

Knowledge Regarding Breast Feeding Practices among Para-Medical Staff of Health Care Facility in Puducherry

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ABSTRACT

BACKGROUND

Breastfeeding is crucial for good maternal and child health (MCH). It is the most economical, easily accessible and the safest form of nutrition for every newborn. It is important to assess the knowledge of Breast-Feeding Practices (BFP) among para-medical staff and to take necessary steps to promote awareness among them. We wanted to assess the knowledge of Breast Feeding Practices (BFP) among para-medical staff working in a private medical college in Puducherry.

METHODS

A descriptive cross-sectional study was conducted among 150 para-medical staff in a private healthcare facility in Puducherry based on structured Questionnaire. Data was analysed using SPSS software.

RESULTS

All the participants were aware of the correct time of initiation of breastfeeding and also felt that working mothers should continue to breastfeed. Around 66% of the participants knew the concept of exclusive breast feeding including its duration and around 80% of them felt that colostrum is beneficial to the baby.

CONCLUSIONS

The study observed some substantial knowledge gaps on Breast Feeding Practices (BFP) observed among the para-medical staff, necessitating a need for more training programs to promote effective Breast-Feeding Practices (BFP).

KEYWORDS

Maternal and Child health (MCH), Breast Feeding Practices (BFP), World Health Organization (WHO)

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BACKGROUND

Human milk is considered universally as the essential part of nutrition for the new-born child. It is highly nutritious providing all the necessary elements needed for infant health during the first six months of life and thereafter.^{1,2,3} Lactation starts with secretory differentiation of breast tissue during pregnancy. Hormonal changes in oestrogen, progesterone, IGF-1 and prolactin cause differentiation of the mammary gland epithelium in nurturing for milk production. Alveoli form by the end of the 1st trimester of pregnancy. Placental prolactin, placental growth hormone, and human placental lactogen support mammary gland differentiation and milk formation. Progesterone produced by the placenta prevents synthesis of mature milk until after birth. Secretory activation occurs as progesterone levels fall and milk production increases from 50 mL/d at birth to approximate 500 mL/d in the first 2 to 3 days after delivery. As production increases, mammary secretions change from colostrum, a clear fluid rich in secretory IgA and lactoferrin, to mature milk, which contains lactose, lipids, and proteins. Milk synthesis occurs continuously, as lactocytes produce lipids, lactose, proteins, and immunoglobulins that comprise human milk. Milk secretion occurs intermittently, when oxytocin stimulates the milk ejection reflex, causing contraction of myoepithelial cells and secretion of milk. Milk let down is inhibited by stressful stimuli. For the infant to transfer milk, he or she must latch successfully.

Infant suckling stimulates release of oxytocin and production of prolactin, and facilitates transfer of milk from the areola to the infant's mouth. Breast milk is easily available in a clean and safe manner and is beneficial both for the child and mother. It promotes new-born immunity and enhances child survival.^{1,2} Human milk contains antibodies that help protect infants from common childhood illnesses - such as diarrhoea and pneumonia, the two primary causes of child mortality world wide.³ Breastfed children are found to be intelligent, are less likely to be overweight or obese and less prone to metabolic diseases like diabetes later in life. Breastfeeding women also have a significantly reduced risk of breast and ovarian cancers in their latter half of life.⁴ Breastfeeding has also been shown to promote protection against pregnancy and development of breast cancer and promotes mother-infant bonding, amongst other benefits.^{2,5} Unhealthy practices like marketing of breast-milk substitutes continues to diminish efforts to improve breastfeeding rates and duration worldwide. World Health Organization (WHO) recommends that all infants should be exclusively breastfed for the first 6 months and continue to receive breast milk until 2 years of age to supplement other foods to achieve the health and optimal growth of infants.⁴

American Academy of Paediatrics cites breastfeeding as the ideal form of infant nutrition, providing health benefits for both mothers and infants.⁶ Despite the benefits of breastfeeding, exclusive breastfeeding is not commonly practiced. There are a many factors known to influence a mother's attitude to initiate and maintain breastfeeding

including the practical, emotional support, and encouragement from health professionals. Breastfeeding support from Health Professionals most importantly paramedical staff (nurses) can be effective in influencing a mother's decision to initiate and maintain breast feeding.⁷ It is therefore important that nursing students and other students in other health professionals, acquire knowledge about Breast Feeding Practices (BFP), and develop skills to support and provide appropriate care to pregnant women, and to mothers with infants, to ensure that correct Breast Feeding Practices (BFP) are followed by mother. However, para-medical staff, do not always receive adequate breastfeeding education during their foundational education programme to effectively help mothers. Therefore the nurses may vary in their ability to provide breastfeeding support to new mothers. Many nurses lack knowledge about practices that promote breastfeeding initiation and duration, and/or have negative or indifferent attitudes about breastfeeding. This study is undertaken to assess the knowledge regarding Breast Feeding Practices (BFP) amongst paramedical staff working in a private medical college in Puducherry.

