



## Awareness about “Ten Steps for Successful Breastfeeding” among Medical and Nursing Students

Vandana A. Kakrani, Hetal K. Rathod (Waghela), Megha S. Mammulwar, Jitendra S. Bhawalkar

Department of Community Medicine, Pad. Dr. D.Y. Patil Medical College, Pimpri, Pune, Maharashtra, India

### Correspondence to:

Dr. Vandana A. Kakrani, Department of Community Medicine, Pad. Dr. D.Y. Patil Medical College, Pimpri, Pune, Maharashtra, India. E-mail: [vankak@hotmail.com](mailto:vankak@hotmail.com)

**How to cite this article:** Kakrani VA, Rathod (Waghela) HK, Mammulwar MS, Bhawalkar JS. Awareness about “ten steps for successful breastfeeding” among medical and nursing students. *Int J Prev Med* 2015;6:40.

### ABSTRACT

**Background:** Baby-friendly Hospital Initiative (BFHI) is a vital intervention supported by World Health Organization and UNICEF to reduce infant mortality and has been included as a part of the curriculum in nursing and medical courses. To know the extent of knowledge of students about BFHI along with its understanding and to find out the gap in their knowledge about BFHI steps.

**Methods:** A descriptive cross sectional study was carried out among the nursing (4<sup>th</sup> year) and medical students (3<sup>rd</sup> year MBBS) about ten steps of BFHI by a pretested and predesigned questionnaire. After ethical clearance, information was collected about their awareness and correct understanding concerning ten steps.

**Results:** A total of 102 (51.6%) medical and 96 (48.4%) nursing students comprising of 57 (28.8%) males and 141 (71.2%) females were interviewed, had similar mean score about the ten steps of BFHI. Female respondents 82.3% had best understood the step 2 (training), as compared to males 80.7%. About step 6 (no supplements) 94.3% females and 86% males had well understood the step. Step 7 (rooming in) was known to 85.8% females and 54.4% males respectively. Step 9 (no pacifiers) was known to 80.1% females while among males 56.1% were aware. There was statistically significant difference in their knowledge about the steps 2 and 4 (skin to skin), 5 (counseling), 7, and 9 as females were more aware about these steps than males. The least understood steps in medical and nursing students were step 1 (written policy) (15.7%, 15.6%), step 3 (prenatal education) (27.5%, 29.2%), step 8 (cues) (10.8%, 24%) and step ten (community support) (8.8%, 11.5%) respectively.

**Conclusions:** BFHI is one of the successful international efforts undertaken to promote, protect and support breast feeding. Acquiring knowledge about the same by medical and nursing students is most crucial tool for better practices by them in the future. Continued medical education, workshops and seminars by lactation specialists in addition to the regular teaching about BFHI as part of the curriculum may be considered to ensure and update their knowledge about BFHI.

**Keywords:** Awareness, Baby-friendly Hospital Initiative, medical students, nursing students

### Access this article online

#### Quick Response Code:



Website: [www.ijpvmjournal.net/www.ijpm.ir](http://www.ijpvmjournal.net/www.ijpm.ir)

DOI:  
10.4103/2008-7802.156838

### INTRODUCTION

World Health Organization (WHO) and UNICEF in 1991 launched a “Baby-Friendly Hospital Initiative” (BFHI) to encourage proper infant feeding practices starting after birth.<sup>[1]</sup> The global BFHI is based on ten steps, which the hospital must fulfill to get a certification of

Baby-friendly Hospital and more than 1300 hospitals in India have been certified as Baby-friendly.<sup>[2,3]</sup> Exclusive breast feeding (EBF) has been accepted as the most vital intervention to reduce infant mortality and for ensuring optimal growth and development of children.<sup>[4]</sup> In developing countries, infants who are not breast fed are 6–10 times more at risk of death in 1<sup>st</sup> months of life than infants who are breast fed.<sup>[5,6]</sup> The ten steps are expected to have a direct impact on breastfeeding rates by creating awareness among mothers about appropriate breastfeeding practices. This initiative has been supported by the major professional medical and nursing bodies in India and forms an important child survival initiative, expected to be adopted and practiced by all health care professionals including doctors and nurses.<sup>[7]</sup> The expected counseling services on infant and child feeding practices are meager; very few mothers have access to such services.<sup>[8]</sup> BFHI is included as a part of curriculum in nursing as well as medical courses and hence that all the students from respective courses are made aware of the concept of baby friendly initiative with the knowledge about ten steps of BFHI as “must know” portion of the curriculum. However, knowledge about overall understanding of the ten steps has not been tested in the student community; hence an attempt is made to know the extent of knowledge of students about each step along with its right understanding through this study.

