

Perception of Rural Mothers towards Exclusive Breastfeeding during the COVID-19 Pandemic

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1. ABSTRACT

Background: Infants should be exclusively breastfed for the first six months of life to obtain the nutritional and immunological advantages of breast milk. **Aim:** The study aimed to assess the perception of rural mothers towards exclusive breastfeeding during COVID-19 pandemic. **Method:** A descriptive study design was used on 178 rural mothers. **Setting:** The study was conducted at rural primary health care center in Damietta, Egypt. **Tool of data collection:** A Structured interview questionnaire was used for gathering the data. **Results:** Nearly half (46.6%) of rural mothers perceived pre-lacteal feed to be important for infants. Also, half of them believed that breast milk alone isn't enough for ≥ 6 months infant so baby can't survive without water in the 1st 6 months of life. While 46.1% of them thought that lactation should be discontinued if taking any type of medication. The majority of them believed that breast milk protects infants against COVID-19 virus while 70.8% of them stated that COVID suspected or positive mothers shouldn't stop breastfeeding. **Conclusion and Recommendations:** The study concluded that however 61.8% of rural women had adequate perception towards exclusive breastfeeding, others had inadequate perception and myths of exclusive breastfeeding. Developing educational programs for optimal behaviors and correct prevalent myths to improve breastfeeding practices are recommended.

Keywords: Attitude, COVID-19, Exclusive breastfeeding, Perception, Rural mothers.

2. Introduction:

According to the World Health Organization (WHO), exclusive breastfeeding (EBF) includes providing breast milk only for the first six months of life to newborn infants with no other liquids (WHO, 2021). Exclusive breastfeeding provides unmatched health benefits for both mothers and newborn infants. Furthermore, breast milk is the best source of nutrition for infants (Jama et al., 2020). Both mothers and newborns can benefit from breastfeeding in terms of health. A newborn receives the best nutrition from breast milk, which also promotes growth and development. Additionally, breastfeeding can protect mothers and infants against several disorders. (Mekebo et al., 2022).

Despite the health benefits of exclusive breastfeeding, the rates are still low, especially in developing countries where there is the most need (WHO, 2021). Globally, exclusive breastfeeding rates were slowly increased since 1995. It took over ten years to rise from 33% to 39% in developing nations (Asare, Preko, Baafi, & Dwumfour-Asare, 2018).

The recommended six months of exclusive breastfeeding are a missed opportunity for nearly 60% of newborns worldwide. In the first hour of

life, only 43% of newborns globally in 2018 were breastfed (UNICEF, 2019).

2.1 Significance of the study

During COVID-19 pandemic, a significant number of lactating mothers stopped breastfeeding while others reduced the duration of breastfeeding, due to fear of transmission risk, a lack of knowledge, an unfavorable attitude and perception (Gebretsadiq, Tadesse, Mamo, Adhanu & Mulugeta, 2022).

Also, Socio-demographic characteristics as residence and cultural beliefs have a great impact on breastfeeding initiation and continuation of breastfeeding exclusively (Kamal, Ismael, Abdelrehim & El-Khateeb, 2021).

There is a misconception regarding exclusive breastfeeding among rural mothers. Also, their intent to breastfeed exclusively is affected by the attitude and beliefs towards breastfeeding and prevalent myths of breast milk in certain cultures that results in sub-optimal breastfeeding practices (Alnasser et al., 2018).

2.2 Study Aim

The current study aimed to assess the perception of rural mothers towards exclusive breastfeeding during the COVID-19 pandemic.

2.3 Research question

What is the perception of rural mothers towards exclusive breastfeeding during COVID-19 pandemic?

3. Methodology

3.1 Study Design

A descriptive research design was used as a quantitative research method to collect quantifiable information about the perception of rural mothers towards exclusive breastfeeding during COVID-19 pandemic

3.2 Study Setting

The study was conducted at rural primary health care center in Damietta, Egypt.

3.3 Subjects:

The study included 178 lactating mothers who attended the above-mentioned setting to vaccinate their newborn infants and agreed to participate in the study.

3.4 Data collection tool:

A **structured interview questionnaire** was used to collect the data; It was designed by the researcher after reviewing the previous research. It consisted of three parts as the following:

Part I: Socio demographics: such as the age group, occupation, family income, level of education.

Part II: Obstetric history: such as gravidity, parity, the mode previous of delivery, number of abortions, number of living children, age of gestation.

Part III: A Likert scale for exclusive breastfeeding perception among rural mothers

The perception was measured on a Likert scale. It consisted of 2 parts. **Part (A):** Studied women perception of exclusive breastfeeding in terms of non-COVID related factors including 7 questions about EBF only.

Part (B): Studied women perception of exclusive breastfeeding in terms of COVID related factors including 8 questions about WHO recommendations of EBF during COVID-19 pandemic.