We wanted to assess the knowledge regarding Breast Feeding Practices (BFP) amongst para-medical staff working in a private medical college in Puducherry.

METHODS

A cross-sectional survey was conducted amongst 150 paramedical staff (nurses) working in a private medical college in Puducherry. The study was started after the approval from Institutional ethical committee. All the nurses were interviewed after an informed consent, using a structured questionnaire which included the knowledge, attitude and beliefs regarding Breast Feeding Practices (BFP). The data was analysed using SPSS software.

RESULTS

The study included 150 female paramedical staff (nurses) belonging to the age group of 25-35 years, working in a private medical college in Puducherry. The various aspects of knowledge regarding Breast Feeding Practices (BFP) were tabulated as in Table 1. All the participants of the study answered that the breastfeeding to be initiated in all new-borns immediately at birth and also felt that working mothers should continue to breastfeed.

Around 66% of the participants knew the concept of exclusive breast feeding including its duration, whereas only 37% knew that pre-lacteal feed is not supposed to be given. Around 80% of them felt that colostrum's is not to be discarded. Around 20% of the nurses were not aware of the adverse effects of bottle feeding and 20% of them felt bottle feeding was safe. Around 80% responded that breastfeeding needs to be continued if a baby develops diarrhoea, but 20%

of them felt that breastfeeding needs to be discontinued. Only around 20% knew that breastfeeding is both beneficial to the mother and baby and around a similar percentage of them were also aware that breastfeeding can be continued even when a mother becomes pregnant while lactating.

Sl. No.	Knowledge of Breast-Feeding Practices (BFP)	No. (150)	%	
1.	Time of initiation of breastfeeding	Immediately	150	100
		Within 6 hours	0	0
2.	Duration of Exclusive breastfeeding	6 months	99	66
		1 year	51	34
		Honey	63	42
3.	Pre-lacteal feed	Sugar water	31	20.6
		Not to be given	56	37.3
4.	Colostrum to be given	Yes	120	80
		No	30	20
5.	Exclusive breastfeeding includes	Nothing other than breast milk	99	66
		Breastfeeding + water	31	20.6
		Breastfeeding + formula feeds	20	13.3
6.	What should the mother do, if baby has diarrhoea	Continue breastfeeding	120	80
		Stop breastfeeding	0	0
		Don't know	30	20
7.	Adverse effects of bottle feeding	Yes	90	60
		No adverse effects	30	20
		Don't know	30	20
8.	Should a working mother continue to breast feed	Yes	150	100
		No	0	0
9.	Advantages of breastfeeding	Maternal benefits only	0	0
		Child benefits only	118	78.7
		Both maternal and child benefits	32	21.3
10.	What should a mother do if she becomes pregnant while lactating	Continue to breastfeed	30	20
		Stop breastfeeding	90	60
		Don't know	30	20

Table 1. Knowledge of Breast-Feeding Practices (BFP) amongst Paramedical Staff

DISCUSSION

A cross-sectional survey was conducted amongst 150 female paramedical staff (nurses) belonging to the age group of 25-35 years, working in a private medical college in Puducherry to assess the knowledge regarding Breast Feeding Practices (BFP). The correct time to initiate breast feeding was identified by all the participants of the study and all of them also felt that working mothers should continue to breastfeed. The World Health Organization (WHO) strongly recommends EBF for the first six months of life. At six months, other foods should be given as a complement to breastfeeding, with breastfeeding to continue for up to two years and beyond. In addition, breastfeeding should begin within an hour of birth; offered to the infant "on demand," and as often as the child wants day and night; bottles or pacifiers should be avoided.⁸ Around 66% of the participants knew that no other fluids other than breast milk constitutes Exclusive Breast feeding and its duration for 6 months. A study done by Utoo. B.T. et al in their study amongst Health workers showed 83.4% knew the correct duration of Exclusive Breast Feeding.⁹ Around 34% felt that other drinks to be given before 6 months and as compared to Sadohet al, in their study of medical women's breastfeeding practices showed around 15.7% of respondents felt other drinks and or food should be introduced before the age of six months.³