## METHODS

The topic of BFHI is included in the curriculum of medical and nursing students. The topic is covered in theory as lectures as well as in the form of discussion, which are conducted as part of maternal health care in postnatal wards. The ten steps are displayed on the board in the postnatal ward.

### Study setting and study design

The study was carried out in one of the medical colleges of Pune, Maharashtra, India. Descriptive cross sectional study was conducted in the census population of the 4<sup>th</sup> year nursing ( $n = 96$ ) and 3<sup>rd</sup> year MBBS medical students ( $n = 102$ ). All the students willing to participate and present on the day of study were included.

Ethical clearance was obtained from the Institutional Ethics Committee before starting the study. After obtaining a written informed consent, the information was collected about their awareness concerning ten steps of BFHI [Box 1].

### Study period and data collection: Six months

The study tool consisted of the questionnaire having demographic information and multiple choice questions

framed for each step to test their knowledge about the broader understanding of these steps. It is one of the most commonly used methods to evaluate the knowledge of students. All the questions were validated. From the responses/options given, the correct answers were counted as a student had to select one correct answer from the options provided. The knowledge of medical and nursing students was tested separately by using the same questionnaire. The analysis was done by using Microsoft excel and SPSS version 20 (IBM), and the knowledge was compared between the two groups. The weak areas of knowledge were identified. For descriptive statistics means, standard deviation (SD), confidence interval and percentages were used. Chi-square test was used as a test of significance. This was followed by a lecture and interactive session on the same topic for both groups.

## RESULTS

A total of 102 (51.6%) medical and 96 (48.4%) of nursing students were included in the study. The mean age of the medical students included in the study was 21 years (SD: 0.98), and that of nursing students was 23 years (SD: 3.4). There was a marginal difference in the mean score secured by the medical and nursing students about the ten steps of successful breastfeeding [Table 1].

The analysis of questionnaire regarding the ten steps of successful breastfeeding revealed that among the nursing students, majority had average level of knowledge while

<b>TEN STEPS TO SUCCESSFUL BREASTFEEDING</b>	
<i>Every facility providing maternity services and care for newborn infants should:</i>	
1.	Have a written breastfeeding policy that is routinely communicated to all health care staff.
2.	Train all health care staff in skills necessary to implement this policy.
3.	Inform all pregnant women about the benefits and management of breastfeeding.
4.	Help mothers initiate breastfeeding within a half-hour of birth.
5.	Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6.	Give newborn infants no food or drink other than breastmilk unless medically indicated.
7.	Practise rooming in - allow mothers and infants to remain together - 24 hours a day.
8.	Encourage breastfeeding on demand.
9.	Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10.	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

**Box 1:** Ten steps of Baby-friendly Hospital Initiative

among medical students, few had much more than the average level of knowledge as found from the wide variability and outliers [Figure 1].

A significant number ( $P = 0.055$ ) of male respondents 53 (93%) were aware of the fact that there are “ten” steps to successful breastfeeding. Most of the male respondents could correctly answer the question related to step 5 (counseling) (89.5%), followed by step 6 (no supplement) (86%), step 2 (training) (80.7%), step 4 (skin to skin) (68.4%), step 9 (no artificial teats) (56.1%) and step 7 (rooming in) (54.4%).

While among the female respondents 111 (78.7%) of them were aware of the fact that there are “ten” steps to successful breastfeeding. Most of the female respondents could correctly answer the question related to step 6 (no supplement) (94.3%), step 7 (rooming in) (85.8%), step 2 (training) (82.3%), and step 9 (no artificial teats) (80.1%).

