

Original article

Knowledge, Attitude and Practices Regarding Breastfeeding and Immunization among Mothers Attending a Tertiary Care Hospital in Sylhet

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Abstract

Introduction: Breast milk provides proper nutrition, immunological protection, helps young children grow, preventing undernutrition and promoting brain development and helps to build mother infant bonding. Immunization is a timely step to prevent under 5 mortality and morbidity due to communicable diseases. Immunization along with breastfeeding reduces a significant number of infant and maternal mortality. Disease like neonatal tetanus can be prevented by vaccination of the women during pregnancy. This study tries to find out the knowledge, attitude and practices among the mothers regarding breastfeeding and immunization.

Materials and Methods: This facility based cross-sectional study was conducted among 205 women having at least one under five child at Jalalabad Ragib Rabeya Medical College and Hospital, Sylhet. A semi structured questionnaire was used as the data collecting tool.

Results About half of the participants had adequate knowledge regarding breast feeding. About 68% from urban area, had adequate knowledge regarding breastfeeding whereas majority of participants (66%) from rural area had inadequate knowledge of breast feeding (66%) which is found statistically significant ($p=0.02$). Statistically significant difference was also found in relationship between level of knowledge regarding breastfeeding and educational status of the participants ($p= 0.01$).

Conclusion: The results from our study showed that many participants had lacunae in attitude and practice of breast feeding and immunization and adequate health education should be given to the women with under five children.

Key words: Breastfeeding, Immunization Attitude, Awareness.

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Introduction

Breastfeeding has been the best way to feed babies and provide them with the necessary nutrition for over a million years. If breastfeeding is increased in babies under the age of five, it could save approximately 820,000 children who are under 5 years old.¹ The highest gaps in Bangladesh were identified in practice of putting the baby to the breast during the first hour of delivery (76%), feeding colostrum and without administering other drinks, meals, or drugs within the first three days (54%), and exclusive breastfeeding from birth to 180 days (90 percent gap).² Gastrointestinal infections, respiratory infections, diarrheal illnesses, and celiac disease are all reduced by breast milk.^{3,4} It also helps

to prevent inflammatory bowel disease, diabetes in children, and cancer in children.⁵ A vast majority of the fatalities under the age of 5 in developing countries can be reduced by early breastfeeding initiation and exclusive breastfeeding.⁶ A reduction in undernutrition, increase in brain development and a reduction in the chances of the child becoming overweight can be achieved by exclusive breastfeeding in the first six months of a baby's life. Predictions suggest that 1.3 million deaths may be avoided each year if exclusive breastfeeding was maintained for the first 6 months of the children's lives.^{7,8} Breast feeding has numerous advantages for both the baby and the mother, as well as the mother-child attachment. These factors are completely dependent on a pregnant mother's understanding of the value and

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technique of breast feeding, as well as her attitude toward it and, of course, the practical aspects of breast Feeding.⁹

Expanded program on immunization (EPI) target diseases remain one of the main factors behind high childhood morbidity and death, as indicated by high IMR (infant mortality rate) in underdeveloped countries. Immunization is an important step in preventing death and morbidity from infectious diseases in children aged 0 to 5. 10 Vaccines are becoming available for a growing number of diseases, including some of the most common killers, such as pneumonia and diarrhea.¹¹ In underdeveloped nations, immunization is a very cost-effective way to improve

child survival.¹² However, whereas vaccine coverage rates in developed countries have risen significantly in recent decades, most underdeveloped countries continue to struggle with low rates.¹³ One of the most sensitive indicators of a community's health status is the infant mortality rate(IMR).¹⁴ Despite EPI's achievements, vaccine-preventable diseases claim the lives of nearly 1.5 million children each year.¹⁵ Because of early or delayed, partial, and poor vaccination coverage, vaccine-preventable illnesses remain a potential public health hazard in South-East Asia (including Bangladesh) and Sub-Saharan Africa.¹⁶ It is critical for parents to gain unambiguous understanding and perspectives concerning immunizations. Because unambiguous knowledge and practices contribute to the development of a good attitude about vaccination and, as a result, their contribution to vaccination. It aids in the reduction of the burden of deadly infectious diseases that are best managed through immunization.^{17,18}

Materials and methods

This cross-sectional study took place in Jalalabad Ragib Rabeya Medical College and Hospital, Sylhet in January 2019. A total of 205 women with at least one child under the age of five, attended the hospital during the study period participated in the research period. The data was collected using a pretested, interviewer administered semi structured questionnaire to evaluate mothers' knowledge and attitudes about breast feeding and immunization. The knowledge score was categorized into two: adequate and poor knowledge. The data was analyzed with the SPSS 16.0 statistical package. The Chi-square test was used for the analysis, and p0.05 was considered statistically significant.

