

Original Research Article

## **World Breastfeeding Week Observation: An Opportunity for Assessing Awareness Regarding Breastfeeding Practices, Techniques and Advantages among Trainees of Private Nursing Institute in Haryana**

Ramesh Kumar Verma<sup>1</sup>, Gajraj Kaushik<sup>2</sup>, Minakshi Kharb<sup>3</sup>

<sup>1</sup>Assistant Professor; Department of Community Medicine, Bhagat Phool Singh Government Medical College for Women Khanpur Kalan, Sonapat, Haryana, India

<sup>2</sup>Director, Gajraj Institute of Health and Training Centre Gohana, Sonapat, Haryana

<sup>3</sup>MPH Final Year Student, Jodhpur School of Public Health, Jodhpur

Corresponding Author: Dr Gajraj Kaushik

### **ABSTRACT**

**Background:** Promotion of breastfeeding alone contributes to an 11.6% reduction in infant mortality rate according to Lancet series of 2008. Various studies reported that health care providers are the most important source of dispersal of information about breastfeeding to the mothers. Nursing trainee students who will serve the community in near future would be beneficial for motivating the mothers to adopt healthy practices regarding breastfeeding.

**Aim and objective:** To assess awareness regarding breastfeeding practices, techniques and advantages.

**Methods:** A cross-sectional descriptive study was conducted by utilizing the opportunity of World breastfeeding week observation in Gajraj Nursing Institute. 160 trainee students were assessed by using pretested, self-administered questionnaire as study tool. Data was analyzed done using SPSS version 22.0.

**Results:** majority among trainee students were females (91%) and mean age was  $20.6 \pm 2.7$  yrs. None of the trainee student was aware about the theme of World breastfeeding week 2016. Knowledge regarding initiation of breastfeeding in normal vaginal delivery and caesarean section was found correct among 46 (29%) participants and 88 (55%) respectively. Perception regarding technique of breastfeeding and causes of bad attachment to breast was found correct among 51 (32%) and 5 (3%) trainee students respectively.

**Conclusion:** there is a certain knowledge gap about breastfeeding among trainee students. There is need to give emphasis on modular teaching. Public health day's observation should be utilized for assessing, refreshing and updating their knowledge to promote and support breastfeeding in the community.

**Key words:** World breastfeeding week, breastfeeding, trainees, private nursing institute

### **INTRODUCTION**

World Breastfeeding Week is celebrated every year from 1<sup>st</sup> to 7<sup>th</sup> August to encourage breastfeeding and improve the health of babies around the world. It commemorates the Innocent Declaration signed in August 1990 by Government policymakers, World Health Organization

(WHO), United Nations Children's Fund (UNICEF) and other organizations to protect, promote and support breastfeeding. WHO theme for the year 2016 is "Breastfeeding: a key to sustainable development." WHO is encouraging people to "Support mums to breastfeed anytime, anywhere," as all of society has a role to

play in making our communities more breastfeeding friendly. [1]

The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more. [2] Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk for 6 months without the addition of any other liquids or solids. [3] Breastfeeding has a unique biological and emotional influence in the health of both mother and child. So promotion of breastfeeding is justified on firm scientific grounds. [4]

Promotion of breastfeeding alone contributes to an 11.6% reduction in infant mortality rate according to Lancet series of 2008. [5] The benefits of breast-feeding, to both mother and baby, have long been recognized. [6] In mothers it protects from developing ovarian and premenopausal breast cancers. It also reduces the risk of postpartum bleeding and osteoporosis. Hence Breast-feeding indirectly promotes improved maternal and child health by providing immunological protection and lengthening birth intervals. [7,8]

Various studies reported that health care providers are the most important source of dispersal of information about breastfeeding to the mothers. [9,10] They had a positive attitude towards breastfeeding but their knowledge was inadequate as per the studies conducted in many developing countries. [11-14] Hence, to assess the awareness about breastfeeding practices and technique among nursing trainees students who will serve the community in near future would be beneficial for motivating the mothers to adopt healthy practices. No study has been found in literature discussing the knowledge about breastfeeding practices, techniques and its advantages among nursing trainee students especially in private sector. Hence during world breastfeeding

week observation activity this study was planned.

