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Original Research Article

Assessment of knowledge, perception and intent among health professional students on breastfeeding: A cross sectional study

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ABSTRACT

Objective: To assess knowledge, perception, and intention regarding breastfeeding among medical students.**Materials and Methods:** This cross-sectional study assessed the knowledge, perception, and intentions of 198 third-year medical students at Maulana Azad Medical College, New Delhi, regarding breastfeeding.**Results:** Indicated that 69.6% had average knowledge, with only 3% demonstrating good knowledge. The mean score was 6.39 ± 4.940 . Gender and attendance of prior lectures did not significantly influence knowledge levels. The study explored participants' perceptions of breastfeeding policies and found no significant gender-based differences. Additionally, 55 students expressed intent to work in Reproductive and Child Health (RCH) in the future. While not statistically significant, their knowledge scores were higher.**Conclusion:** The study emphasizes the importance of enhancing breastfeeding education among medical students and highlights the potential role of future healthcare professionals in promoting optimal breastfeeding practices.This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.For reprints contact: reprint@ipinnovative.com

1. Introduction

The advantages of breastfeeding go far beyond just nourishing a baby. In addition to providing several health benefits for both parties, it forges a strong emotional bond between mother and child. Breastfeeding is a desirable practice because of its nutrient content, the cognitive and emotional growth it promotes, the lower risk of chronic diseases, the advantages it has for mothers after giving birth, and the favorable effects it has on the environment and the economy.^{1,2}

As per NFHS-5, 63.7% Infants were breastfed for 6 months, about 55.6% of Indian children under six months were exclusively breastfed, only 41.8% were breastfed

within one hour of birth and 54.9% of children aged 6 to 23 months continued nursing. India has established a number of initiatives and breastfeeding support policies to address these issues. The government has introduced "National Guidelines on Lactation Management Centers in Public Health Facilities" and is actively promoting "Baby-Friendly Hospital Initiative." Along with educating women and families about the value of breastfeeding, community-based programs and awareness campaigns also strive to support nursing moms.³⁻⁵

The changing patterns of life, work and leisure have had a significant impact on the breastfeeding practices followed and thus on the Infant and Mother's health. There is a scope of promoting, protecting and maintaining health enhancing behaviour related to breastfeeding. MBBS students are our assets, can act as a linker to our community

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and thus empower them. In Community Medicine classes, they are exposed to the community through Family Health Advisory Program, OPD at our health centers and also through outreach sessions. It becomes imperative to know the knowledge status, perceptions and future intents of our young medical students. Indian studies have shown poor knowledge of breastfeeding among medical students.⁶

Looking at such figures which validate the increasing scope of creating awareness among the general population regarding breastfeeding, it becomes imperative to know the knowledge status, perceptions and future intentions of our young medical students. Indian studies have shown poor knowledge of breastfeeding among medical students.⁶ Therefore, the current study was undertaken to assess the knowledge, perception and the attitude of medical students of Maulana Azad Medical College, New Delhi regarding breastfeeding.

2. Materials and Methods

2.1. Study design

Cross-sectional.

2.2. Study population

Medical students of Maulana Azad Medical College, New Delhi.

2.3. Study period

One month i.e., August 2023.

2.4. Inclusion criteria

All third-year medical students who were to appear in the final professional exams of Community Medicine and attend their undergraduate lectures.

2.5. Exclusion criteria

Any student who did not attend college on the day of data collection.

2.6. Sample size

A total of 198 participants were included in the study.

2.7. Sampling technique

A universal sampling approach was employed among the 3rd year students who came for their lectures.

2.8. Study tools

An online self-designed, semi-structured, and pre-tested Google form was used for the data collection. The questionnaire consists of questions regarding knowledge

of breastfeeding, awareness regarding the government-led initiatives, their perception of enabling breastfeeding practices for working mothers, and their future intent to work in this field.

2.9. Ethical considerations

The consent of the study participants was taken through the Google form itself. Students were gathered in the lecture theatre and a Google form link was shared with them. After explaining the nature of the study, they were asked to complete the form online. The self-administered form took an average of 16 minutes to complete following which the students were relieved.

The topic of Breastfeeding is in their curriculum and covered in theory as lectures and discussions as part of UG lectures, Family Health Advisory Programme and also in Clinical postings. IEC approval was waived off but permission from Dean was obtained. For the assessment of knowledge, the scores were given as: for each correct answer a score of 1 was given while none was given or deducted for the incorrect answers. The totaling of the scores was done for each of the study participants and categorized as good knowledge (14-18 correct responses), average knowledge (9-13 correct responses), and poor knowledge (below 9 correct responses).

2.10. Statistical analysis

The collected data was downloaded from the Google Forms and imported into Microsoft Excel. After data cleaning, the data was processed and analyzed using SPSS software version 25. Quantitative variables have been summarized as mean and SD. Qualitative variables have been expressed as proportions. A p-value of ≤ 0.05 has been considered statistically significant.

3. Results

The findings of 198 students are presented here. Mean age of the study participants was 21.23 ± 3.25 years. Among the participants, 118 (59.6%) were males and 80 (40.4%) were females. Out of 198, only 6(3%) were found to have good knowledge, 138 (69.6%) had average knowledge and 54 (27.2%) had poor knowledge regarding breastfeeding. The mean score of the total participants was found to be 6.39 ± 4.940 .

