ORIGINAL ARTICLE

Factors Preventing Exclusive Breastfeeding among Working and Non-working Women

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ABSTRACT

Background: The global target 2030 for EBF is 70% but in Pakistan, only 37.7% of women exclusively breastfeed their children. There has been increase in female work force with diminished workplace breastfeeding support. Investigating the barriers and finding possible initiatives to assist working mothers is needed.

Objective: To highlight and compare the factors affecting exclusive breastfeeding practices among working and non-working women living in various parts of Islamabad.

Methodology: A descriptive, cross-sectional study, carried out from March-August, 2019, using a self-constructed questionnaire with a sample size of 100 mothers belonging to all aspects of society and ethnicity. Data was analysed using SPSS.

Results: In the study population, 26.5% of working and 75.5% of non-working women exclusively breast fed their babies. The main reason for decline of EBF among working women was the compulsion to return to their jobs soon after delivery and non-working women found EBF as too tiring along with breast tenderness.

Conclusion: EBF practices were found to be significantly more common in non-working mothers.Better maternity leave periods and timings, combined with breastfeeding friendly environment to facilitate working mothers can help tackle the enigmatic issue of mothers not continuing EBF with full commitment.

Key words: Exclusive breast feeding, working women, housewives

INTRODUCTION

The practice of exclusive breastfeeding (EBF) has significant established benefits for both mother and the child. Breastfeeding provides very high levels of the immunoglobulins predominantly IgA, especially in the colostrum. These provide protection against diarrhea and acute respiratory infections that are two of the major causes of infant mortality in the developing world. It is also to improve the child's response vaccinations. Exclusive breastfeeding, that is breastfeeding for the first six months of an infant's life, is ineluctable because it stimulates an infant's immune system and confers cognitive benefits as well. 2 Mother's milk comprises of essential fatty acids that are required for the growth of the child's brain, blood vessels and eyes; these are not readily available in other forms of nutrition.2Children who are not breastfed perform poorly in intelligence tests and are more prone to become overweight or obese.3 Breastfeeding also has beneficial effects for the mother's health by decreasing risks of developing breast & ovarian cancer, type II Diabetes Mellitus and heart disease. It also promotes birth spacing by lactational amenorrhea.4

According to UNICEF the global breastfeeding trends since 1990 have remained constant with 36 per cent of children under six-months old being exclusively breastfed in 2012.⁵ In Pakistan, increasing numbers of newborns are enjoying the benefits of breastfeeding. According to the latest National Nutrition Survey (2018) the proportion of children put to breastfeeding within one hour after delivery increased from 40 per cent in 2011 to 45.8 per cent in 2018.Likewise exclusive breastfeeding has increased from 37.7 percent in 2011 to 48.4 per cent in 2018⁶.

A third world country like Pakistan suffers from high mortality and morbidity rates of infants within the first year of life. The most common causes of fatalities are diarrhea, acute respiratory infections and malnourishment. According to UNICEF only four out ten babies are exclusively breastfed in Pakistan, which is less than the least developed countries⁶. The low breastfeeding rates are largely driven from working mothers who face several obstacles to routine breastfeeding.

The most common factors are lack of family support, short span of leaves from workplaces and nonconventional areas for breastfeeding at the workplaces which further lead to decrease in breastfeeding in urban areas. In these situations majority of the mothers are either solebread earnersor they add to their household income to meet their basic requirements. Although working women are less likely to exclusively breastfeed as compared to non-working women the demographic and health survey of Pakistan 2012-2013 states that the rates of exclusive breastfeeding and non-exclusive breast feeding are 38% and 67% respectively. 10

All these facts support the case that a lot of women, working or not, can be encouraged to exclusively breastfeed if they are properly supported to carry out this practice. This study was conducted with the intention to identify the factors preventing exclusive breast feeding in working and non-working women of Islamabad. Pakistan.