#### **Aim and Objective:**

1. To assess awareness regarding breastfeeding practices, techniques and advantages among trainees of private nursing institute in Haryana

#### **METHODS**

First week of August is observed as world breast feeding week (WBW) throughout the world to promote and create awareness regarding breast feeding. From 1st-7th August, 2016 WBW was observed by Department of Community Medicine BPS Govt. medical college for women, Haryana, which is a rural medical institution for women in North India. We utilized this opportunity to carry out the present cross sectional study in Gajraj Nursing Institute among 160 trainee students undergoing training of Multipurpose Health Worker (MPHW) and General Nursing and Midwifery (GNM). Age, sex, place of residence, marital status and knowledge regarding breastfeeding practices, techniques and advantages were taken through pretested, self-administered questionnaire. Written permission was taken from the Director of the institute for conducting the study and written informed consent taken from each nursing trainee student.

**Inclusion criteria:** all the participants who had given written informed consent.

**Exclusion criteria:** those participants who were not willing to participate in study.

**Data analysis:** data was entered in Microsoft Office Excel 2010 and statistical analysis was done using SPSS version 22.0. Descriptive statistics were expressed as mean with standard deviation for continuous variables and frequency with percentage for categorical variables.

#### **RESULTS**

In this present study a total of 160 trainee students of private nursing institute enrolled, majority among them were females (91%) and mean age of study

participants was  $20.6 \pm 2.7$  years. Majority of trainee students 115 (72%) belonged to rural area. One fifth of study participants were married. Majority of the trainee students 83 (52%) belonged to SC/ST category while 14 (9%) from other backward category and 63 (39%) from general category.

The present study revealed knowledge of trainee students undergoing training of Multipurpose Health Worker

(MPHW) and General Nursing and Midwifery (GNM) of private health institute in a rural area during public health day's observation activity regarding breastfeeding practices, techniques and advantages. None of the trainee student was aware about the theme of World breastfeeding week 2016 but all the participants knew that breastfeeding week was celebrated from 1<sup>st</sup> to 7<sup>th</sup> August every year.

**Table 1: Profile of study participants (n=160)**

Attribute		Study participants N (%)
Sex	Female	145 (91)
	Male	15 (9)
Caste	General	63 (39)
	OBC	14 (9)
	SC/ST	83 (52)
Locality	Rural	115 (72)
	Urban	45 (28)
Marital status	Married	32 (20)
	Unmarried	128 (80)

Figure in parenthesis indicate percentages

**Table-2: Awareness regarding breastfeeding practices and its advantages among study participants (n=160)**

Variable		Study participants N (%)
When should breastfeeding be started after normal delivery?	Immediately after birth	46 (29)
	After one hour	90 (56)
	Don't know	24 (15)
When should breastfeeding be started after caesarean section?	As early as possible	88 (55)
	After one hour	15 (9)
	After 4 hours	15 (9)
	After one week	36 (23)
	Don't know	6 (4)
What should be given just after birth?	Mother's first milk (Colostrum)	127 (79)
	Ghutti and others	33 (21)
What should be the frequency of breastfeeding in 24 hrs?	On demand	85 (53)
	At least 8 times	9 (6)
	More than 8 times	63 (39)
	Don't know	3 (2)
Breastfeeding to be continued till the age of	4 months	19 (12)
	6 months	92 (57)
	1 year	34 (22)
	2 year	15 (9)
IQ would be more in	Only breastfed babies	133 (83)
	No difference and others	27 (17)
Should breastfeed be continued in sick infants?	Yes	120 (75)
	No	40 (25)

Figure in parenthesis indicate percentages

**Table-3: Awareness of study participants regarding techniques of breastfeeding (N=160)**

Variable	Study participants N (%)
Signs of good attachment to breast	
Chin touching the breast and mouth wide open	37 (23)
Mouth wide open and lower lip turned outward	19 (12)
Lower lip turned outward and more areola visible on upper side	23 (14)
All of the above	51 (32)
Don't know	15 (9)
Reasons of bad attachment to breast	
Feeding from bottle	14 (9)
Lack of awareness among mother	50 (31)
Lack of support and motivation to mother	91 (57)
All of the above	5 (3)

Figure in parenthesis indicate percentages

## DISCUSSION

This study assessed knowledge about practices, techniques and advantages of breastfeeding among nursing trainee students of a private health institute in a rural area during World breastfeeding week observation activity.