Result

This study included 205 women who had at least one kid under the age of five. The majority of the respondents (53.2%) were between the ages of 24 and 28, lived in urban areas (57.07%), and had completed secondary and higher secondary education (53.17 percent). [Table:1] According to the findings, approximately 53.7 percent of the participants had adequate understanding of breast feeding (figure-I).

Approximately 68 percent of participants from the urban region had acceptable knowledge of breastfeeding, whereas the majority of participants from the rural area (about 66 percent) had poor knowledge of breast feeding

(Table-4), which was statistically significant (p=0.02). Table 5 shows that there were statistically significant differences in the association between participants' degree of breastfeeding knowledge and their educational status (p= 0.01). In terms of breast-feeding knowledge, the majority of respondents (96.1 percent) were aware that colostrum should be fed to newborns, whereas 20% were uninformed that colostrum boosts child immunity.

About half of the women (42%) were uninformed that nursing reduces the risk of diarrhea in the baby, and about the same amount (45.4%) were unaware that breastfeeding should be stopped if there is a breast infection. The survey found that while 83 percent of participants were aware of the proper period of exclusive breastfeeding, the majority of them (68.8%) were unaware that it is a natural means of contraception. [Table 2]

As shown in Table 3, 94.1 percent of participants were aware that vaccination reduces the risk of disease. When questioned about the tetanus vaccine, about 80% (79.5%) recognized that it is given during pregnancy, but only 21% knew that TT given during pregnancy protects both the mother and the neonate. Almost all of the participants (96.6%) expressed a good attitude toward getting their child fully immunized, and about the same percentage (97.1%) agreed that immunization is vital for their children and planned to adhere to the immunization schedule on a regular basis.

Eighty one percent of the respondents knew that the child should be taken to nearest health centre if it shows adverse event following immunization (AEFI) but nearly 50% participants (49.8%) had the misconception of stopping the immunization if it caused side effects. Table 6 reveals that urban inhabitants had a higher degree of immunization knowledge than rural dwellers, however this difference was not statistically significant (p= 0.417). Furthermore, there was no statistically significant association (p=0.631) between the mothers' educational status and their degree of knowledge [Table-7].

Table No. 1: Socio Demographic Characteristics of the respondents. (n=205)

Variables	Frequency	Percentage
Age group		
19-23	55	26.8
24-28	109	53.2
29-33	28	13.7
34-38	13	6.3
Place of resident		
Rural	88	42.93
Urban	117	57.07
Educational status		
Illiterate	13	6.36
Primary level	55	26.82
Secondary & higher secondary	109	53.17
Graduate & above	28	13.65

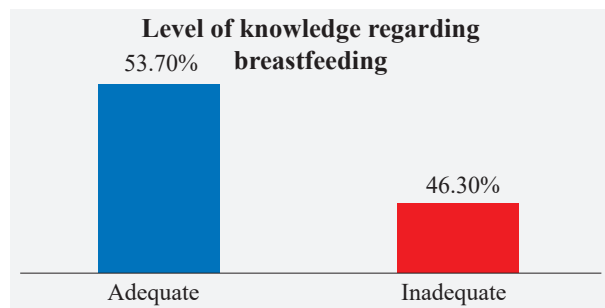


Figure No. 1: Level of knowledge regarding breastfeeding among participants.

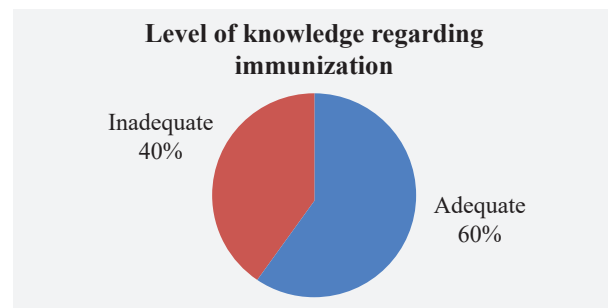


Figure No. 2: Level of knowledge regarding immunization among participants.