Scoring system: If the statement explicit positive attitude, the responder scored (2 for agree, 1 for neutral and 0 for disagree). If the statement explicit negative attitude, the responder scored (2 for disagree, 1 for neutral and 0 for agree). **The total attitude score** was calculated based on the number of answers in which $\geq 60\%$ considered

positive attitude and $<60\%$ considered negative attitude (Marzo et al., 2019).

3.5 Validity and Reliability of the tool

The tool's validity was examined by three of woman's health and midwifery nursing experts. Cronbach's (alpha) test in version 20 of the Statistical Package for the Social Sciences (SPSS) was used to test the reliability of the tool. The test value was **(0. 0. 891)** indicating high reliability of the questionnaire.

3.6 Ethical Considerations

Ethical approval obtained from the Faculty of Nursing - Mansoura University's Research Ethics Committee was obtained as well as the mentioned setting approval to carry out the study was obtained. Also, all participants' written consent was obtained after explaining the purpose of the study, the right to withdraw at any point of the study voluntarily, ensuring their privacy, and confidentiality.

3.7 Data Collection Procedure

The pilot study included 18 of lactating women attended the previously mentioned setting to vaccinate their babies representing 10 % of the total sample size. The pilot's goal was to evaluate the tool in terms of clarity, applicability, feasibility, objectivity, consistency and to make sure that questions had conveyed the desired meaning. The pilot study percentage wasn't included in the analyzed sample. The researcher interviewed every mother individually for about 15 - 20 minutes to complete the structured interview questionnaire to evaluate the perception towards exclusive breastfeeding among rural mothers.

3.8 Statistical Analysis

The collected data were analyzed by Statistical Package for Social Sciences (SPSS version 20). Cronbach's alpha was used to test the internal consistency of the study tools. Data represented as descriptive statistics in frequency, percentage, mean and standard deviation. **III.**

4. Results

Table one shows that nearly one quarter (**21.3%**) of the studied women perceived breastfeeding as painful process. While nearly half (**46.6 % and 46.1% respectively**) of them disagreed that Pre-lacteal feed is important and agreed on stopping breastfeeding if taking any type of medication. Also, slightly more than half (**51.1%**) of them believed that breast milk alone is not enough for ≥ 6 months.

Table two shows that more than two -thirds (**70.8%**) of the studied women disagreed with

stopping breastfeeding for suspected or Positive mothers, while one quarter (26.4%) of them had neutral attitude. As well, one -third of them (30.9%) had negative attitude towards skin-to-skin contact during the pandemic. Additionally, one - thirds (34.3%) of the studied women agreed on stopping breastfeeding in case of being vaccinated.

5. Discussion

The current study implemented to assess perception of rural mothers regarding exclusive breastfeeding during COVID-19 pandemic. The results of the current study had answered the research question.

Regarding colostrum feeding, the current study found that the majority of the studied women explicit positive attitude toward colostrum. Similar findings were also observed in **Ambike et al. (2017)** who conducted a study on Knowledge, awareness, and breast-feeding practices of postnatal mothers in a rural teaching hospital cross-sectional survey and found half of the studied women had awareness about importance of colostrum and a positive believe that colostrum was good to feed.

Conversely, our finding is higher than the study of **Islam.M.S., Kaiser.R. (2019)**. on Colostrum feeding status in a selected rural area of Bangladesh, who found that less than two-thirds of the studied women gave colostrum. This is due to lack of knowledge and negative belief that colostrum is harmful, and many mothers even discard it with the advice of mothers-in-law.

Regarding pre-lacteal feed, the findings of the present study showed that less than half of the studied women had a negative attitude regarding pre-lacteal feeds. This is lower than study findings of **Verma & Dixit (2016)** in India found that three-fourths percent of the studied women had a negative attitude regarding pre-lacteal feeds. This could be explained by poor perception about inadequate breast milk amount in the first days following delivery.

Although the current study showed that more than three-fourths of the studied women agreed that breast milk protects against the COVID-19 virus, more than half of them had the misconception that coronavirus is transmitted through breast milk. This variation in previous answers was also found by **Abuidhail, Tamim, Abdelrahman & Al-Shalabi (2022)** study of Knowledge and Practices of Breastfeeding Mothers towards Prevention of the Emerging Coronavirus conducted in Jordon reported three-quarters of mothers with believed that Coronavirus is transmitted through breast milk but, nearly all

mothers admitted that breast milk remains the best source of nutrition for most infants. This may be explained by the lack of information available on different media channels by specialized professionals regarding these points, and the characteristics of the study sample.

Regarding Coronavirus transmission through breast milk a study in Turkey performed by **Yassa, et al. (2020)** showed that half of the mothers didn't think that breastfeeding is unsafe during the COVID-19 outbreak. **Conversely**, about three-quarters of respondents agreed that coronavirus could be transmitted by breast milk, which was congruent with an Indian study reported that half of participants not aware about transmission of COVID-19 through breast milk (**Kamal, Thakur, Swain & Vikneshram, 2020**). However, till now most studies failed to detect coronavirus in breast milk (**Aiman, Sholehah & Husein, 2021**).