It was observed that knowledge about few other steps like step 1 (policy) (male 12.3%, female 17%), step 3 (pre- and post-natal information) (male 29.8%, female 27.7%) and step 8 (cues) (male 15.8%, female 17.7%) was very less among all the male as well as female respondents.

The knowledge about the support needed by a lactating mother from the community (step ten) was least (8.8%) among male as well as female (10.6%) respondents.

It was observed that, though the number of female respondents (78.7%) who were aware about the exact

number of steps required to achieve successful breastfeeding, it was less as compared to male respondents (93%), however the knowledge about individual steps was better in females step 6 (no supplements) 94.3%, step 7 (rooming in) 85.8%, step 2 (training) 82.3%, step 9 (no pacifiers) 80.1%, step 4 (skin to skin contact) 73.8%, step 1 (policy) 17%, step 8 (cues) 17.7%, step ten (community support) 10.6% as compared to male respondents except step 3 (pre- and post-natal information) and step 5 (counseling).

The difference in the knowledge of male and female respondents was statistically significant in step 4 (skin to skin contact) ( $P = 0.006$ ), step 5 (counseling) ( $P = 0.050$ ), step 7 (rooming in) ( $P = 0.00$ ) and step 9 (no pacifiers) ( $P = 0.003$ ) [Table 2].

A total of 90 (88.2%) medical students and 74 (77.1%) nursing students were aware about the fact that there are “ten” steps to successful breastfeeding while 6 medical and 3 nursing students did not attempt the question at all. This knowledge was significantly more among medical students ( $P = 0.01$ ).

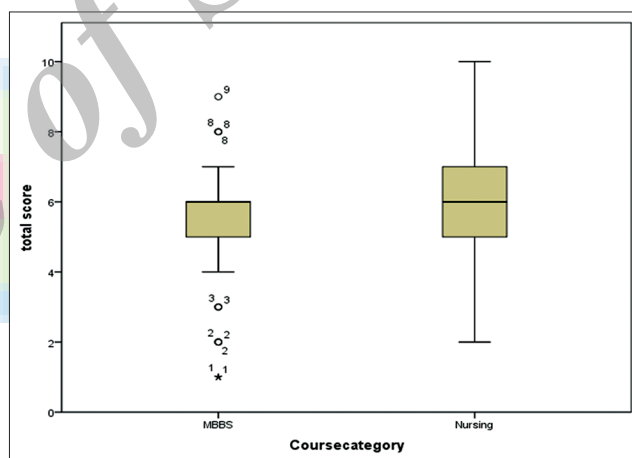


Figure 1: Distribution of the total score of nursing and medical students

Table 1: Mean age, score and SD of the respondents about the 10 steps to successful breastfeeding

Course category	Mean age (years) (SD) (CI)*	Mean score (SD) (CI)*
Medical	21 (0.98) (20.98-21.37)	5.39 (1.56) (5.09-5.70)
Nursing	23 (3.4) (22.46-23.85)	5.84 (1.48) (5.54-6.15)

\*SD=Standard deviation, CI=Confidence interval

Table 2: Sex wise distribution of knowledge about the 10 steps to successful breastfeeding

BFHI steps	Male (n=57) (%)			Female (n=141) (%)			P#
	Correct	Incorrect	NA*	Correct	Incorrect	NA*	
Total number of steps	53 (93)	3 (5.3)	1 (1.8)	111 (78.7)	22 (15.6)	8 (5.7)	0.055
Step 1 (policy)	7 (12.3)	45 (78.9)	5 (8.8)	24 (17)	111 (78.7)	6 (4.3)	0.355
Step 2 (training)	46 (80.7)	9 (15.8)	2 (3.5)	116 (82.3)	25 (17.7)	0	0.080
Step 3 (pre- and post-natal information)	17 (29.8)	37 (64.9)	3 (5.3)	39 (27.7)	101 (71.6)	1 (0.7)	0.106
Step 4 (skin to skin contact)	39 (68.4)	14 (24.6)	4 (7.0)	104 (73.8)	37 (26.2)	0	0.006
Step 5 (counseling)	51 (89.5)	4 (7)	2 (3.5)	110 (78)	29 (20.6)	2 (1.4)	0.050
Step 6 (no supplements)	49 (86)	6 (10.5)	2 (3.5)	133 (94.3)	6 (4.3)	2 (1.4)	0.148
Step 7 (rooming in)	31 (54.4)	20 (35.1)	6 (10.5)	121 (85.8)	19 (13.5)	1 (0.7)	0.00
Step 8 (cues)	9 (15.8)	46 (80.7)	2 (4)	25 (17.7)	114 (80.9)	2 (1.4)	0.617
Step 9 (no pacifiers)	32 (56.1)	21 (36.8)	4 (7)	113 (80.1)	24 (17)	4 (2.8)	0.003
Step 10 (community support)	5 (8.8)	48 (84.2)	4 (7)	15 (10.6)	121 (85.8)	5 (3.5)	0.541

