

Breastfeeding perception among Medical students of Islamic International Medical College (IIMC) in Relation to COVID-19 pandemic

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Author's Contribution

⁵ Conception of study

² Experimentation/Study conduction

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Abstract

Introduction: Breastfeeding is crucial for the development & growth of the infant in the early years of life. Unfortunately, the incidence of breastfeeding is very low in our part of the world. Doctors play a critical role in the public awareness of the benefits & importance of breastfeeding. This study is done to find out the perception, knowledge, and attitude of medical students about breastfeeding and its implications during COVID-19 pandemic.

Materials & Methods: This cross-sectional study was conducted at Islamic International Medical College (IIMC), Rawalpindi from 10 November 2021 to 30 November 2021. An online questionnaire was sent to the students of MBBS from first to final year via email. Results were analyzed on SPSS version 21.

Results: A total of 316 students participated. The majority of students were aware of the initiation, duration, and advantages of breastfeeding.

Conclusion: The majority of the students of IIMC were aware of the benefits of breastfeeding but most of them lacked knowledge of breastfeeding by mothers suffering from COVID-19.

Keywords: Breastfeeding, COVID-19, Medical Students.

Introduction

Every child has a right to an adequate, safe, and nutritious diet.¹ Breast milk is an ideal & perfect food for an infant with several advantages. It has a crucial role in the growth and development of an infant, with far-reaching implications for both the mother and the child's health.² It is hygienic and contains antibodies that help protect children against a variety of infections. It also promotes cognitive development. Research provided evidence that exclusively breastfed babies have high IQ levels as compared to bottle-fed babies.³ Long-term benefits are the prevention of immune disorders, obesity, and diabetes mellitus.⁴ Breastfeeding may also help conserve the mother's and society's resources.⁵ In developing countries like Pakistan, where financial constraints are the most important factor, this is the cheapest way of providing the best quality food to the baby. According to the latest survey 2020, the infant mortality rate in Pakistan is 58.46.⁶ Leading causes of death include infections like diarrhoea & pneumonia.⁷ One of the easiest & cheapest ways to reduce this mortality is the promotion of breastfeeding.

WHO and UNICEF recommend initiating breastfeeding within the first hour of birth and the infant must be exclusively breastfed for the first 6 months of life – meaning no other foods or liquids including water.⁸ According to a 2017 CDC survey, just 58.3 percent of newborns in the United States are exclusively breastfed at 6 months.⁹ In Pakistan; however, the situation is more frustrating. (48.4%).¹⁰ Concerns have been expressed, in light of the current COVID-19 pandemic, over whether moms infected with COVID-19 can pass the SARS-CoV-2 virus to their new-born or young kids through breastfeeding. The World Health Organization recommends that mothers with suspected or confirmed COVID-19 start or continue breastfeeding since the benefits exceed the dangers of transmission.¹¹ The incidence of COVID-19 infection in babies is minimal, and the infection is usually moderate or asymptomatic, but the effects of

artificial feeding and separation from the mother can be severe.¹²

Medical students being the future doctors & medical teachers can play a crucial role to promote, protect, and supporting breastfeeding. The assessment of their knowledge and attitudes about breastfeeding is also a reflection of the success of undergraduate education programs. Such data can help us to anticipate the future situation and guide us to design and implement strategies for curricular reforms in medical schools and cultural change in hospitals.

Very few local studies have been found on this topic in literature, especially on medical students. This study is conducted to highlight the knowledge of medical students about breastfeeding particularly during the COVID-19 pandemic.

Materials and Methods

This Cross-sectional study was done at Islamic International Medical College (IIMC) Rawalpindi from 10 November to 30 November 2021. A total of 500 MBBS students studying at IIMC were included in the study. An online questionnaire comprising 19 questions related to breastfeeding & its importance during the COVID-19 pandemic was shared online with students of first to final-year MBBS. 316 students responded and their response was collected and analyzed on SPSS version 21.

Results

29 students from 1st year, 44 from 2nd year, 28 from 3rd year, 100 from 4th year, and 115 from final year responded. Most of the students had adequate knowledge about breastfeeding. About 88 % of students said that breast milk is an ideal food for a baby. Table 1 shows the response of the students to various questions.

Whereas students' understanding and perception of breastfeeding were adequate, they lacked knowledge on the continuation of breastfeeding during COVID 19 pandemic as shown below in Table 2.