In our study, unfortunately only 37% knew that pre-lacteal feed is not supposed to be given and around 70% of them felt that colostrum is very beneficial and not to be discarded. Similar results were found by Shahida Rasheed et al in a study amongst nurses working in maternity units in Karachi.¹⁰ Around 60% of the nurses were aware of the adverse effects of bottle feeding. Bottle feeding is regarded as a risk factor for common childhood illnesses like diarrhoea and upper respiratory infections, which are major causes of infantmortality.^{11,12}

Around 80% responded that breastfeeding needs to be continued if a baby develops diarrhoea as compared to 68.75% in a study done by Shahida Rasheed et al amongst nurses working in maternity units in Karachi.¹⁰ Only around 20% knew that breastfeeding is both beneficial to the mother and baby and around a similar percentage of them were also aware that breastfeeding can be continued even when a mother becomes pregnant while lactating. Similar results were observed by Utoo. B.T. et al in their study amongst Health workers.⁹

Studies have shown that medical and paramedical personnel who are not adequately trained to counsel mother son breastfeeding impact optimal practice of breastfeeding negatively due to knowledge gaps.^{3,12,13} Two studies, one in Egypt¹⁴ and one in the USA¹⁵ reported that nursing students had higher knowledge about the benefits of breastfeeding for the baby and the cost benefits for families and society of breastfeeding but their knowledge of Breast Feeding Practices (BFP) was considerably low, even following several theoretical and practical evidence based clinical education in their course in maternal and child nursing. Amin et al. found that irrespective of the educational disciplines of the students the breastfeeding knowledge scores were low.¹⁶

Three studies compared junior and senior nursing students on their attitude & knowledge of Breast Feeding Practices (BFP) including physiology, benefits, and management.^{17,18,19} In a study both the junior and senior nursing students' awareness of the benefits and physiology of breastfeeding at the two points in time were good, but knowledge of the management of breastfeeding was significantly higher in the group of graduating students.¹⁷ In one qualitative study, it is found that nursing students' knowledge of Breast Feeding Practices (BFP) with their written responses to one question: "What do you consider success factors that promote breastfeeding in Sweden?". Most nursing students reported that promoting breastfeeding was essential for infant health, and most students quoted knowledge about the advantages of breastfeeding, such as breast milk increases immune protection for the child than formula milkdoes.²⁰

Therefore, there is a need for more training of the paramedical staff which thereby promotes effective Breast-Feeding Practices (BFP). Researchers suggest different forms of educational programmes, including workshops, clinic-based education, seminars and more traditional teaching programmes for the betterment of Breast Feeding Practices (BFP) and its knowledge.^{21,22,23} Healthcare professionals with good experience & knowledge in Breast

Feeding Practices (BFP) play a pivotal role in helping nursing students practise basic breastfeeding assessment skills learnt in the classroom and laboratory. However, this may not be possible if the healthcare professionals possess poor knowledge and skill and are inappropriate in the approach, they take to provide breastfeeding support. In a review study by Watkins and Dodgson²⁴ and Spiby et al.²⁵ It is found that not all healthcare professionals are adequately experienced and knowledgeable, and found that many do not feel confident in managing breastfeeding problems.

These studies suggest that all the healthcare professionals, including nurses and doctors should participate at least in an ongoing breastfeeding education and should develop their skills in Breast Feeding Practices (BFP). Particularly important is the need to challenge nurses' attitudes and cultural norms related to breastfeeding, to fully prepare nursing students to provide care for new mothers

CONCLUSIONS

It is essential that health care professionals, most importantly para-medical staff, have a good attitude & knowledge towards Breast Feeding Practices (BFP), and should be able to provide breastfeeding women with the basic information they require, thereby improving the quality of Maternal and Child Health (MCH). The present study concludes that all the participants were aware of the correct time of initiation of breastfeeding and also felt that working mothers should continue to breastfeed. However, we also observed some knowledge gaps on Breast Feeding Practices (BFP) amongst health workers working in the health care facility. Therefore, there is a need for more training of the para-medical staff which thereby promotes effective BFP, a very essential and crucial step ahead for ensuring better child growth and development and also helps in improving child survival.

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