\*NA: Not attempted, #Chi-square test was applied. BFHI=Baby-friendly Hospital Initiative

When the knowledge about the individual steps was assessed in medical and nursing students, it revealed that the least understood steps were 1 (policy) (15.7%, 15.6%), 3 (pre- and post-natal information) (27.5%, 29.2%), 8 (cues) (10.8%, 24%) and 10 (community support) (8.8%, 11.5%) respectively. When the knowledge about the ten steps was compared between medical and nursing students, it was found that the level of awareness was more among nursing students and it was statistically significant in steps 4 ( $P = 0.05$ ), 7 ( $P = 0.01$ ) and 8 ( $P = 0.03$ ) [Table 3].

Figure 2 shows that the most clearly understood steps of successful breast feeding among medical and nursing students seem to be similar except that the step 5 (technique of BF) among medical students and step 7 (rooming in) among nursing students were better understood in the respective groups.

While analyzing the options given for each step, it was noticed that for step 1, 46% of respondents incorrectly understood it as a written national policy which, in fact is an international policy. 44% of them misunderstood

that in step 3, informing only lactating women about breastfeeding was needed which, in fact includes pregnant women as well. Almost three-fourth of the respondents felt that the baby should be breastfed every 2 h as per the interpretation of step 8 which, in fact is demand feeding. Interpretation of step ten was misunderstood that the counseling could be done only by trained health personnel. Only few of the respondents had concept of peer support groups to promote breastfeeding in mothers.

## DISCUSSION

The BFHI was introduced in 1991, as a method to encourage breastfeeding and to get national support.<sup>[9]</sup> The hospitals were designated Baby-friendly only if adherence to all steps was considered. The factors commonly observed in the hospitals that act as hindrances to successful breastfeeding practices are inadequate awareness regarding EBF, and its desired age, violation of breast milk substitute code.

Our study revealed the average level of awareness among nursing as well as medical students about the ten steps [Table 1]. In spite of similar curriculum for medical and nursing students regarding maternal and child health care, the wide variability was observed in our study. This indicates that the level of awareness in few medical students was much more than nursing students [Figure 1] as they may be academically better performing medical students. In a study conducted about EBF there was a statistically significant difference between the mean score regarding knowledge of respondents working in two hospitals, which was due to the effect of workshop or seminar on the topic resulting in significantly improved score of the respondents.<sup>[10]</sup>

Both the male and female students in the nursing and medical category were aware of the crucial steps, that

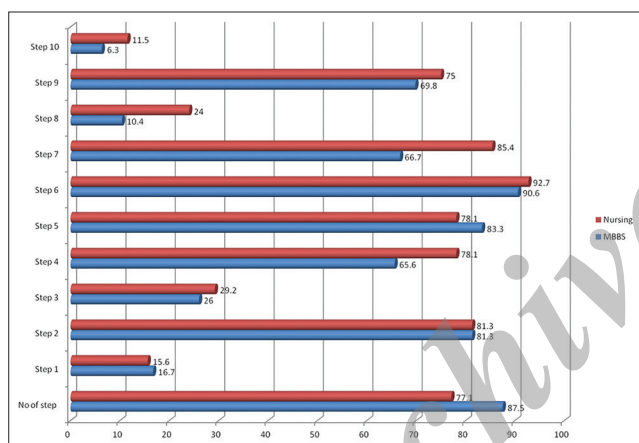


Figure 2: Graph showing stepwise correct answer among medical and nursing students