Table 1: Knowledge about breastfeeding

S. no.	Question	Yes No. of students (%)	No No. of students (%)
1.	The benefits of breastfeeding last only as long as the baby is breastfed.	90 (28.48)	188 (59.49)
2.	Formula feeding is more convenient than breastfeeding.	97 (30.69)	157 (49.68)

3.	Breastfeeding increases mother-infant bonding.	244 77.21	44 (13.92)
4.	Breast milk lacks iron.	117 37.02	123 38.92
6.	Formula feeding is the better choice if the mother plans to go back to work.	123 38.92	102 32.27
7.	Mothers who feed formula milk to their babies miss the great joys of motherhood.	199 62.97	55 17.40
9.	Breastfed babies are healthier than formula-fed babies.	226 71.51	49 15.50
10.	Breastfed babies are more likely to be overfed than formula-fed babies.	97 30.69	124 39.24
12.	Formula milk is as healthy for an infant as breast milk.	141 44.62	119 37.65
15.	Breast milk is more easily digested than formula milk.	229 72.46	35 11.07
13.	Breast milk is cheaper than formula.	224 70.88	42 13.29
14.	Fathers feel left out if a mother breast feeds.	55 17.40	190 60.12
15.	Mothers should not breastfeed in public places such as restaurant.	119 37.65	105 33.22
16.	Fathers feel left out if a mother breast feeds.	55 17.40	190 60.12

Table 2: Breastfeeding & COVID-19

Question	Yes No. of students (%)	Neutral No. of students (%)	No No. of students (%)
There is a risk if a baby is breastfed by a mother suffering from Covid 19.	128 40.50	115 36.39	73 23.10
Breastfeeding is protective against Covid 19 infection.	134 42.40	81 25.63	101 31.96
The formula is safe if the mother is suspected /confirmed Covid 19.	179 56.64	58 18.35	79 25

Discussion

This study aimed to assess the knowledge of medical students regarding breastfeeding practices. The overall knowledge of medical students was good, and the senior students (4th & final year) had better knowledge as compared to the preclinical students. Similar results (31% preclinical years and 44% clinical years) were observed in a study done among Malaysian students¹³ & studies conducted at Karachi^{14,15} although the authors assessed different parameters related to knowledge regarding breastfeeding. One reason for this difference could be the small sample size of preclinical students as compared to clinical year students as they were attending face-to-face sessions on campus.

About 80% of the students had adequate knowledge regarding breastfeeding in our study which is consistent with other studies.¹⁶ Results of the present study are far better than a study done among Malaysian students (37.3%).¹³ This improved perception of breastfeeding among students could be because the faculty members of the IIMC place a strong emphasis on it, and it is incorporated in the early years' curriculum as well as the clerkship module.

In our study, 77.21% of students perceived that breastfeeding increases mother-infant bonding which is almost the same as reported in a study from India (71%).¹⁷ Another study from the UK reported a high percentage (97%).²

71.51% of students agreed that breastfed babies are healthier than formula-fed babies which is more than

reported in various studies (64% & 53.45 respectively).^{15,16} This percentage was higher in a study conducted by Biggs et al² & a study conducted by Ahmed et al¹⁸ both of which reported 90% of students' perception of reducing early childhood infections and 77% of students' perception of reduced risk of DM and obesity in adulthood.²

72.46% of the students said that breast milk is more easily digested than formula milk as compared to 89% of students in a study conducted by Ahmed et al.¹⁸

79.74% of students said that breast milk is an ideal food for a baby which is consistent with a study conducted in India which reported a percentage of 71.4%.¹⁷ Contrary to this, a study conducted by Ahmed et al on nursing students 100% agreed with this.¹⁸

Despite an extensive literature search, the authors couldn't find any study on the knowledge of students on breastfeeding and its effects on COVID-19. In this study, the authors find an overall poor perception of students in this matter.

One of the limitations of this study was that it was only undertaken at one medical school hence cannot be generalized to all medical students. Further research should be conducted in the future, comparing private and public schools, so that the need of including breastfeeding expertise in medical university curricula throughout Pakistan can be stressed at the government level.

Conclusion

The overall knowledge and perception of the students in IIMC concerning breastfeeding were satisfactory, but it could be made better, because being first-line in the health delivery system, they are expected to know much more about breastfeeding than other health-affiliated students. They are not aware of the significance of breastfeeding during the COVID-19 pandemic which must be improved as it is the need of the day. Therefore, the value of breastfeeding, as well as its importance in COVID 19, should be emphasized in the medical curriculum across Pakistan.

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