

Nurse’s Knowledge Regarding Exclusive Breast Feeding in Pediatric Ward at Rangpur Medical College Hospital

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Original Research Article

Abstract:

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Background: Exclusive breastfeeding is a critical aspect of infant care, promoting optimal health and development. Nurses play a crucial role in educating and supporting mothers in this practice. This study aimed to assess the knowledge of nurses regarding exclusive breastfeeding in the pediatric ward at Rangpur Medical College Hospital. **Objectives:** The study aimed to explore the level of knowledge among nurses regarding exclusive breastfeeding, including their understanding of its benefits, the timing and intervals of breastfeeding, and the prevention of associated complications. **Materials and Methods:** A descriptive correlational design was employed to collect data from a sample of 50 nurses working in the pediatric ward of Rangpur Medical College Hospital. A total of 50 nurses comprising two sections: a demographic questionnaire and a nurse’s knowledge questionnaire on exclusive breastfeeding. **Results:** Fifty nurses were selected for the study, with age distribution as follows: 18% aged 21-30 years, 62% aged 31-40 years, and 20% aged 41-50 years. The nurses had varying lengths of service, with 62% serving for 1-10 years. Only 30% of nurses had received specialized training on breastfeeding the majority (84%) held a diploma in midwifery, while 14% had a B. Sc in Nursing, and 2% had an MPH/MSc. Regarding specialization in breastfeeding, 30% of nurses had completed a training course, while 70% had not. The results indicated that 38% of nurses had received complete exclusive breastfeeding training, and 62% had not. **Conclusion:** The study identified knowledge gaps among nurses regarding exclusive breastfeeding, emphasizing the need for comprehensive training to enhance their understanding of specific aspects. This will enable nurses to provide effective support and education to mothers in the pediatric ward.

Key Words: Exclusive Breastfeeding, Knowledge, Nursing, Awareness.

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INTRODUCTION

Breastfeeding particular exclusive breastfeeding is an essential part of early infant feeding. The benefits of breastfeeding for mothers and infants have been widely recognized and researched. Studies have shown that breastfeeding is superior to infant formula feeding because of its protective properties against illness, in addition to its nutritional advantages [1]. Considering the extensive benefits of breastfeeding, the World Health Organization and the American Dietetic Association recommend exclusive breastfeeding of infants for the first six months and continued breastfeeding with complementary foods up to 12 months of age [2]. This decrease in breastfeeding rates around the world has led to serious implications for infant health in developing countries, including infants in the Caribbean [3]. The decline in exclusive breastfeeding (EBF) has led to an increase in the prevalence of protein energy malnutrition (PEM) in developing countries.

Although these feeding recommendations were based on the evidence available in the publish literature, the effects of following these recommended infant feeding practices (IFPs) on growth during infancy and early childhood have not been evaluated. The promotion of EBF is a key component of child survival strategies. International policy places emphasis, on exclusive breastfeeding during the first 6 months of life [4]. Although there is an extensive scientific basis for the impact of breastfeeding on post neonatal mortality, evidence is sparse for its impact on neonatal mortality and, to our knowledge nonexistent for the contribution of the timing of initiation to any mortality impact. Maternal colostrums, produced during the first days after delivery, have long been thought to confer additional proportion because of its immune and non –immune properties [5].

However, epidemiologic data indicate that high proportion of neonatal deaths are a result of obstetric complications, and these are unlikely to be affected by colostrums transitional breast milk or mature breast milk. Elucidating the role of timing of initiation of breastfeeding is particularly relevant for sub-Saharan Africa, where neonatal and infant mortality rates are high but most women already exclusively or predominantly breastfeed their infants [6].

