Original Article

Knowledge & Practices of Breastfeeding in Working and Non-working Mothers

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ABSTRACT

Objective: To assess knowledge and practices of mothers towards breastfeeding and identify the association of socio demographic factors with knowledge and breastfeeding practices among mothers.

Methodology: A descriptive cross-sectional study conducted in outdoor departments of Pediatrics & Gynecology in a tertiary level hospital in Lahore. The study population was mothers having children ≤5 years of age. Study variables included socio-demographic factors, knowledge & practice factors. The calculated sample size was 362 and a purposive sampling technique was applied. The data collection instrument was a self-developed questionnaire. The data analysis plan was: descriptive statistics, frequency trends, and Chi-square test of significance application.

Results: Demographic profile showed 75.5% of mothers were housewives and 24.3% working mothers; 42% were living in a nuclear family, 58% in an extended family. Knowledge level revealed that 36.5% knew breastfeeding (BF) should be done up to 2 years; 75.5% knew that it should be given on demand; 91% knew that colostrum should be given to the newborn. Practice level assessment showed 44.5% had initiated BF immediately after birth; 79.9% had given colostrum; and 34.9% had done BF > one year. Significant association <0.05 was found between socio-demographic factors (status of mother, type of family, total family income, mode of delivery) and knowledge and practice variables.

Conclusion: There is an important role of an extended family system that could act as a support pillar to enhance the practice of breastfeeding practices among mothers. Furthermore, at home mothers and lower socio economic class also play an important role as contributing factors in continuation of BF >6 months.

KEYWORDS: Breastfeeding, initiation, knowledge, newborn, practice.

INTRODUCTION

Breastfeeding behaviors are mostly dependent upon the specific cultural norms and perceptions of the mothers that actually guide them towards duration and frequency of breastfeeding to the infant. [1] Breast milk prevents malnutrition in the newborn and boosts up its immunity.[3]Timely and early initiation of breastfeeding by the mothers play an important role in control of infections and mortality in infants.[4] The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) have strongly recommended all nursing mothers to initiate breastfeeding within first hour after birth of the newborn and then continue with exclusive breastfeeding for next six months; specifically, in low economic and developing countries.[5]The WHO also advocates that breastfeeding is to be continued along with complementary feeding up to the age of two years or beyond.[5] However, many unhealthy breastfeeding practices are seen in developing countries like Pakistan; where infant and child mortality rates are high and infection rate among infants is high.[6] Various researchers have identified multiple influencing factors that affect the early initiation and duration of breastfeeding among mothers; like their age, education level, income, marital status, and professional career, information from media and literature, and family support.[7] It so happens that with an increase in the age of the child, practices of breastfeeding by the mothers' decline. The first two hours after birth is labeled as the sensitive period and is the optimum time to start breastfeeding to the child, and unfortunately, only 29% of the newborn get breastfeed during this time.[9]

With this scenario in mind, the current study was planned to assess breastfeeding knowledge and practices among working and non-working mothers in

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a lower socio-economic community. Current study results will also guide us towards the planning of an effective exclusive breast feeding (EBF) promotion drive in the said locality to improve the situation further and to raise awareness among the community about the significance of EBF and its impact upon the health of child and mother both. We aimed to assess the knowledge and practice level of mothers towards breastfeeding and identify the association of socio demographic factors with knowledge and breastfeeding practices among mothers.

METHODOLOGY

It was a descriptive cross-sectional study conducted in the outdoor departments of Pediatrics and Gynecology in a tertiary level hospital situated in a lower socio-economic category area of Lahore during June 2018 to Dec 2018. IRB approval was taken from the organization (letter no: SMDC/ IRB/ 01-03/083) Study universe was married females of reproductive age group visiting the selected hospital outdoor departments for health care. The study population was mothers having children ≤5 years of age. Study variables included: socio-demographic variables and variables for knowledge and practice regarding breastfeeding, in their last, birth. Inclusion criteria were: willingness of the respondent and mothers having children ≤5 years of age. Whereas exclusion criteria were: mothers having children above the listed age and mothers who had participated in research of a similar kind. The sample size was calculated upon Open Epi software using the prevalence of exclusive breastfeeding of 38%, CI of 95%, and 5% margin of error.[9] The calculated sample size was 362. Purposive sampling technique was applied to select our study sample and respondents were recruited for the study after due written informed consent. Data collection tool was the interview method and the data collection instrument was self-developed questionnaire related to breastfeeding, in the last born child. Questions included in the questionnaire were selected after a detailed reading of the relevant material upon breastfeeding by the World Health Organization (WHO).