MATERIALS AND METHODOLOGY

The survey was conducted in the Federal Capital, Islamabad which lasted for six months from March to August 2019. 100 mothers were questioned who belonged to various private, public institutions and also multiple residential areas across the city. The sample size of 100 was calculated using the formula $\frac{z^2pq}{d^2}$ z=1.96, p=0.377,

q=0.623, d=0.1, applying 10% inflation, adjusted sample size = 100. These study participants were selected using the non-probability convenience sampling technique.

A customized questionnaire was generated by reviewing multiple templates used in existing literature and inculcating all important points highlighted within them. We also added our own modifications to ensure that the questionnaire was not only self-explanatory but also well detailed leaving no room for ambiguity. The inclusion criteria were women living in Islamabad, both working and unemployed, who were married and had at least one living child. Exclusion criteria for the study included women not residing in Islamabad, those who were nulliparous or had underlying medical conditions that restricted their capacity to breastfeed.

Data collection and analysis: The questionnaire was divided into three main sections. The first section aimed to document complete socio-demographic data about the mother; such as age, income, mothers' occupation, education and residence.

The second section consisted of questions about the maternal profile and obstetric history; medical history, parity, antenatal visits, mode of delivery, initiation of breast feeding, knowledge about benefits of exclusive breastfeeding, colostrum received by child etc. It also contained a detailed question about factors preventing exclusive breast feeding in mothers such as pain in breast, production of insufficient milk, lack of privacy, time restrictions, occupational factors, fatigue, lack of knowledge, any maternal health problems or congenital anomaly in child due to which exclusive breastfeeding (EBF) was not possible.

The third and final section was oriented towards working women, asking questions about their type of occupation, working hours, additional help/helper at home, reason for working and provision of specific breastfeeding areas at workplace.

In order to make data collection and compilation as seamless as possible, the language chosen for the questionnaire was English as it not only made it easy for us to collect and compile the data, the majority of the study population was also fluent in English. Those who were not well conversant in English were assisted with Urdu translation to complete the form. Data analysis was done using SPSS statistical package (v.23).

RESULTS

One hundred (100) women, both working and non-working, living in Islamabad were included in this study. Women with children aged 6 months and above were included in the study. Most of the study population comprised of women between 25-35 years of age (61%), followed by 35-45 years (20%) and the smallest portion was made by the age group 18-25 (19%). There was a significant association between age group and EBF. 25-35 years old were more likely to practice EBF (p-value 0.014). A major section of the women we surveyed were literate (86%) with only a small portion of them being illiterate (14%), and there was an association between level of education and EBF with higher prevalence of EBF among those having highest level of education(p-value 0.007). Exclusive breastfeeding was more common in women who had knowledge about it (p-value 0.036). There was no association between EBF and Family Income (p=0.073), and EBF and the gender of the child (p=0.692).

Table 1: Association of Socio-demographic characteristics with breastfeeding practices.

	Exclusive	Breastfeeding	Non-Exclusive	Total	P-Value
	practice		Breastfeeding practice		
Age					
What was the age of the mother?					
18-25	15		4	19	
25-35	25		36	61	0.014
35-45	9		11	20	
Total	49		51	100	
Family Income					
What was the monthly income of the family?					
Upto 50,000	21		25	46	
50,000 to <100,000	17		8	25	0.073
>100,000	11		18	29	
Total	49		51	100	
Education				•	
What was the qualification of the mother?					
Illiterate	10		4	14	
Primary education	3		8	11	
Up to Matric	8		16	24	0.007
Fsc/FA	11		2	13	
Bachelors and above	17		21	38	
Total	49		51	100	
Knowledge of EBF					
Did the mother have knowledge regarding exclusive					
breastfeeding?					
Yes	35		26	61	0.036
No	14		25	39	
Total	49		51	100	
Gender of child				•	
What was the gender of the child?					
Male	24		27	51	0.692
Female	25		24	49	
Total	49		51	100	

Table 2: Association between breastfeeding practice and working status of women

	Working women n(%)	Non-working women n(%)	Total	P-value
Breastfeeding practice				
How do you breastfeed your child?				
Exclusive BF	13 (26.5%)	36 (73.5%)	49 (100%)	
Not exclusive BF	28 (54.9 %)	23 (45.1%)	51(100%)	0.004
Total	41 (41%)	59 (59%)	100 (100%)	

