compliance to exclusive breastfeeding can be controlled by implementing breastfeeding support programmes and promoting awareness in rural areas. However, merely boosting awareness among mothers may not be sufficient. Instead, in addition to breastfeeding mothers, the target audience should also include mothers-in-law and other key family members

²¹. Therefore all parties need to get involved, especially healthcare professionals, mother and family members to address the factors leading to non-compliance towards exclusive breastfeeding (12).

Limitations of the Study: The breastfeeding mothers who participated in the study were elected from the hospital settings to evaluate the factors affecting the non-compliance towards exclusive breastfeeding. The mothers were purposefully chosen to discuss their experiences, challenges related to breastfeeding in the first six months after delivery. Though the results can be generalizable to the population yet again we encourage to conduct community based studies on the subject.

CONCLUSION

It was evident that inclination to use formula milk, insufficient breast milk, early weaning and lack of the education among mothers were most common causes of non-compliance towards exclusive breastfeeding. Maternal education level and parity were significantly associated with exclusive breastfeeding. These observations support the need of additional initiatives to enhance breastfeeding patterns among mothers in Sindh Pakistan. Based on the baby's age and the socioeconomic position of the mother, policy makers and program managers need to devise customized interventions to enhance breastfeeding patterns. Governmental restrictions on the marketing of formula milk in Pakistan should go hand in hand with public relations activities to promote better breastfeeding habits.

Conflict of Interest: Authors declared no any conflict of interest

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Contributing Authors: AK and SA Collected the data, SW analyzed the data, IJ, WT and WH drafted and MP Shahani critically analyzed the manuscript.

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