In the present study it was observed that 46 (29%) participants responded correctly that breastfeeding should be started immediately after birth in case of normal delivery and 88 (55%) answered correctly that breastfeeding should be started as early as possible after caesarean section. The study conducted by Mikiel-Kostyra et al and Shirima et al described the fact that early initiation of breastfeeding is important for the health of the infant and successful establishment and maintenance of breastfeeding. [15,16] A delay in the onset of breastfeeding has been reported to have an increased risk of neonatal mortality. [17]

In this study, 127 (79%) participants answered correctly that mother's first milk (colostrum) should be given while 33 (21%) responded ghutti and others. The finding revealed that initiation of breastfeeding with ghutti and others were still persistent in the community and influencing the thought of health care providers' trainee students.

It was observed that frequency of breastfeeding in 24 hours was correctly answered by only 85 (53%) trainee students. It pointed out towards the fact that foundation stone of problem of malnutrition has been laid down from the starting due to lack of awareness.

However in a study carried out in Tanzania revealed that only three nurses knew the recommendations for demanded breastfeeding. [18]

It was found that awareness regarding exclusive breastfeeding was correct among 92 (57%) of trainee students. The WHO recommends no water supplementation in exclusively breastfed babies. [19] This is because breast milk contains enough average daily fluid requirements for healthy infants which are in the range of 80 to 100 ml/kg in the first

week of life to 140 to 160 ml/kg between 3 to 6 months of life, if breastfed exclusively and on demand. The content of breast milk is 88% water and it contains very low amounts of solutes, therefore there is no need of water to flush out the excess solutes. [20] The WHO recommends continuation of breastfeeding for up to two years and beyond. [21]

The present study found that IQ is more among breastfed babies was answered correctly by 133 (83%) participants. A meta-analysis of 20 studies showed that scores of cognitive function on an average was 3.2 points higher among children who were breastfed compared with those who were formula fed. [22]

Breastfeeding should continue in sick infants was answered correctly by 120 (75%) study participants however one fourth trainee students were not aware of this fact. Whereas study conducted in Egypt revealed that breastfeeding should be continued if baby develops diarrhea and respiratory infection respectively. [23]

Knowledge regarding technique of breastfeeding was found correct among 51 (32%) trainee students. In this study, perception about 'causes of bad attachment to breast among mothers' was found partially correct as 'lack of support and motivation to mother' among 57% study participants; lack of awareness among mother (31%) and feeding from bottle among 9% of trainee students. However, only 5 (3%) trainee students answered correctly about all possible reasons of bad attachment to breast among mothers.

In a study carried out in Manipur, India that even in trainee medical students only 1/10<sup>th</sup> knew correctly about all the signs of good attachment. [14] Only 5.2% of health care providers were able to demonstrate the correct positioning and attachment of the baby to the breast in a study carried out by Okolo and Ogbonna. [24]

## CONCLUSIONS AND RECOMMENDATIONS

The study explored that there is a certain knowledge gap about breastfeeding among trainee students. These results highlight a need to reinforce that emphasis should be given on modular teaching and it should be included in their training curriculum. Public health day's observation also plays important role in timely refreshing and updating their knowledge to promote and support breastfeeding in the community. Public health day's observation should be utilized for assessing such kind of awareness activities.

## ACKNOWLEDGEMENT

Our sincere thanks to the study participants for giving their consent and opportunity for being the part of this study.

**Conflict of interest:** nil declared

**Ethical issue:** written permission was taken from the Director of the institute for conducting the study and written informed consent taken from each trainee student.

**Contribution of each author:**

Dr Ramesh Kumar Verma: concept, design and draft the article

Dr Gajraj Kaushik: critical revision for intellectual content and final approval for publication