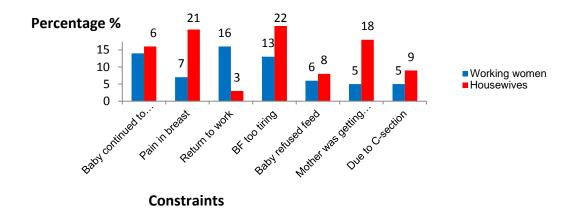


Figure 1: Factors preventing exclusive breastfeeding

Table 3: Association of occupational characteristics with breastfeeding practices

	Exclusive breastfeeding	Non-exclusive breastfeeding	Total	P-value	
Type of job					
Doctor/Nurse	5	15	20		
Teachers/Office jobs	6	7	13	0.460	
Maid/Aaya	2	6	8		
Total	13	28	41		
Workplace setup					
Government	4	10	14		
Public	9	18	27	0.523	
Total	13	28	41		
Working hours					
4-8 hours	6	23	29	0.029	
>8 hours	7	5	13		
Total	13	28	41		
Provision of Exclusive breastfeeding at workplace					
Yes	3	12	15		
No	10	16	26	0.305	
Total	13	28	41		
Maternity leave					
0-6 weeks	6	15	21	0.744	
6-12 weeks	7	13	20		
Total	13	28	41		
Helper/Nanny		•	•	•	
Yes	5	20	25	0.044	
No	8	8	16		

We compared the prevalence of exclusive breastfeeding in working women and non-working women in Table 2. The results show that exclusive breastfeeding is less prevalent in working women (26.5%) as compared to non-working women (73.5%). Chi square test was applied to see the association between breastfeeding practice and working status of women. The calculated value was $\alpha = 0.05$. Thus, a significant association between EBF with the working status of a woman was observed.

Figure 1 shows the factors preventing exclusive breastfeeding. It was observed that amongst the

constraints of exclusive breastfeeding, most of constraints were faced by non-working women. Maximum number of non-working women complained of breastfeeding being too tiring (22%) followed by; breast tenderness (21%), mother experiencing weakness (18%) and baby being continuously hungry (16%) whereas the major complaints of working women consisted of returning to work (16%) alongside baby continuing to be hungry (14%) and breastfeeding being too tiring (13%). Minor complaints included baby refusing feed and inability to BF due to C-section stitches.

Table 3 shows the relationship between mother's occupational characteristics and their association with exclusive breastfeeding practices. Working hours had an association with the practice of exclusive breastfeeding (p-value 0.029). Other than that having a helper/nanny at home for the baby decreases the practice of exclusivebreastfeeding (p-value 0.044).

DISCUSSION

Breast-milk is extremely crucial for the proper growth of a newborn especially during the first 6 months of life. It provides nutrition as well as boosts the immunity of a child. The lack of exclusive breastfeeding is one of the major causes of infant mortality. The aim of our study was to find out the factors which prevent the exclusive breastfeeding (EBF) among the working and non-working women.

In the present study, we evaluated the prevalence of EBF amongst women in Islamabad based on their socio-economic profile, age, occupation and educational status. We also assessed the constraints faced by working and non-working women. It was observed that the major issues faced by the women, that prevent EBF, were tiredness/fatigue, followed by the baby's continued hungriness, Breast pain and having to return to work. Similar results were found in a study that took place in Egypt which further supports these results.¹¹

Moreover,the same study conducted in Egypt observed that as breast milk is a cheaper and more easily accessible form of nutrition for a family belonging to a low income tier, such women prefer breast feeding their babies so that they use their resources towards other requirements. 11 However, our study showed no significant association between income and exclusive breastfeeding practice; the main reason for which could be our small sample size.

