Breastfeeding Practices and Their Association with Socio-Demographic Profile of Women Who Delivered Within Last One Year in Lahore, Pakistan

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Abstract

Objetive: To assess Breastfeeding practices and their association with sociodemographic profile of women who delivered within last one year in Lahore, Pakistan.

Materials and Methods: An analytical cross-sectional study was conducted in Akhtar Saeed Trust Teaching Hospital and Farooq Hospital Westwood branch Lahore from April 2022 to September 2022. A total of 210 record-based data of patients who delivered their babies in last one year in these hospitals were included. Nonprobability, convenience sampling technique was used. A self-structured questionnaire was used for data collection through phone calls. Data was entered and analyzed in SPSS version 23. Association between variables was assessed by applying chi-square test of significance and p-value of <0.05 was taken significant.

Results: Mean age of the participants was 28.86 ± 35 years. Out of total 210 study participants, the frequency of breastfeeding among women who delivered within last one year was 190(90%). Mothers who breastfeed their child shows significant association with provision of supplements to babies upon instruction by health care staff ($p=0.00$), not giving pre lacteal feed ($p=0.00$) and not using pacifiers ($p=0.00$)

Conclusion: Frequency of breastfeeding practices in the present study was optimal. Time of initiation breastfeeding after delivery, not giving pre lacteal feed, no use of pacifiers, mother's perception about recommendation of supplements to baby were strongly associated with maternal practice of breastfeeding.

Key words: Breastfeeding practices, infants, sociodemographic

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Introduction

Proper nutrition during the first thousand days of human existence is extremely important since it reflects general health state and reduces the probability of becoming prone to numerous chronic disorders.[1] According to the World Health Organization, newborns should only be breastfed for the first six months, after which supporting meals and nursing should be continued until they are two years old.[2] Worldwide prevalence of breastfeeding is only 41% among women those who started breastfeeding after one hour of delivery and only 42% of women provided exclusive breastfeeding to their children.[3] A study conducted in Australia shows 91% of women after delivery initiate breastfeeding.[4] Prevalence of exclusive breastfeeding is less in developed countries as working mothers cannot spare enough time while in developing countries the prevalence has increased to 37%5 Only 24-26% of neonates in South Asian nations such as Pakistan, Bangladesh, and India receive breast milk in the first 24 hours following birth.[6] In Pakistan, the percentage of breastfeeding is 77% for non-employed and 23% for employed women.[7] World Health Organization UNICEF Pakistan reports that only 34.3% mothers practice exclusive breastfeeding and 3.5% mothers are involved in early initiation of breastfeeding.[8] A study conducted in Lahore in 2017

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found that just 42% of newborns received colostrum as their primary dietary source. However, according to another study conducted at Jinnah Hospital Lahore, over 80% of mothers gave sole nursing, while 84% continued breastfeeding with complementary food.[9] Factors affecting breastfeeding practices include soreness of nipples, age of mothers, number of children, nighttime feeding, lack of knowledge among healthcare professionals, unhygienic measures, cultural credence, and lack of counseling.[10] The current study aimed to assess the breastfeeding practices and knowledge among women delivered within last one year at tertiary care hospitals in Lahore, Pakistan.