Table No. 2: Knowledge perception and attitude towards breastfeeding among the participants (n = 205)

Knowledge & perception among the participants	Not aware n (%)	Aware n (%)
Child should be fed colostrum	8 (3.9)	197 (96.1)
Colostrum boost child immunity	41 (20.0)	164 (80.0)
Duration of exclusive breast feeding is 6 months	34 (16.6)	171 (83.4)
Baby should be breast fed on demand	10 (4.9)	195 (95.1)
After breastfeeding baby should be made to burp	60 (29.3)	145 (70.7)
Complementary feed should be started after 6 months	48 (23.4)	157 (76.6)
Breastfeeding decreases the risk of diarrhea in the baby	86 (42.0)	119 (58.0)
Breastfeeding should be continued if the child falls sick	36 (17.6)	169 (82.4)
Breastfeeding is stopped temporarily if the mother falls ill	100 (48.8)	105 (51.2)
Breastfeeding is stopped if there is a breast infection	93 (45.4)	112 (54.6)
Exclusive breast feeding is a natural contraception method	141 (68.8)	64 (31.2)
Smoking is prohibited during breast feeding	33 (16.1)	172 (83.9)
Colostrum is healthy for my baby	13 (6.3)	192 (93.7)
Attitude among the participants	No n (%)	Yes n (%)
Will exclusively breastfeed my baby	13 (6.3)	192 (93.7)
I will give pre-lacteal food to my baby	129 (62.9)	76 (37.1)
Will continue to breast feed my baby up to 2 years along with weaning food	54 (26.3)	151 (73.7)

Table No. 3: Knowledge awareness and attitude towards Immunization among participants (n = 205)

Knowledge & awareness among participants	Not aware n (%)	Aware n (%)
Immunization prevents and reduces the risk of disease	12 (5.9)	193 (94.1)
Immunization is started at birth	81 (39.5)	124 (60.5)
TT vaccine is given during pregnancy	42 (20.5)	163 (79.5)
TT given during pregnancy protects mother and neonate	43 (21.0)	162 (79.0)
Child should be taken to nearest health centre if it shows AEFI	39 (19.0)	166 (81.0)
	Disagree	Agree
Feel that immunization is important for my child	6 (2.9)	199 (97.1)
Vaccines may cause side effects, so will discontinue my child's vaccination	103 (50.2)	102 (49.8)
Attitude towards Immunization among the participants	No n (%)	Yes n (%)
Will get my child completely immunized	22 (10.7)	183 (89.3)
Will follow vaccination schedule	7 (3.4)	198 (96.6)

Table No. 4: Place of living and level of knowledge regarding breastfeeding of participants

Variables	Level of Knowledge regarding breastfeeding		p-value
	Adequate	Inadequate	
Place of living	n (%)	n (%)	
Rural	30 (34.0)	58 (65.9)	0.02
Urban	80 (68.3)	37 (31.6)	

Table No. 5: Educational status and level of knowledge regarding breastfeeding of participants

Variables	Level of Knowledge regarding breastfeeding		p-value
	Adequate	Inadequate	
Educational status	n (%)	n (%)	
Illiterate	2 (15.4)	11 (84.6)	0.01
Primary level	21(38.1)	34 (61.8)	
Secondary & higher secondary	61 (56.0)	48 (44.0)	
Graduate & above	26 (92.9)	2 (7.1)	

Table-6: Place of living and level of knowledge regarding immunization of participants

Variables	Level of Knowledge regarding immunization		p-value
	Adequate	Inadequate	
Place of living	n (%)	n (%)	
Rural	38 (43.1)	50 (56.8)	0.417
Urban	84 (71.7)	33 (28.2)	

Table -7: Educational status and level of knowledge regarding immunization of participants

Variables	Level of Knowledge regarding immunization		p-value
	Adequate	Inadequate	
Educational status	n (%)	n (%)	
Illiterate	5(38.5)	8(68.5)	0.631
Primary level	27(49.0)	28 (51.0)	
Secondary & higher secondary	63(57.8)	46 (42.2)	
Graduate & above	27(96.4)	1(3.6)	