Table 3: Stepwise knowledge about BFHI among medical and nursing students

BFHI step	Medical (n=102)			Nursing (n=96)			P#
	Correct	Incorrect	NA*	Correct	Incorrect	NA*	
Total number of steps	90 (88.2)	6 (5.9)	6 (5.9)	74 (77.1)	19 (19.8)	3 (3.1)	0.010
Step 1 (policy)	16 (15.7)	81 (79.4)	5 (4.9)	15 (15.6)	75 (78.1)	6 (6.3)	0.917
Step 2 (training)	84 (82.4)	18 (17.6)	0 (0)	78 (81.3)	16 (16.7)	2 (2.1)	0.340
Step 3 (pre- and post-natal information)	28 (27.5)	72 (70.6)	2 (2)	28 (29.2)	66 (68.8)	2 (2.1)	0.961
Step 4 (skin to skin contact)	68 (66.7)	30 (29.4)	4 (3.9)	75 (78.1)	21 (21.9)	0 (0)	0.056
Step 5 (counseling)	86 (84.3)	14 (13.7)	2 (2)	75 (78.1)	19 (19.8)	2 (2.1)	0.515
Step 6 (no supplements)	93 (91.2)	8 (7.8)	1 (1)	89 (92.7)	4 (4.2)	3 (3.1)	0.326
Step 7 (rooming in)	70 (68.6)	28 (27.5)	4 (3.9)	82 (85.4)	11 (11.5)	3 (3.1)	0.016
Step 8 (cues)	11 (10.8)	88 (86.3)	3 (2.9)	23 (24)	72 (75)	1 (1)	0.036
Step 9 (no pacifiers)	73 (71.6)	25 (24.5)	4 (3.9)	72 (75)	20 (20.8)	4 (4.2)	0.827
Step 10 (community Support)	9 (8.8)	89 (87.3)	4 (3.9)	11 (11.5)	80 (83.3)	5 (5.2)	0.737

\*NA: Not attempted, #Chi-square test was applied. BFHI=Baby-friendly Hospital Initiative



is, advise about not to use supplements,<sup>[6]</sup> and artificial teats,<sup>[11]</sup> and the need for training was well understood by majority of them [Table 2]. But the other important steps about successful breastfeeding were not understood by the female nursing students who will be in future responsible for implementing the steps in hospitals.

Though the total number of steps were known to majority, the least understood steps in medical as well as nursing students were 3, 8, and 10 [Table 3]. The students have not understood the importance of making the mothers aware about breastfeeding at the earliest, that is, during pregnancy. The students misunderstood that it was the demand feeding, which is to be encouraged and involvement of the support group for the same is also not known to them. A study conducted to assess practices and attitudes regarding breastfeeding promotion in United States, revealed that only 11% informed the pregnant women about breast feeding and were not familiar with the steps of BFHI showing a broad knowledge gap.<sup>[12]</sup> On the other hand, there are professionals strongly advocating to their clients about best breastfeeding practices as found in some surveys.<sup>[13]</sup>

The rates of breastfeeding were expected to be dependent on adherence to all the ten steps by hospital authorities.<sup>[14,15]</sup> An observational study conducted in Scotland UK to examine the effect of BFHI on breastfeeding rates revealed that the rates increased significantly faster in the hospitals from 1995 to 2002.<sup>[16]</sup> In our study there was a statistically significant difference in the knowledge about steps 4, 7, and 8 among the nursing and medical students. The importance of these steps cannot be over emphasized as these are the key steps responsible for improvement of rates of EBF. Therefore, there is a need to give more stress on these steps in the teaching/training programs of the respective groups.