Data was collected by the female team members on account of the sensitive nature of the questions and cultural limitations.

***Statistical Analysis*:** The data analysis plan was developed as a descriptive statistics calculation, frequency trends in knowledge and practice sections, and Chi-square test of significance was applied.

RESULTS

Total Data of 362 respondents was collected. We obtained hundred percent response rate which was entered on SPSS 20 and analyzed. The mean age of mothers was 28 years±4.95 with a range of 16-42 years. We found that 356(98.3%) of mothers had ≤3 children and only 6(1.7%) mothers had > three children.

Table 1: Knowledge level of mothers regarding breastfeeding in their last born (N=362)

Variable	Response	N (%)
Should mother's milk be given to child immediately after birth	Yes No	328 (90.6%) 34 (9.4%)
Should colostrum be given to the child	Yes No	325 (91.1%) 36 (9.9%)
For how long breastfeed should be given	Up to 4 months Up to 6 months Up to 1 year Up to 2 years	38 (10.5%) 103 (28.45%) 89 (24.58%) 132 (36.46%)
How many times should mother's milk be given to the child in a day	1-4 times 5-8 times On-demand	28 (7.7%) 60 (16.6%) 274 (75.7%)
When should you start solid food for a child	At 4 months At 6 months 8 months-1 year	85 (23.5%) 255 (70.4%) 22 (6.1%)
After weaning should mother's milk be given to a child	Yes No	348 (96.1%) 14 (3.9%)
Should mother's milk be given to child during illness	Yes No	331 (91.4%) 31 (8.6%)
Does mother's milk strengthens immunity in a child	Yes No	355 (98.1%) 7 (1.9%)
Does breastfeeding reduces the risk of breast cancer in mother	Yes No	255 (70.4%) 107(29.6%)
Do you know the benefits of breastfeeding	Yes No	314 (86.7%) 48 (13.3%)

Results showed that 274(75.7%) mothers were housewives and 88(24.3%) were working mothers (majorities are teachers, few had their own small business, and only one or two are doctors). The present study found that 152(42%) mothers were living in nuclear family type and 210(58%) in extended family type. According to the results, 198(54.7%) mothers had their last born through cesserian section and 164(45.3%) through normal vaginal delivery (NVD).

Table 2: Practice level in mothers regarding breastfeeding in their last born (N=362)

Variable	Response	N (%)
What did you give your last born child immediately after birth	Pre lacteals Colostrum Water Top feed	141 (39%) 181 (50%) 6 (1.6%) 34 (9.4%)
When did you give breastfeed after birth	Immediately After one day After two days	141 (44.5%) 136 (37.6%) 65 (18%)
Did you give colostrum to your child	Yes No	289 (79.9%) 72 (19.1%)
For how long did you breastfeed your baby	Did not breastfeed <4 months 4-6 months 6-12 months >12 months	28 (7.7%) 6 (1.6%) 37 (10.2%) 165 (45.5%) 126 (34.9%)
How many times do you breastfeed your child in a day	1-4 times 5-8 times On-demand	30 (8.3%) 63 (17.4%) 268 (73.5%)
In case of a child's upset stomach do you continue to breastfeed	Yes No	325 (89.8%) 37 (10.2%)
Did you choose to breastfeed to reduce the risk of breast cancer	Yes No	206 (56.9%) 156 (43.1%)
Did you practice breastfeeding after weaning	Yes No	322 (89%) 40 (11%)
Did you give top feed to last born	Yes No	252 (69.6%) 110 (30.4%)

P-value ≤0.05 is significant

Table 3: Associations of demographic variables and knowledge of initiation of breastfeeding soon after birth