In Bangladesh, mean lactational period was shown to be 25 months, lactational amenorrhoea 19 months and total birth interval 36 months [7]. However, it should be remembered that 6.68, 7.00, 2.50, and 2.26% of lactating mothers in Bangladesh, India, Philippines and USA respectively, may become pregnant before menstruation is resumed. These mothers may not be exclusively breastfeeding, however. Lactational amenorrhoea of the mother permits her to recover her iron store, correct anaemia and enhances her immune and nutritional status. Breastfeeding prevents obesity in mothers. Lactation is an anti diabetic factor. Some lactating mothers enjoy remission of the diabetic state. A feeling of wellbeing is a more common phenomenon in diabetic mother during lactation [8].

MATERIALS AND METHODS

This chapter discussed the research methodology used in this study. This includes the aim & objectives of the study, Design of the study, research question study site, study population, sampling method & procedures involving in obtaining the sample, data collection & analysis. The study was conducted at Rangpur medical college hospital. The study was carried out from September 2014 to April 2015. Total number of nurses working in this Hospital was 550. The study was conducted in 9& 10 wards paediatrics ward.

Data Collection

The researcher asked nursing superintendent to assist in selecting nurses who were subjects in this study. Purpose of the study was explained by the researcher to the subjects and was asked for their co-operation. After explaining the purpose of the study, the researcher was then seeking for verbal and written informed consent from the subjects who agreed to participate in this study.

Data Analysis

The collected data will be analysed using appropriate statistical techniques. Descriptive statistics will be used to summarize the demographic information and the nurses' knowledge scores. Inferential statistics, such as correlation analysis, may be used to explore the relationships between variables. The software or tools that will be used for data analysis will be SPSS vs.23.0.

Ethical consideration

Before the initiation of the trial, the procedure of the following study was approved by the Ethical Review Committee (ERC) of Rangpur Medical College Hospital. This study includes obtaining informed consent, ensuring confidentiality and privacy of participants, voluntary participation, minimizing harm, obtaining ethical approval, maintaining transparency and honesty in reporting, and striving to benefit both the participating nurses and society. These considerations are crucial in upholding ethical principles, protecting participant rights, and conducting the research in an ethically responsible manner.

RESULTS

A total of 50 nurses of RpMCH were interviewed to assess their knowledge on Exclusive breast feeding has been presented in Table (1-2) Fifty nurses were selected for study the age of who were 18% at the age of 21-30yrs, 62% at the age of 31-40yrs, 20% at the age of 41-50 years. All were Diploma nurse. Among then 84% was diploma in midwifery, 14% having B. Sc in Nursing and 2% having MPH/MSc. The nurses have different length of service are 62% serving from 1-10yrs. 28% nurses from 11-20yrs and remaining 10% nurse 21-30yrs. 30% of nurses were completed specialization course on breast feeding & 70% has no training.

Table 1: Demographic information of the participated nurses:

Variable	Parameters	N=50	%
Age (year)	21-30	9	18
	31-40	31	62
	41-50	10	20
Gender	Male	0	0
	Female	50	100
Academic qualification	S.S.C	42	84
	H.S.C	5	10
	B.Sc/BA	3	6
	Masters	0	0
Professional qualification	Diploma in Nursing & Midwifery	42	84
	BSC in Nursing	7	14
	M.P.H/ M.Sc.	1	2
Length	1-10	31	62

Variable	Parameters	N=50	%
ofservice			
	11-20	14	28
	21-30	5	10
Specialization	yes	15	30
Course	No	35	70

In most of the questions of the nursing knowledge regarding exclusive breast feeding , complete exclusive breast feeding training yes 38% no 62%, have any knowledge about exclusive breast feeding yes 100% you know colostrums is the first food of new born baby yes 100%, know the benefit of breast feeding yes 100%, know complication may occur if not breast feeding yes 94% no 6%, ensure and provide health education about exclusive breast feeding yes 100% , , you listen and give time to patient as per need yes 100% , mother co-operate with you in counseling yes 100% , you attend duty in time yes 96% no 4%, give advice about personal hygiene maintain during breast feeding yes 100%, advice that mother getting proper diet yes 100%,Does the mother co-operate with you in counseling yes 100% (Table 2).