The current study showed that more than three-fourths of the studied women agreed that breast milk protects against the COVID-19 virus. Moreover, more than two-thirds of them expressed a positive attitude toward stopping breastfeeding for suspected or Positive mothers. This may be due to mothers' previous exposure to coronavirus during the practice of breastfeeding.

Our findings are in disparity with **Coca, et al. (2022)** who conducted a comparative study across five countries online survey on 3253 women on postnatal women's breastfeeding beliefs, practices, and support during the COVID-19 pandemic. It reported that nearly three fourths of women in South Korea, more than half of women in Taiwan, and Thailand, and only seven percent of women in Brazil agreed that confirmed or suspected mother should not breastfeed. Also, breastfeeding could be replaced by formula feeding (negative attitude).

6. Conclusion

Based on the present study findings to assess perception of rural mothers regarding exclusive breastfeeding during COVID-19 pandemic, despite efforts to raise awareness about breastfeeding and increase EBF rates worldwide, the current study concluded that nearly two-fifths of rural women have inadequate perception regarding EBF.

7. Recommendation:

Based on the current study findings, the suggested recommendation is:

Developing educational program about exclusive breastfeeding to improve perception and practices among newly mothers.

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Table (1): Studied women perception of exclusive breastfeeding in terms of non-COVID related factors (n=178)

	Disagree		Neutral		Agree	
	n	%	n	%	n	%
Breastfeeding is painful	126	70.8	14	7.9	38	21.3
Pre-lacteal feed is important for the baby	83	46.6	12	6.8	83	46.6
Discarding colostrum is important	160	89.8	9	5.1	9	5.1
Breast milk alone is enough for ≥6 months infant	91	51.1	3	1.7	84	47.2
Exclusive breastfeeding only affects newborn health negatively	118	66.3	31	17.4	29	16.3
The baby can survive without water in the 1 st 6 months	92	51.7	1	0.6	85	47.7
Mother should stop feeding if taking any type of medication	94	52.8	2	1.1	82	46.1

Table (2): Perception towards exclusive breastfeeding in terms of COVID related factors(n=178)

	Disagree		Neutral		Agree	
	n	%	n	%	N	%
Hand washing helps in COVID prevention and transmission	11	6.2	2	1.1	165	92.7
Breast milk protects infants against the COVID-19 virus	11	6.2	28	15.7	139	78.1
COVID suspected or positive mothers should stop breastfeeding	126	70.8	47	26.4	5	2.8
COVID suspected or Positive mothers should be separated from their infant	98	55.1	50	28.1	30	16.8
skin-to-skin contact shouldn't be maintained during the COVID-19 pandemic	88	49.4	35	19.7	55	30.9
A mother with Severe COVID -19 disease could express milk to be given to her infant	31	17.4	48	27.0	99	55.6
Vaccinated women should stop breastfeeding	96	53.9	21	11.8	61	34.3
Breastfeeding should be avoided in case of cold or flu of the mother	136	76.4	2	1.1	40	22.5

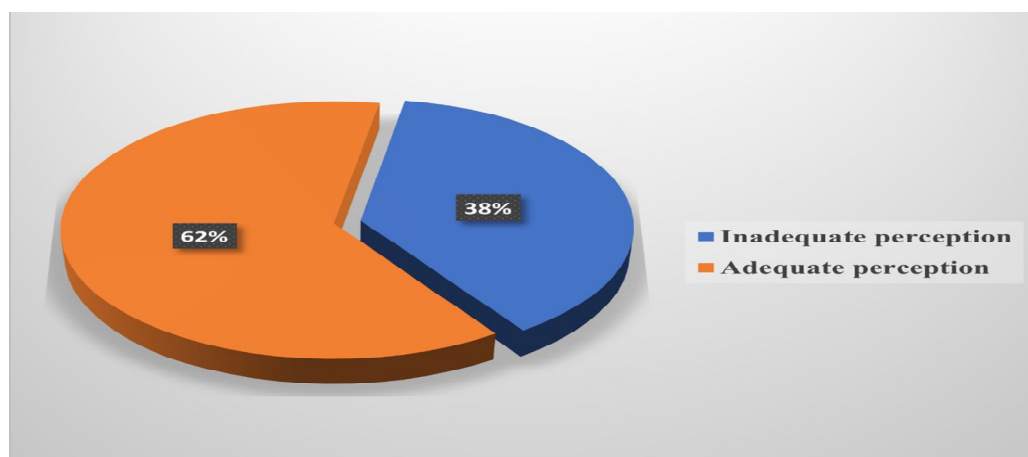


Figure (1) Total exclusive breastfeeding perception score among the studied women during the COVID-19 pandemic (N=178).