4. Discussion

Our study revealed that almost 70% of the participants had average knowledge about breastfeeding which is similar to another study but lower than Brodribb et al.⁷⁻⁹ The differences in the level of knowledge among boys and girls were not statistically significant which can be explained as it's a part of their curriculum teaching and hence

Table 1: Association of knowledge with socio-demographic variables (N=198)

Variable	Attended prior lectures in college			Gender		p-value
	Yes (n=144)	No (n=54)	p-value	Male (118)	Female (80)	
Knowledge scores (Mean ± S.D.)	9.60 ± 2.387	9.65 ± 2.364	0.893	9.60 ± 2.401	9.63 ± 2.351	0.946

Table 2: Association of perception regarding implementation of policy regarding breastfeeding in the college of the study participants with socio-demographic variables (N=198)

Variable	Attended prior education			p-value	Gender		p-value
	Yes (116)	Yes (144)	No (54)		Male (118)	Female (80)	
Implementation status of various policies related to breastfeeding in the college	Yes (116)	90 (77.5)	26 (22.5)	0.06	66(56.8)	50(43.2)	0.35
	No (82)	54 (65.8)	28 (34.2)		52(63.4)	30(36.6)	
Should the college have a baby crèche	Yes (170)	126 (74.1)	44 (25.9)	0.27	100 (58.8)	70 (41.2)	0.58
	No (28)	18 (64.2)	10 (35.8)		18 (64.2)	10 (35.8)	

Table 3: Association of intent to work in RCH in future with socio-demographic variables (N=198)

Variable	Received prior education			p-value	Gender		p-value
	Yes (n=144)	No (n=54)			Male (118)	Female (80)	
Career in RCH	Yes (55)	36 (65.4)	19 (34.6)	0.15	33 (60.0)	23 (40.0)	0.80
	No (143)	108 (75.5)	35 (24.5)		87 (60.8)	56 (39.2)	

Table 4: Association of intent to work in RCH in future with knowledge scores (N=198)

Variable	Intent to work in RCH as a career option			p-value
	Yes (n=144)	No (n=54)		
Knowledge scores (Mean ± S.D.)	10.09 ± 2.430	9.39 ± 2.300		0.113

was imparted equally between both genders. Similarly, although one-fourth of the medical students did not attend prior lectures on breastfeeding, their knowledge did not differ significantly from the ones who attended lectures. The indifference can be explained on the basis that knowledge of breastfeeding is more of a matter of general awareness and hence the knowledge can be imparted to the students through various other modes than just lectures. The students are going for home visits to families and provide general counseling to mothers for taking care of their newborns under the supervision of the residents and faculty, thereby indicating that knowledge can be imparted indirectly as well, while the residents are counseling the mother, the students grasp that knowledge and hence irrespective of attending proper lectures on breastfeeding, their knowledge was not poor.¹⁰

5. Conclusion

The advantages of breastfeeding go far beyond just nourishing a baby. In addition to providing several health benefits for both parties, it forges a strong emotional bond between mother and child. Breastfeeding is a desirable practice because of its nutrient content, the cognitive and emotional growth it promotes, the lower risk of chronic diseases, the advantages it has for mothers after giving birth,

and the favorable effects it has on the environment and the economy.

A growing number of initiatives have been made to assist and promote breastfeeding as society becomes more aware of its advantages. We can give women the tools they need to make the greatest decision for the health and well-being of their children by fostering breastfeeding-friendly environments.

6. Source of Funding

None.

7. Conflict of Interest

None.

References

1. Breastfeeding. World Health Organization (WHO). Available from: https://www.who.int/health-topics/breastfeeding#tab=tab_1.
2. Victora CG, Bahl R, Barros A, França GVA, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet*. 2016;387(10017):475–90.
3. Isaacs EB, Fischl BR, Quinn BT, Chong WK, Gadian DG, Lucas A, et al. Impact of breast milk on intelligence quotient, brain size, and white matter development. *Pediatr Res*. 2010;67(4):357–62.
4. Kim P, Feldman R, Mayes LC, Eicher V, Thompson N, Leckman JF, et al. Breastfeeding, brain activation to own infant cry, and maternal

- sensitivity. *J Child Psychol Psychiatry*. 2013;54(8):907–15.
5. Harder T, Bergmann R, Kallischnigg G, Plagemann A. Duration of breastfeeding and risk of overweight: a meta-analysis. *Am J Epidemiol*. 2005;162(5):397–403.
 6. Hauck FR, Thompson JMD, Tanabe KO, Moon RY, Vennemann MM. Breastfeeding and reduced risk of sudden infant death syndrome: a meta-analysis. *Pediatrics*. 2011;128(1):103–10.
 7. Postpartum haemorrhage. World Health Organization (WHO). Available from: [https://www.who.int/teams/sexual-and-reproductive-health-and-research-\(srh\)/areas-of-work/maternal-and-perinatal-health/postpartum-haemorrhage](https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/maternal-and-perinatal-health/postpartum-haemorrhage).
 8. Stuebe A. The risks of not breastfeeding for mothers and infants. *Rev Obstet Gynecol*. 2009;2(4):222–31.
 9. Newby R, Brodribb W, Ware RS, Davies PSW. Infant feeding knowledge, attitudes, and beliefs predict antenatal intention among first-time mothers in Queensland. *Breastfeed Med*. 2014;9(5):266–72.
 10. Sultania P, Agrawal NR, Rani A, Dharel D, Charles R, Dudani R. Breastfeeding Knowledge and Behavior Among Women Visiting a Tertiary Care Center in India: A Cross-Sectional Survey. *Ann Glob Health*. 2019;85(1):64.

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