Table 2: Yes & NO question for assessment nurses’ knowledge regarding exclusive breast feeding

Variable	Yes	%	No	%
Do you complete exclusive breast feeding training?	19	38	31	62
Do you have any knowledge about exclusive breast feeding?	50	100	0	0
Do you know colostrums is the first food of new born baby?	50	100	0	0
Do you know complication may occur if not breast feeding?	47	94	3	6
Do you ensure and provide health education about exclusive breast feeding?	50	100	0	0
Do you know right positioning of the infant during breast feeding?	49	98	1	2
Do you listen and give time to patient as per need?	50	100	0	0
Does you mother co-operate with you in counseling?	50	100	0	0
Do you know about attachment of breast feeding?	49	98	1	2
Do you give advice about personal hygiene maintain during breast feeding?	50	100	0	0
Do you advice that mother getting proper diet	50	100	0	0

Total Knowledge Yes 94%, No 6%

At the level of knowledge regarding questionnaire are, having knowledge about exclusive breast feeding, only breast feeding 0 to 6 month- 90%, Only breast feeding-up to 2 years-10%, Breast milk and cows milk-0%. There are different type of food should be given to the new bron birth, 100% answer Colostrums, 0% Water, 0% Cows milk, % Others. Time of breast milk feed after birth, 94% answered at once, 42% after half an hour44% after one an hour 14%. The time interval of feeding baby, 74% One/two hour, 26% According to demand of baby. Immunity grows by exclusive breast feeding, 78% answered IgA IgG IgM 78%, IgK IgD 18% and Do not know 4% . Some disease can be prevented by exclusive breast feeding, 64% Pneumonia, 36% Neonatal sepsis. Complications may occur for mothers while irregular breast feeding, 96% answered Brest complications and 4% answered increase maternal morbidity. Best time for best feeding after delivery, within one hour 62%, within two hour 38%

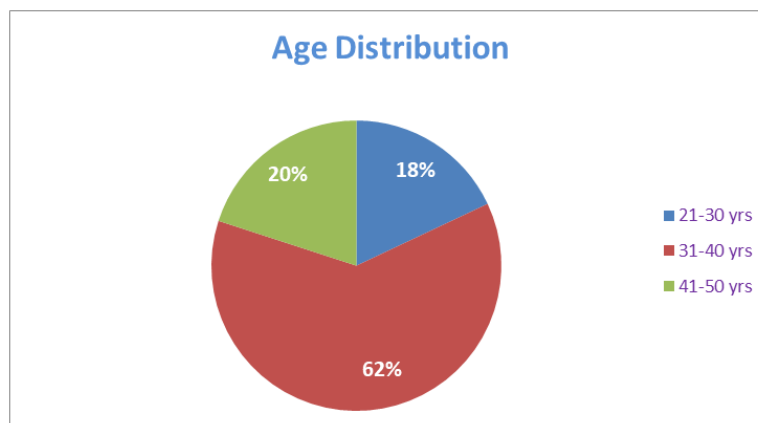


Figure 1: Distribution of the result according to their age. Among them 21-30=18%, 31-40=62%, 41-50=6%

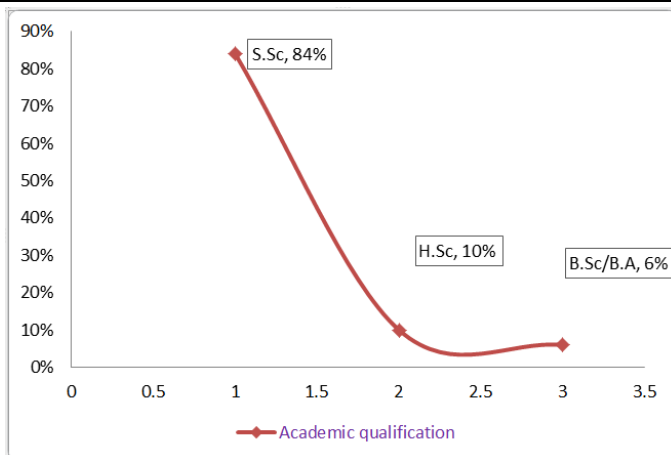


Figure 2: Distribution of the result according to their Academic qualification S.Sc =84%, H.Sc=10%, B.Sc/B.A= 6%