Discussion

Total 205 mothers having at least one under five child were selected purposively from a tertiary care hospital in Sylhet. The proportion of respondents with adequate knowledge on breastfeeding was 53.70% and inadequate knowledge 46.30%. A study done in Abu Dhabi by Mai Isam Al Ketbi found about 63.1% mother had poor knowledge and rest of the mother had good knowledge.²⁰ Level of Knowledge on breastfeeding and its importance was found adequate among mothers with higher educational background (p = 0.01), this findings was consistent with the study done by Mai Isam Al Ketbi.²⁰

Mothers who lived in a city had a better understanding of breastfeeding (p = 0.01). A study conducted in Southern India found a similar finding, with urban people having a higher degree of knowledge than respondents living in rural areas.¹⁴ Our study depicted that 96.1% (n=197) respondents knew that colostrums should be fed to the

child and 80% (n=164) participants were aware that colostrums boosted immunity.

This finding is in consistent to a similar study done in a tertiary care hospital in Southern India which revealed that 86.6% of mothers considered colostrums should be fed.¹⁴ In this study 93.7% agreed that colostrums is healthy for their baby. Most of them (84.9%) started breast feeding their child within an hour after birth, almost all (97.6%) of them had given colostrums.

A study done in Dhaka found that the majority of people are aware of the duration of exclusive breastfeeding (74%) and breastfeeding duration (66%); this finding was consistent with our findings, which revealed that more than 90% agreed that exclusive breast feeding should be given for six months and 76.6 percent knew that complementary feeding should begin after six months.¹³ A cross sectional study concluded that the knowledge of

mothers was poor in areas of starting of breast feeding (95%), colostrums feeding (56%), exclusive breast feeding (38%) which was discordant with the results of the present study.¹⁴

According to our findings, 51.2% mothers were aware that breastfeeding should be stopped temporarily if they fall ill and 54.6% of them knew to stop breastfeeding when they developed breast infection. Similar findings found in a study which reported that 47.3% participants aware of stopping breast feeding on development of breast infection.¹⁴ Immunization is the main weapon by which infectious diseases can be controlled in developing country like Bangladesh.

Maternal and neonatal tetanus is transmitted primarily during delivery and can be prevented by giving pregnant women two doses of tetanus toxoid.¹⁵ A questionnaire-based study conducted in Kashmir revealed that 100 percent of mothers are aware of the benefits of immunization; the findings were nearly identical to those of our study, which showed that 94.1 percent (n=193) of participants were aware that immunization is beneficial and protects their children from diseases.¹⁴

The study also found that while all women were aware of the importance of vaccination during pregnancy (TT), 86 percent were unaware of the advantages.¹³ These findings contrasted with those of our study, which revealed that roughly 79 percent of participants were aware that taking TT during pregnancy protects both the mother and the baby. Another study found that 74.7 percent of primigravida are aware of the advantages of vaccination.¹⁴

All mothers were aware of vaccination during pregnancy (TT) according to the study, however 86 percent were unaware of the benefits.¹³ These findings contrasted with those of our study, which revealed that roughly 79 percent of participants were aware that taking TT during pregnancy protects both the mother and the baby. Another study found that 74.7 percent of primigravida are aware of the advantages of vaccination.

A study has shown that a expecting mother staying in joint household has a positive influence on the immunization status of the mother and child.²⁴ Our study shows that majority of the respondents (56.6%) stayed in a joint family and this could be the reason for better knowledge of immunization among the respondents. The majority of the participants (n=183, or 89.3%) had a good attitude toward having their child fully immunized, and about the same percentage believed that immunization is vital for their children and decided to adhere to the immunization schedule on a regular basis (97.1 percent and 96.6 percent respectively). Our study showed that most of the participants (89.3%) wanted to get their children completely immunized and 97.1% felt that immunization is important for their child. This finding was consistent with the study in which all the participants show positive

attitude towards getting their child immunized and 99.5% participants believe that immunization is important for their children.¹⁹ Approximately 60% mothers knew that immunization is started at birth but only 11% of the respondents gave their child BCG vaccine just after birth. The above mentioned study also showed that all the mothers consider that vaccination is important and should be completed as per schedule.¹³ Consistent with this, 96.6% of mothers in the current study decided to follow the immunization schedule regularly

Conclusion

The results from our study showed that although a major population had adequate knowledge of breast feeding and immunization but lacunae was found in many of them, also they do not follow it properly. This gap should be filed up for reducing infant and maternal mortality rate. The short comings should be met through the available resources present in the health care facility.

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