Materials and Methods

This study was carried out at Akhtar Saeed Trust Teaching Hospital, EME Sector, and Farooq Hospital, West Wood Branch, Lahore and included women from all socioeconomic backgrounds. This idea was conceived in April 2022 and got completed by September 2022. An Analytical Cross-sectional survey was the study design and it was conducted on record-based data of patients who delivered in these hospitals in last one year. Approval was taken from IRB and certificate was generated on 07-06-2022 with reference number M-22/85/CM. Before collecting data, the medical directors of the Farooq Hospital West Wood in Lahore and the Akhtar Saeed Trust Teaching Hospital in the EME Sector provided approval. Rao Soft calculator was used to estimate the sample size, at a confidence level of 95% and margin of error at 5% with prevalence of 38%, the sample size calculated was 210. Nonprobability, Convenience sampling technique was used to collect required sample. All women who gave birth in Akhtar Saeed Trust Teaching Hospital, and Farooq Hospital West Wood Lahore were included while women who were not willing to participate and women with still births and fetal loss were excluded. Data collection was done using a self-structured questionnaire. Data was collected through phone calls, which were retrieved from medical records. Pilot study conducted initially on 20 participants to make required changes in forms. Data was analyzed using SPSS (statistical package for social sciences) version 23. It was presented in the form of frequency tables and pie charts. Bivariate analysis was conducted to access the differences in breastfeeding practices with sociodemographic profile, women practices, and attitudes of health care professionals by applying chi square test of significance and p value was fixed at ≤0.05 to find out significant associations.

Results

The mean age of the participant's was 28.8±6.35 years. The frequency of breastfeeding practices among women

Table 1: *Sociodemographic status of the participant's (n=210)*

Characteristics	Frequency(n)	Percentage (%)
Age in years		
18-25	73	34.8
26-35	106	50.5
36-45	31	14.8
Education status		
Primary	47	22.4
Middle	44	21
Matric	33	15.7
Intermediate	30	14.3
Graduate	49	23.3
Post-Graduate	7	3.3
Occupation		
Unemployed	189	90.0
Employed	21	10.0
Family Type		
Nuclear	99	47.1
Joint	111	52.9
Age of last-born child		
Less than 3 months	51	24.3
3-6 months	102	48.6
7-12 months	57	27.1
Gender of last-born child		
Male	111	52.9
Female	99	47.1
Mode of Delivery		
C-Section	129	61.4
Vaginal	81	38.6
Place of birth		
Trust Hospital	95	45.2
Private Hospital	115	54.8
Breastfeeding Practices/breastfed their child		
Yes	190	90.5
No	20	9.5
Exclusive breastfeed		
Yes	68	35.8
No	122	64.2
Type of alternative milk used		
Formula milk	64	52.4
Cow milk	51	41.8
Buffalo milk	7	5.7
Use of pacifiers		
Yes	79	37.6
No	131	62.3

who delivered within last one year was 90% and 35% of mothers provided exclusive breastfeed to their last-born child. Women having age group of 26-35 years, intermediate education, less than or equal to three children, male gender, caesarean mode of delivery, time of initiation breastfeeding one day after delivery, pre lacteal feed not given to baby and those who received guidance by health care staff for exclusive breastfeeding showed higher rates of breastfeeding. Bivariate analysis shown in table 2 shows significant association with provision of supplements to babies upon instruction by health care staff (p=0.00), pre lacteal feed(p=0.00) and use of pacifiers(p=0.00).

Table 2: *Association between breast feeding practices, sociodemographic profile and attitudes of health care professionals.*