Variable	Should mother's milk be given to baby instantly after birth		Chi-square value	P-value
Status of mother	Yes	No		
Housewife	254	20	5.984	.020*
Working	73	14		
Type of family	Yes	No		
Nuclear	144	8	5.249	.028*
Extended	184	26		
Total family income	Yes	No		
<25000	114	8		
25000-50000	119	21	11.197	.011**
50001-85000	48	5		
>85000	47	0		

P-value <0.05 is significant

Educational level of mothers showed: 36% mothers had education up to matric, forty five percent had Intermediate-Graduate level, and nineteen percent had Postgraduate level education.

In our study it is found that the Total family income of the respondents revealed: Thirty four percent had <25000/ month, Fifty three percent had 25001-85000/ month, and only thirteen percent had >85000/ month.

Table 4: Association between variables and duration of Breast-Feeding practices ≤6 &>6 months

Variable	Duration of Breastfeeding		Chi square value	P-value
Status of mother	≤6 months	>6 months		
House wife	115	159	4.052	0.045*
Working	26	61		
Mode of delivery	≤6 months	>6 months		
C-section	64	128	5.713	0.022*
NVD	75	89		
Type of family	≤6 months	>6 months		
Nuclear	71	81	6.636	0.012**
Extended	70	140		
Total family income	≤6 months	>6 months		
<25000	55	67		
25000-50000	60	80	10.712	0.013**
50001-85000	16	37		
>85000	10	37		

NVD= Normal vaginal delivery, P-value ≤ 0.05 is significant

DISCUSSION

As per WHO recommendation, initiation of breastfeeding to the infant should be within the first sixty minutes' after birth. The initial start with colostrum is a rich source of antibodies and nutrients. Present study patterns of socio-demographic characteristics are supported by the findings of Pakistan Demographic and Health Survey (PDHS) 2017-18 which states: 49% of women had no education, 17% had primary level, 9% had middle level, 12% had secondary level, and 13% had education up-till higher level. This survey also found that the general current employment rate in women is 17%. Specific current employment rate for various age groups was 96% among women of age 15-44 years; with more involvement of urban women in professional/ technical/ managerial jobs 25% and 43% in skilled manual work. Furthermore, the survey reported that 58.3% women were from the lowest-middle wealth quintile and only 41.9% from fourth-highest quintile. Survey reported that 15.3% women had 1-2 children and 15.1% had 3-4 children.[10] Another study conducted in Pakistan found that only 10% of the respondent women were employed in regular jobs; the pattern of educational level of mothers; and household monthly income trends in this study are also similar to our study findings.[11] Demographic profile in our study is also consistent with another study conducted in a rural area in India,

upon 250 respondents from different religious backgrounds.[12]