Dr Minakshi Kharb: Data entry, analysis and interpretation of data

## REFERENCES

1. World Health Organization. World Breastfeeding Week. Available from [www.who.int/mediacentre/events/2016/world-breastfeeding-week/en/](http://www.who.int/mediacentre/events/2016/world-breastfeeding-week/en/) [Accessed on 15/04/17].
2. WHO. Exclusive breastfeeding for six months best for babies everywhere'. World Health Organization; 2011. Available from: <http://www.who.int>. [Accessed on 15/04/2017].
3. WHO. The WHO Global Data Bank on Infant and Young Child Feeding. WHO Nutrition for Health and Development; 2009. Available from: <http://www.who.int>. [Accessed on 15/04/2017].
4. Linkages Project. Exclusive Breastfeeding. The Only Water Source Young Infants Need. Washington: Academy for Educational Development 2002.
5. The lancet series on maternal and child under nutrition executive summary. Available at: <http://www.imagine.in/Sem6ExeSum.pdf>. [Accessed on 15/04/2017].
6. Dennis CL. Breastfeeding initiation and duration: a 1990–2000 literature review. J Obstet Gynecol Neonatal Nurs. 2002; 31:12–32.
7. Kwan ML, Buffler PA, Abrams B, Kiley VA. Breastfeeding and the risk of childhood leukemia: a meta-analysis. Public Health Rep. 2004; 119(6):521–35.
8. Benefits of breastfeeding. United States breastfeeding committee. Raleigh, NC: United States Breastfeeding Committee; 2002.
9. Abrahams SW, Labbok MH: Exploring the impact of the baby friendly hospital initiative on trends in exclusive breastfeeding. Int Breastfeed J 2009, 4: 11.
10. Barnes M, Cox J, Doyle B, Reed R: Evaluation of a practices-development initiative to improve breastfeeding rates. J PerinatEduc 2010, 19 (4): 17-23.
11. Al-Nassaj HH, Al-Ward NJA, Al-Awqati NA. Knowledge, attitudes and sources of information on breastfeeding among medical professionals in Baghdad. East Med J 2004; 10 (6):871-8
12. Doaa AH, Noha E, Abdel-HG. Knowledge of female medical students about breastfeeding. Universal Journal of Public Health 2013, 1(3): 72-78.
13. Amin TT, Abdulrahman AG, Al Muhaidib NS, Al Hamdan OA. Breastfeeding attitudes and knowledge among future female physicians and teachers in Saudi Arabia. Health science journal 2014; 8 (1): 102-15.
14. Devi HS, Avinash K, Elangbam V, Pal S, Thingbujam AS. Knowledge of breastfeeding among medical students in Manipur, India. IJMAS 2013, 2(3): 55-61. Available at

- www.earthjournals.org. [Accessed on 15/04/2017]
15. Mikiel-Kostyra K, Mazur J, Boltruszko I. Effect of early skin-to-skin contact after delivery on duration of breastfeeding: A prospective cohort study. *Acta Paediatr.* 2002, 91:1301-1306.
  16. Shirima R, Gebre-Medhin M, Greiner T. Information and socioeconomic factors associated with early breastfeeding practices in rural and urban Morogoro, Tanzania. *Acta Paediatr.* 2001, 90:936-942.
  17. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics.* 2006, 117:380-386.
  18. Mbwana HA, Conlon C, Hurst P V. Exclusive breastfeeding: Mothers' awareness and health care providers' practices during antenatal visits in Mvomero, Tanzania. *IJNAM* 2013; 5 (3): 40-9.
  19. WHO, Geneva (2001 b). World Health Organization. Global Strategy for infant and young child feeding: The optimal duration of exclusive breastfeeding.
  20. Pan American Health Organization/World Health Organization (2003). Guiding principles for complementary feeding of the breastfed child. [Accessed on 15/04/2017]
  21. WHO, Geneva, Switzerland. World Health Organization and United Nations Children's Fund. (2003). Global strategy for infant and young child feeding. [Accessed on 15/04/2017]
  22. Anderson JW, Johnstone BM, Remley DT. Breastfeeding and cognitive development: a meta-analysis. *American Journal of Clinical Nutrition,* 1999, 70:525-535.
  23. Doaa AH, Noha E, Abdel-HG. Knowledge of female medical students about breastfeeding. *Universal Journal of Public Health* 2013, 1(3): 72-78.
  24. Okolo SN, Ogbonna C. Knowledge, attitudes and practice of health workers in Keffi local Government hospitals regarding Baby friendly hospital initiative practices. *Eur J Clin Nutr* 2002, 56:438-41.

How to cite this article: Verma RK, Kaushik G, Kharb M. World breastfeeding week observation: an opportunity for assessing awareness regarding breastfeeding practices, techniques and advantages among trainees of private nursing institute in Haryana. *Int J Health Sci Res.* 2017; 7(8):24-29.

\*\*\*\*\*