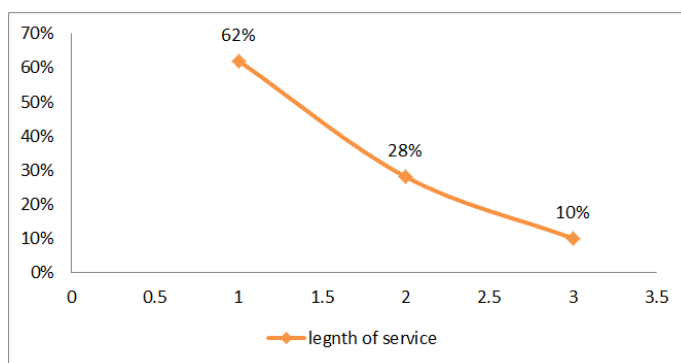


Figure 3: Showing the length of service of the responded nurses 1-10 yrs=62%, 11-20yrs=28%, 21-30yrs=10%

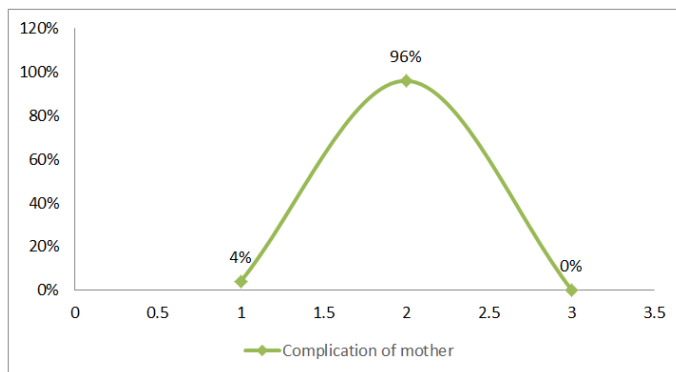


Figure 4: Showing the breast complication of mother

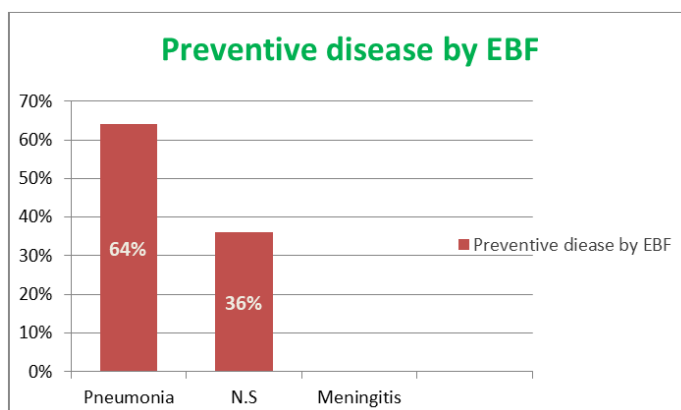


Figure 5: Showing the Preventive diseases by EBF, Pneumonia=64%, Neonatal sepsis=36%

DISCUSSION

This chapter presents a discussion of the results of the study. The results are discussed in relation to existing literature concerning knowledge breastfeeding. Strengths and limitations of the research are detailed and recommendations for further research are presented. A large proportion of paediatric nurses in this study had a number of years experience of nursing infants and children which corresponded with those who had been in their current position for five years or less. Of these nurses, there was a significant number who had been in their current position for less than twelve months. These demographics of the paediatric nurse population are similar to those found by Edwards *et al.*, This is consistent with the professional migration that regularly occurs with nurses and other healthcare professionals worldwide [9].