In our study the knowledge level of women regarding breastfeeding is highly satisfactory upon all the key aspects. The good knowledge level of the respondents regarding all the important aspects of BF is the strength of our study and findings are consistent with another study conducted in Pakistan that found: 89% mothers knew about the importance of BF, 42% of mothers did not add any substitute for breast milk. [11] Still our findings upon the knowledge level of women regarding some aspects of BF are much higher than this past study that found: 36% women did not have any idea about early initiation of BF to the newborn, and 44% had no idea about the importance of giving colostrum to the newborn.[11] In another study conducted in a rural area in India KAP of mothers (belonging to diverse religions) was assessed regarding BF, and authors of this study found similar trends of knowledge level of mothers regarding importance of BF, initiation of BF, giving colostrum to the newborn, and about importance/ otherwise of prelecteals.[12] Our findings are also supported by another study conducted in Pakistan that showed similar trends of knowledge level in mothers regarding the different significant aspects of breastfeeding. [13] Present study findings upon knowledge level regarding breastfeeding among women are strongly supported and are similar to the findings of few other comparative studies that show the same pattern as; 66% mothers in India and 99% mothers in Sri Lanka responded that breastfeeding strengthens the immunity of the child.[14,15] The findings of our respondents upon knowledge level are also consistent with the Jordanian study that found a similar pattern among the study subjects stating that majority of mothers answered correctly about the nutritional benefits of breast milk, a little more than half of the mothers knew whether breastfeeding should be stopped or not when baby is sick, and majority knew that breastfeeding protects against breast and ovarian cancers.[16] Our study also found that mothers were in the practice of giving pre-lacteals to the last born; that included pure honey. This finding is similar and supported by another study conducted in India that had a similar finding.[14] Practice level regarding BF among our study participants has shown remarkable results in all the important areas: majority mothers knew that colostrum had to be given to the newborn immediately after birth and they had done so in their last born; near about half of the respondents had initiated BF soon after birth which is far less than a previous study that found higher rate (72.4%) of early initiation of breastfeeding soon after birth,[16] and then some had done so after one day some after two days; majority had breastfed their last born for 4-12 months and >12 months; majority had done on-demand breastfeeding, had continued breastfeeding after weaning; majority knew that breastfeeding prevents from breast cancer, and majority practiced continuation of breastfeeding during an episode of illness of the child. These findings are supported by the national level survey of Pakistan that found: almost all last born children less than two year of age were breastfed, with 20% of the children breastfed in the first hour after birth and 56% are breastfed within a day of birth. [10] Our findings are also similar to a past Indian study that investigated the knowledge, attitude, and practices of mothers regarding breastfeeding.[12] These findings are also consistent with the findings of breastfeeding practices investigated in a study conducted in Lahore, Pakistan that reported similar trends of breastfeeding practices as in our study.[13] In the present study breastfeeding practice rate in 4-6 months' infants is again lower than some past studies that found breastfeeding rate for four months' duration as: 20.9% [16]; 31% [14]; and 49%.[15] Results also showed a highly significant association of family income with knowledge of immediate onset of breastfeeding after birth; with a greater proportion of mothers in the category of <25000 and up to 50000 per month. A significant association was found with the status of mothers with a large number in the category of housewives as compared to working mothers. We also had significant association with the type of family with the majority of mothers in the category of the extended family system. Logically these findings can be explained by the fact that most of the families in this socio-economic group are living in an extended family system in our culture. Hence, there is the possibility of the impact of lower socioeconomic status, greater social pressure on the mother as well as the age-old inherited knowledge of the elders regarding early initiation of breastfeeding can also play a role in it. Recent national level survey in Pakistan found that median duration for any breastfeeding decreases with household wealth, from 22.3 months in the lowest quartile to 12.3 months in the highest quartile.[10] This same survey found that children of illiterate mothers had a median duration of 21 months as compared to 12.3 months among the children with highly educated mothers.[10] Though, in our study we could not find significant association of mother's education level with breastfeeding. Present study found a significant association of demographic factors: status of mother (working/ housewife), type of

family (nuclear/ extended), total family income, and type of delivery (normal/ C-section); with duration of breastfeeding practices. In all these significant associations a greater proportion of mothers was found in the group of housewives, from households with lower household income groups, and mothers who had NVD. Whereas, there is not much difference in the distribution ratio between the two family types. Possible logical explanation for this finding of our study can be that housewives mothers from lower income households are more inclined towards breastfeeding the infant for longer duration on account of the affordability issue.

Limitations: It was a hospital-based survey with a non-representative sample; so results cannot be generalized.

CONCLUSION

The present study findings also show that there is an important role of an extended family system in enhancing the satisfactory knowledge level of mothers regarding breastfeeding. At home mothers and lower socio economic status has also shown to have a major contribution towards BF > 6 months' duration.

Recommendations: Results of the study warrant that another more precisely planned study should be conducted in this area with a representative sample and breastfeeding practices should be studied in detail along with the influencing factors. Still, in the light of the present study results, health education programs/ sessions can be planned for mothers coming to this hospital; regarding improvement in their breastfeeding practices and enhancing the motivation level of mothers for optimal breastfeeding practices.

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M. Hashir Iqbal:	Concept, literature search, data collection, analysis, first draft write- up.
Namra Noukhaiz:	Literature search, data collection, second draft write up.
Dr. Saadia Shahzad:	Study concept and design, analysis, final review, overall supervision.
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