It was noticed in our study that there were mistakes in interpretation of the correctness of some steps like step 1 interpreted as national policy (instead of international policy), in step 3 only lactating women need to be informed about EBF (pregnant women also to be informed), breastfeeding should be scheduled (instead of on demand). And there was no concept of peer support groups. A study conducted by nonparametric comparisons to examine relationship between the ten steps and breastfeeding rates showed that the interpretation of the steps may not be fully understood resulting in difference in baseline breastfeeding rates between different settings. The key informant interviews revealed misunderstanding of some steps.<sup>[17]</sup>

Similar observations in a study at government hospitals about BHFHI practices revealed that only 20.8% of doctors, nurses and auxiliary staff in health facilities were aware

of initiating breastfeeding within 30 min. Only 5.22% could demonstrate correct positioning and attachment.<sup>[18]</sup> WHO has recommended colostrum as the perfect food for newborn by initiating breast feeding within 30 min after birth and that EBF to be continued up to 6 months of age which is a vital intervention to reduce infant mortality and ensure optimum growth and development in children.<sup>[19]</sup> The improvement in knowledge of medical students through educational intervention is the need of the hour as revealed in a similar study.<sup>[20]</sup>

In a cross sectional descriptive study conducted in 8 maternity obstetrics units and nursing staff in 8 non-BFHI accredited primary care units in Cape town, 47.2% could define components of BFHI, 52.8% could name BFHI practices and only 8.9% of nursing staff new about breast milk expression technique.<sup>[21]</sup> A before and after observational study conducted in University Hospital in Southern Brazil found that infants born at the hospital before it received BFHI accreditation were at a higher risk of discontinuing EBF in the 1<sup>st</sup> month of life.<sup>[22]</sup> On the contrary, no major differences were found in duration and success of lactation among two groups in a study conducted at Baby-friendly Hospital at Bengaluru with a aim to find the impact of breastfeeding policies on lactation success.<sup>[23]</sup>

## CONCLUSIONS

Correct breastfeeding practices in terms of nutrition are of utmost importance for a healthy start of life and further physiological and psychological growth of an infant. BFHI is considered as one of the successful international efforts ever undertaken to protect, promote and support breastfeeding.<sup>[24]</sup> Thus acquiring the correct knowledge about the same by medical and nursing students is the most crucial tool for better practices by them in the future. In addition to their regular curriculum teaching about BFHI, reinforcement about BFHI can be done in the form of continued medical education, workshops and seminars with the help of lactation specialists. Prioritization of the ten steps may be considered by giving preference to some crucial steps by rearranging them (e.g. steps 8, 4, and 3, to be arranged as steps 1, 2, and 3) which may lead to better understanding among the future medical and nursing professionals about the most important practical steps for successful breastfeeding.

## ACKNOWLEDGMENTS

We are thankful to the Dean of Pad Dr. D. Y. Patil Medical College, Dr. Amarjit Singh and the Principal of Pad Dr. D. Y. Patil Nursing College Mrs. Khurshid Jamadar for permitting us to conduct the study in the respective students.