The present study shows that the middle aged women (35-45 years) had better awareness about the EBF practices and its benefits on child's health. This outcome is also supported by a study conducted in North West Ethiopia which showed that younger mothers tend to have less knowledge about benefits of breastfeeding during initial 6 months. Furthermore, the uncertainty about producing enough breast milk hinders the practices of EBF among young women. 12

The prevalence of EBF in our sample population was found to be more among the non-working women. As backed by an Ethiopian study, it was noted that the major reason behind this is the fact that breast milk is the cheapest and easily accessible form of nutrition that can be given to a child. This particular finding was also consistent in the study which reveals that the working women spend their time away from home during the work hours and face more constraints in EBF practices. Our study, however, contradicts the latter part of this study. We concluded that the major reason behind this could be the fact that the working women due to their busy schedule spend lesser time in breastfeeding and hence encounter lesser constraints than non-working mothers who exclusively breastfeed more.

In the present study, a prominent number of women agreed that the reason for not exclusively breastfeeding was the perception that their infant was still feeling hungry

after being breastfed. This finding was supported by a study which explained that the common misconceptions of mothers about insufficient milk production as well as understanding the signs and signals the child gives pertaining to satisfaction from feeding off the mother's milk often leads them to believe that they should look for an alternative source of milk (such as weaning and formula) compared to EBF.¹¹

There was a marginal difference in the relationship between gender and breastfeeding in our study. Female children were slightly more likely to receive Exclusive Breastfeeding as compared to male children. This was supported with a study named "Factors associated with exclusive breastfeeding in Accra", that said that despite socio-cultural differences in the Ghanaian region pertaining to genders, female children received a better percentage of EBF than males.¹³

Although our study did not conclude a significant association between period of maternity leaves and exclusive breastfeeding practice but a study conducted in India in 2015 observed that there is a major decline in breastfeeding rates in the third and fourth months of a baby's life thatimplies end of maternity leave for the working mothersgesturing their compulsion to return to work¹⁴.

The present study highlights return to work as the biggest factor preventing women from exclusively breastfeeding. Various other studies have recognized that exclusive breastfeeding rates have a tendency to be higher in women who have longer maternity leaves or those who don't return to work¹⁵⁻¹⁷. The reason for the difference between our study and theirs could be the small sample size as it doesn't represent the population at large.

It was observed that 61% of the women knew about the concept and benefits of exclusive breast feeding and there was a significant association between knowledge of exclusive breastfeeding a mother had and her breastfeeding practices. This observation is supported by a cross-sectional study conducted in Pakistan in 2017 that concluded that a knowledge about EBF, training of proper method and importance of colostrum milk were noteworthyreasonsthat showed an increase in the prevalence of exclusive breastfeeding.¹⁸

In Pakistan, there are various laws that cover the issue of maternity and its benefits; Section 4 of West Pakistan Maternity Benefit Ordinance, 1958 states that "Female employees are entitled to a maximum of twelve weeks (or 3 months) of maternity leave with full pay. The six-week post natal leave is compulsory. The maternity leave in public sector is also 90 days (3 months) and during this time, wages are paid in full" under the conditions that "The maternity leave is awarded with full pay. The qualifying condition is that the women must be working in enterprise at least four months prior to the date of delivery of her child."19 However, apart from these laws, the Constitution, under its article 37, sub-section e, also requires the state to ensure the maternity benefits for women in employment.²⁰ Despite all these laws, our study shows that more 50% of the working women do not get sufficient maternity leaves and are required to get back to work decreasing the prevalence of EBF amongst them.

CONCLUSION

There are various factors which play a role in the prevention of exclusive breastfeeding among working women, most important of which includes returning to work. In contrast, non-working mothers found exclusive breastfeeding as being too tiring alongside numerous other complaints including pain in breast and havingphysical weakness. A general trend was seen that non-working women faced more constraints than working women. It can be assumed that since working women are more busy and active in their day to day routine juggling household and office duties it leads them to exclusively breastfeed less than non-working women. Also, we observed that most working women have helpers/workers at home to help with the baby. Exclusive breastfeeding practices were lower in working women because very few organizations/ institutions had separate areas allocated for this activity despite the fact that there has been a rise in the female work force population.