If paediatric nurses are unaware of the potential damage to successful breastfeeding by providing supplemental formulas to breastfeeding infants, there remains the possibility that they will encourage or endorse infant formula feeding while the infant is hospitalised. This issue, relating to the lack of knowledge regarding supplementation of breastfeeding with infant formula, needs to be rectified immediately, to ensure breastfeeding continues post-discharge.

The majority of participants agreed that breastmilk provides all the nutrients required for an infant up until the age of six months. This corresponds with previous international research indicating good knowledge among nurses and other healthcare professional groups that exclusive breastfeeding for six months duration is best for the infant [10]. Neonatal mortality remains unacceptably high in developing countries despite significant reductions in post neonatal mortality. Most neonatal deaths occur at home in these countries, and effective community level interventions are urgently needed [11].

However, there is little evidence from randomized controlled trials, and inferring causation from observational studies is fraught with difficulties. We reported a marked dose-response relation in our previous analysis; with neonatal mortality increasing significantly as delay in initiation of breastfeeding increased [12]. However, evidence about biological plausibility and effect on cause-specific mortality in neonates is sparse. Proper feeding practices during infancy are essential for attaining and maintaining proper nutrition, health, and development of infants and children [13]. Results of studies on infant and child feeding have indicated that inappropriate feeding practices can have profound consequences for the growth, development, and survival of infants and children, particularly in developing countries.

The major sources of breastfeeding knowledge were reported to be gained from personal experience and professional colleagues. The practice area of nurses was used as a proxy for knowledge sources. The influence of practice area on level of knowledge of breastfeeding related to the hospitalised infant was analysed and found to be important. Although it is acknowledged that this is not considered a reliable proxy result have consistently indicated in this study that practice area does have an influence on nurses' knowledge.

Nursing is a profession that requires lifelong learning. Adults have different learning styles: visual, auditory and kinaesthetic, which require different approaches to teaching for education to be successful [14]. Participants were also asked if children should be able to observe breastfeeding practices as a normal part of growing up, which has not been asked of nurses or other healthcare professionals in previous studies. Nine out of ten paediatric nurses agreed that it should be a part of childhood. This result could possibly be related to the acceptance of breastfeeding in public. These results are promising, as previous research has indicated exposure to breastfeeding enhances the likelihood of a positive decision to breastfeed when children grow up and become parents [15].

CONCLUSION

The study found that Paediatric nurse have recognized that exclusive breastfeeding is best for both mother & child, The generalized knowledge that has been demonstrated by Paediatric nurse in the study. Knowledge deficit is important area to common breast-feeding problems. The deficit has potential impact negatively, on appropriate support for breastfeeding mothers when their infant hospitalized. Counselling techniques should be used to reinforce specific, priority messages by health facility staff and community-based workers at all contact points with mothers of young infants. This study extends further knowledge in the field of breastfeeding in infancy by documenting mothers' perceptions that delay timely breastfeeding initiation and interfere with EBF. Although many mothers had heard some breastfeeding promotional messages from the media and other sources, these did not sufficiently influence their perceptions and practices. It is evidence from this study that most of the nurses have adequate knowledge about exclusive breast feeding in Paediatric ward at Rangpur Medical College Hospital.

Limitations

This study includes a small sample size, potential selection bias, reliance on self-reported data, limited generalizability, cross-sectional design, lack of longitudinal assessment, and a narrow focus on knowledge without considering other factors influencing breastfeeding practices.

Recommendations

Further research is needed to explore how training, including undergraduate and postgraduate programs, and other sources like in-service training, seminars, and conferences, influence the knowledge of pediatric nurses regarding breastfeeding. Implementing breastfeeding knowledge strategies can enhance their preparedness in working with infants and mothers.

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