Received: 08 May 14 Accepted: 25 Sep 2014

Published: 11 May 15

## REFERENCES

1. World Health Organisation, UNICEF. Baby Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care. Sec. 1. Background and Implementation. Geneva, Switzerland: World Health Organisation; 2009. Available from: [http://www.unicef.org/nutrition/files/BFHI\\_2009\\_s1.pdf](http://www.unicef.org/nutrition/files/BFHI_2009_s1.pdf). [Last cited on 2014 Aug 24].
2. World Health Organisation. Protecting, promoting and supporting breast feeding. The special role of maternity service. Geneva: World Health Organisation; 1989.
3. Gupta A. Report of All India Study of Newborn Care, Infant Feeding Practices and Implementation of the "Infant Milk Substitutes, Infant Foods and Feeding Bottles (Regulation of Production, Distribution and Supply) Act, 1992." In the Hospital Settings, and Infant Feeding Practices in the Catchment Area of These Hospitals. Ch. 1. Pitampura, Delhi: Breastfeeding Promotion Network of India BP-33; 2000. p. 14.
4. Gupta A, Arora V. The State of World's Breast Feeding Tracking implementation of Global Strategy for Infant and Young Child Feeding. International Baby Food Action Network (IBFAN), Asia Pacific, South Asia Report; Feb, 2007
5. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: A pooled analysis. WHO Collaborative Study Team on the Role of Breastfeeding on the Prevention of Infant Mortality. *Lancet* 2000;355:451-5.
6. Bahl R, Frost C, Kirkwood BR, Edmond K, Martines J, Bhandari N, et al. Infant feeding patterns and risks of death and hospitalization in the first half of infancy: Multicentre cohort study. *Bull World Health Organ* 2005;83:418-26.
7. Park K. Park's Text Book of Preventive and Social Medicine. 22<sup>nd</sup> ed. Banarsidas Bhanot Publisher; Jabalpur, India. 2013. p. 499.
8. Dadhich JP, Gupta A. Assessment of Status of Infant and Young Child Feeding (IYCF) Practice, Policy and Program-Achievement and Gaps. Breast Feeding Promotion Network of India; 2005.
9. UNICEF, WHO. Baby Friendly Hospital Initiative, Revised, Updated and Expanded for Integrated Care. WHO press, Switzerland: WHO; 2009.
10. Oluwatosin AO. Nurses knowledge of and attitude to exclusive breast feeding in southwest Nigeria. *Afr J Nurs Midwifery* 2007;9:73-81.
11. World Health Organisation, UNICEF. Baby Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care. Sec. 3. Breastfeeding Promotion and Support in a Baby-Friendly Hospital – 20-hour Course. Geneva, Switzerland: World Health Organisation; 2009. Available from: [http://www.unicef.org/nutrition/files/BFHI\\_2009\\_s3.1and2.pdf](http://www.unicef.org/nutrition/files/BFHI_2009_s3.1and2.pdf). [Last cited on 2014 Aug 24].
12. Philipp BL, Merewood A, O'Brien S. Physicians and breastfeeding promotion in the United States: A call for action. *Pediatrics* 2001;107:584-7.
13. Pascoe JM, Pletta K, Beasley J, Schellpfeffer M. Best start breastfeeding promotion campaign. *Pediatrics* 2002;109:170.
14. Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the baby friendly hospital initiative. *BMJ* 2001;323:1358-62.
15. Kramer MS, Chalmers B, Hodnett ED, Sevkovskaya Z, Dzvikovich I, Shapiro S, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): A randomized trial in the Republic of Belarus. *JAMA* 2001-31;285:413-20.
16. Broadfoot M, Britten J, Tappin DM, MacKenzie JM. The baby friendly hospital initiative and breast feeding rates in Scotland. *Arch Dis Child Fetal Neonatal Ed* 2005;90:F114-6.
17. Taylor EC, Nickel NC, Lobbok MH. Implementing the Ten Steps for Successful Breastfeeding in hospitals serving low-wealth patients. *Am J Public Health* 2012;102:2262-8.
18. Okolo SN, Ogbonna C. Knowledge, attitude and practice of health workers in Keffi local government hospitals regarding Baby-Friendly Hospital Initiative (BFHI) practices. *Eur J Clin Nutr* 2002;56:438-41.
19. WHO Breast Feeding; 2012. Available from: <http://www.who.int/topics/breast-feeding/en/>. [Last cited on 2013 Jan 15].
20. Hillenbrand KM, Larsen PG. Effect of an educational intervention about breastfeeding on the knowledge, confidence, and behaviors of pediatric resident physicians. *Pediatrics* 2002;110:e59.
21. Jackson DD. Knowledge, attitudes and practices of nursing staff regarding the Baby-Friendly Hospital Initiative in non-accredited obstetric units in Cape Town. *S Afr J Clin Nutr* 2011;24:32-8.
22. Braun ML, Giugliani ER, Soares ME, Giugliani C, de Oliveira AP, Danelon CM. Evaluation of the impact of the baby-friendly hospital initiative on rates of breastfeeding. *Am J Public Health* 2003;93:1277-9.
23. Shilpa, Lalitha, Prakash A, Rao S. BFHI in a tertiary care hospital: Does being Baby friendly affect lactation success? *Indian J Pediatr* 2009;76:655-7.
24. World Health Organisation Protecting, Promoting and Supporting Breast Feeding: The Special Role of Maternity Services. Geneva: World Health Organisation; 1989.

Source of Support: Nil, Conflict of Interest: None declared.