Recommendations

- There should be awareness programs conducted for girls in college and universities giving them early information on the importance of EBF.
- Education and enlightening of parents for better EBF knowledge.
- Counselling sessions for parents. To specify roles and responsibilities of partners in promoting EBF practices
- Provide separate areas for EBF at workplaces and create a breastfeeding friendly environment so mothers don't feel uncomfortable.
- Better maternity leave periods and timings so mothers don't have to return back to work at the prime time when their baby has to be exclusively breastfed.
- More efforts should be committed towards gaining information from both rural and urban work places.
- 7. Our study serves as a great platform for further interventional researches on this topic.

REFERENCES

- UNICEF. Progress for children: a report card on nutrition: Unicef; 2006.
- Elyas L, Mekasha A, Admasie A, Assefa EJljop. Exclusive breastfeeding practice and associated factors among mothers attending private pediatric and child clinics, Addis Ababa, Ethiopia: a cross-sectional study. 2017;2017.
- Stuebe A. The risks of not breastfeeding for mothers and infants. Reviews in obstetrics and gynecology. 2009;2(4):222.
- Hunegnaw MT, Gezie LD, Teferra ASJIbj. Exclusive breastfeeding and associated factors among mothers in

- Gozamin district, northwest Ethiopia: a community based cross-sectional study. 2017;12(1):30.
- Woods NK, Chesser AK, Wipperman J. Describing adolescent breastfeeding environments through focus groups in an urban community. Journal of primary care & community health. 2013;4(4):307-10.
- UNICEF. Why family-friendly policies are critical to increasing breastfeeding rates worldwide - UNICEF 2019, August 01 [Available from: https://www.unicef.org/pakistan/press-releases/why-family-friendly-policies-are-critical-increasing-breastfeeding-rates-worldwide.
- Soomro J, Shaikh Z, Bijarani S, Saheer TJE-EMHJ. Factors affecting breastfeeding practices among working women in Pakistan. 2016;22(11):810-6.
- Soomro JA. Factors affecting breastfeeding practices in working women of Pakistan 2015.
- Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign SJIbj. Factors associated with exclusive breastfeeding practices among mothers in Goba district, south east Ethiopia: a cross-sectional study. 2012;7(1):17.
- Demographic P. Health Survey 2006–7. Islamabad and Calverton, MA: National Institute of Population Studies and Macro International Inc.: 2008, 2015.
- Mohamed S, Zaki NA-E, Thabet AMJIJoN, Science H. Barriers of Initiation and exclusive breast feeding among infants. 2016;5(2):01-10.
- Woldie TG, Kassa AW, Edris MJSJPH. Assessment of exclusive breast feeding practice and associated factors in Mecha District, North West Ethiopia. 2014;2(4):330-6.
- Aidam BA, Perez-Escamilla R, Lartey A, Aidam JJEjocn. Factors associated with exclusive breastfeeding in Accra, Ghana. 2005;59(6):789.
- Kumar V, Arora G, Midha IK, Gupta YPJIJoM, AIDS. Infant and young child feeding behaviors among working mothers in India: implications for global health policy and practice. 2015;3(1):7.
- Fein SB, Roe B. The effect of work status on initiation and duration of breast-feeding. American journal of public health. 1998;88(7):1042-6.
- Guendelman S, Kosa JL, Pearl M, Graham S, Goodman J, Kharrazi M. Juggling work and breastfeeding: effects of maternity leave and occupational characteristics. Pediatrics. 2009;123(1):e38-e46.
- Islam K, Samad N, Haque M, Sadia A, Adhikary A, Ahmed NJJNFS. Constraints of exclusive breastfeeding practice among breastfeeding mothers of Dhaka slums. 2017;7(637):2.
- Sabin A, Manzur F, Adil SJPjoms. Exclusive breastfeeding practices in working women of Pakistan: A cross sectional study. 2017;33(5):1148.
- Pakistan Go. THE PUNJAB MATERNITY BENEFIT ORDINANCE, 1958. 22 December 1958.
- Pakistan Go. Constitution of the Islamic Republic of Pakistan. 10 April 1973.