Variables	Breastfeed given	Breastfeed not given	Total	p-Value
Age of mother				
18-25	66(90.4%)	7(9.5%)	73	
26-35	98(92.4%)	8(7.5%)	106	0.35
36-45	26(83.8%)	5(16%)	31	
Education				
Primary	43(91.4%)	4(8.5%)	47	
Middle	40(90.9%)	4(9%)	44	
Matric	28(84.8%)	5(15.1%)	33	0.26
Intermediate	30(100%)	0(0%)	30	
Graduate	42(85.7%)	7(14.2%)	49	
Postgraduate	7(100%)	0(0%)	7	
Parity				
Less than or equal to 3	149(90.3%)	16(9.6%)	165	0.87
More than 3	41(91.1%)	4(8.8%)	45	
Age of last-born child(months)				
Less than 3	46(90.1%)	5(9.8%)	51	
3-6	94(92.1%)	8(7.8%)	102	0.65
7-12	50(87.7%)	79(12.2)	57	
Gender of baby				
Male	101(90.9%)	10(9.0%)	111	0.78
Female	89(89.8%)	10(10.1%)	99	
Mode of delivery				
Caesarean	114(88.3%)	15 (11.6%)	129	0.19
Vaginal	76(93.8%)	5 (6.2%)	81	
Pre-lacteal feed given to baby				
Yes	125(86.8%)	19(13.1%)	144	0.00
No	65(98.4%)	1(1.5%)	66	
Baby put on breast inside labor room				
Yes	83(91.2%)	8(8.8%)	91	0.70
No	107(89.9%)	12(10.1%)	119	
Trouble while breastfeeding in early hours after delivery				
Yes	64(90.1%)	7(9.9%)	71	0.90
No	126(90.6%)	13(9.4%)	139	
Received suggestion about feeding position				
Yes	89(92.7%)	7(7.3%)	96	0.31
No	101(88.6%)	13(11.4%)	114	
Received guidance by health care staff for exclusive breast feeding				
Yes	130(90.9%)	13(9.1%)	143	0.75
No	60(89.6%)	7(10.4%)	67	
Health care staff informed about WHO feeding policy				
Yes	68(89.4%)	8(10.6%)	76	0.70
No	122(91%)	12(9%)	134	
Receivedsupplies by Health care staff that promote breastmilk				
Yes	58(93.5%)	4(6.5%)	62	0.32
No	132(89.2%)	16(10.8%)	148	
Use of pacifiers				
Yes	65(82.2%)	14(17.7%)	79	0.00
No	123(95.3%)	6(4.6%)	129	
Mother's perceptions about recommendation of supplements to baby				
Inadequate milk supply	87(93.5%)	6(6.5%)	93	
Doctor's instruction	22(78.6%)	6(21.4%)	28	0.00
Difficulty in breastfeeding	6(54.5%)	5(45.5%)	11	
Health issues	10(83.3%)	2(16.7%)	12	
Mother's opinions about benefits of breastfeeding				
Easy to digest	95(90.5%)	10(9.5%)	105	
Prevent from diarrhea and infections	79(89.8%)	9(10.2%)	88	0.94
More convenient than formula milk	14(93.3%)	1(6.6%)	15	
Ensure child spacing	2(100%)	0(0%)	2	

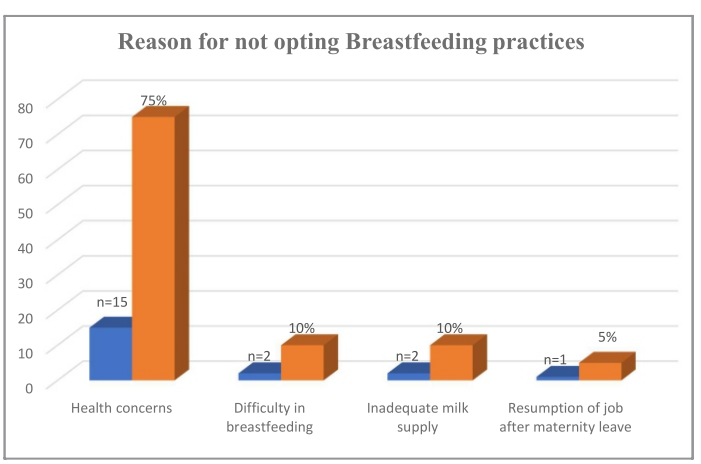

Figure1: *Reason for not opting Breastfeeding practices.*

Discussion

Breast-feeding is recognized as a public health priority world-wide, for the health of newborns and women. The World Health Organization recommends that infants should only be fed breast milk for the first six months of their lives, followed by supplementary foods until they are between one and two years old. The aim of this study was to establish the breastfeeding practices and their association with sociodemographic profile of women who delivered within last one year in Lahore. The frequency of breast-feeding practices among women who delivered within last one year was (n=190)90% in this study whereas in a similar study conducted in Dera Ghazi Khan the 93% of mothers breastfed their youngest child.[11] The present study showed that were 35.8% babies who were exclusively breastfeed whereas in another study conducted in Poland 57% of women exclusively breastfeed their infants.[12] This may be due to the fact that the woman in our study were less informed and less educated as compared to the women of Poland. In this study breast feeding was reported higher in the mothers who studied till intermediate as of them breast fed their child in contrast to a study conducted in Southern Punjab where the mothers who achieved more than middle school education were the highest to breastfeed their child.[13] It depicts that education plays a predominant role in informing public about advantages of breast feeding.

In this study, mothers with three or more children were more likely to breast feed their child which was similar to results of another study conducted in rural area of North India where significant association was found between breast feeding and increased parity.[14] It is therefore safe to deduce that mothers with subsequent pregnancies become more and more aware regarding the advantages of breast feeding their child.

Thirty-five mothers (48%) in the present study started breast feeding their child right after delivery. These results are similar to findings in a study conducted in India where initiation of breast feeding started immediately after birth was found in 40% of the cases.[15] The most prevalent cause cited in this survey for failure to breastfeed is related to maternal health concerns (75 percent) and poor milk production was used as an excuse by a minority of moms (10%). Contrary to these findings in a study conducted in India, the leading cause of breastfeeding failure was the perception by 41% of mothers that their breast milk was insufficient.[16] In this study 88.3% c-section females breast fed their children as compared to 93.8% who underwent vaginal delivery. In another similar study 42% mothers breast fed their child as compared to 28% of mothers who delivered via c-section.[17] This indicates that c-section was a hinderance for mothers in breastfeeding their children. In this study 98.45% of breastfed babies were not provided with prelacteal feed. However, a cross-sectional study conducted in Karaikal depicted that majority 75.6% of the mothers gave sole breastmilk and rest 24.4% introduced prelacteal food.[18] In this study, 90.6% of the breast-fed children did not face any trouble feeding in early hours after delivery. Similar results were observed in a cross-sectional study conducted in Denmark where 60% of the mothers faced no problems in breastfeeding their child.[19] In this study 89.4% mothers said that they were informed by the healthcare staff regarding WHO feeding policy whereas final outcome of a study conducted in India demonstrated that merely 15.60% mothers provided breastfeed to their children triumphantly in accordance with The Baby-friendly Hospital Initiative (BFHI), a global effort launched by World Health Organization to promote breastfeeding.[20] In this study, not using pacifiers as significantly associated (p-value 0.00) with breast feeding whereas in a previous study of United Kingdom, utilization of pacifiers, did not influence the prevalence or extent of exclusive and partial breastfeeding till four months of age in breastfeed infants who were full term and healthy.[21] In this study 50% mothers highlighted easy digestion of breast milk as the most important reason for motivating them to breast feed their child. In another study conducted in Shujabad, Pakistan 34% of mothers (n=17) named easy digestion to be a reason for breast feeding as compared to 58% who thought it prevents from diarrhea.[22] In this study inadequate milk supply was reported highest (93.5%) in breastfeeding mothers as a reason to give supplements to newborns. In another study conducted in Manitoba, Azad et al reported 27% of babies received supplements as the mothers thought milk supply was not sufficient.[23] The methods employed to acquire the data were uniform. First, the small participant population may have led to inadequate analysis is a weakness of this study. Secondly, because the participants' nursing habits were assessed using questionnaires filled out via phone interviews, this method is susceptible to social desirability bias, a problem that is frequently observed in questionnaire-based studies. All interviewers had extensive training prior to the start of the data collection process to reduce the captious verbal and nonverbal interaction and diminish the threat of social desirability bias.

Conclusion

In the current study, 90% of women breastfed their babies. Not giving pre lacteal feed, not using pacifiers and mother's opinion of the baby's supplement suggestion were all significantly associated with maternal practice of breastfeeding. Through community activities that support practical education, issues that affect breastfeeding should be addressed. Factors which influence breastfeeding should be addressed to the community through interventions which promote practical education.

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