Factors Related to Exclusive Breastfeeding During The COVID-19 Pandemic: Literature Review

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Abstract

Background: The COVID-19 pandemic has created several challenges in exclusive breastfeeding, even though WHO has provided recommendations to continue exclusive breastfeeding during the COVID-19 pandemic.

Purpose: This study aims to summarize the factors that can affect breastfeeding mothers during the COVID-19 pandemic.

Methods: This research is a literature review. Thematic articles were selected from 2020-2023 from the electronic databases Science Direct, PubMed, and Google Scholar. Researchers used the PRISMA method.

Result: From 170 articles, 15 studies were reviewed, and finally, only 10 were analyzed. From the articles analyzed, various supports from husbands, families, and health workers, information support, motivation, beliefs, self-efficacy, delivery settings, age, education level, and work situations influence exclusive breastfeeding.

Conclusion: The factors that most influence the practice of exclusive breastfeeding are support from husbands, and family, support from health workers, and information support. It is hoped that policymakers and health workers will be more active in making socialization programs about the importance of providing exclusive breastfeeding during the COVID-19 pandemic.

Keywords: COVID-19 Pandemic, Exclusive Breastfeeding, Health Worker Support, Husband Support

Introduction

The COVID-19 pandemic has created several challenges in providing nutrition and care for newborns, especially regarding breastfeeding. Few parents are afraid to give exclusive breastfeeding during a pandemic because they are worried about the transmission of SARS-CoV-2.^{1,2} However, WHO has recommended that exclusive breastfeeding should still be given to babies even during a pandemic. WHO has also issued breastfeeding guidelines for mothers suffering from COVID-19.^{3,4,5}

Many factors, including cultural factors, sociodemographic, the mother's education level, delivery method, place of delivery, psychosocial factors, self-efficacy, applicable policies, and others, still influence breastfeeding practice.⁶ Policies that support decision-making for breastfeeding such as maternity leave, including support from the spouse, as well as the availability of professional support for breastfeeding

success.1,7

Breastfeeding should be encouraged and facilitated so mothers and babies can be cared for together to establish attachment through skin-to-skin contact, even during the COVID-19 pandemic. If the mother is too sick to breastfeed, it is necessary to facilitate and support the breastfeeding process indirectly so the baby can breastfeed. In this case, the need for information and health care from professionals that can be accessed is essential.⁸

Because the practice of breastfeeding during the COVID-19 pandemic has decreased, this research is needed to summarize the literature to identify what factors can affect breastfeeding mothers during a pandemic, so that it can become a theory when counseling breastfeeding mothers.

Method

1. Research design

This research is a literature review.

2. Setting and samples

The research results according to the theme were selected from 2020-2023. The inclusion criteria of this study were articles with full text, which can be accessed free of charge, in English, and reports with cross-sectional, cohort, case-control, and mixed-method research designs. Exclusion criteria are articles in the form of conference papers, chapters, editorials, theses and dissertations, and are not open access.

3. Measurement and data collection

The data sources for this study were articles found in the electronic databases Science Direct, PubMed, and Google Scholar. The researcher used the following search strategy in each database with the keywords "exclusive breastfeeding", "exclusive breastfeeding during the pandemic", and "exclusive breastfeeding during the COVID-19 pandemic".

4. Data analysis;

Researchers use the Preferred Reporting Items for Systematic Reviews and Metaanalyses Statement (PRISMA) method to follow the correct research steps or protocol, as shown in Figure 1.

Results

Based on the search strategy and selection criteria that have been carried out, from 170 articles in total, 15 studies were reviewed in full. Finally, only 10 studies could be analyzed to the end. The selection process for this study is presented in Figure 1.



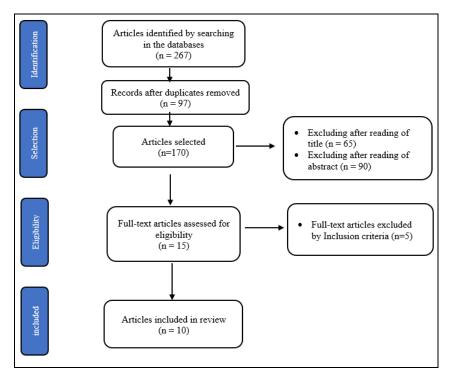


Figure 1. The selection process of studies based on PRISMA

Table 1. Result of article analysis

No	Author	Title/Journal	Method	Result
1	Samaria D, Marcelina LA, Florensia L	The COVID-19 pandemic's impact on breastfeeding self-efficacy: A path analysis, Enfermería Clínica, 2023, Vol. 33.	Cross- sectional	Factors that influence exclusive breastfeeding during a pandemic are self-efficacy, family support, social support and health workers, level of anxiety, and bonding with the baby.
2	Agrina, Afandi D, Suyanto, Erika, Dewi YI, Helina S, Pramita D, Safira N.	Analysis of Supporting Factors Associated with Exclusive Breastfeeding Practice in the Urban Setting during the COVID-19 Pandemic, Children, 2022, Vol. 9 (1074).	Mix- method	Emotional and informational support are the most critical factors influencing exclusive breastfeeding during a pandemic. In addition, the support of the husband, family, mother's age, higher education level, and duration of work also influence.
3	Nisa F, Damayanti NA, Suhariadi F, Herisanty W, Afiyah RA.	Internal factors affecting the mother' psychological capital in exclusive breastfeeding during the COVID-19 pandemic, Journal of Public Health Research, 2022, Vol. 11(3).	Cross- sectional	The factor that influences the psychological capital of mothers related to exclusive breastfeeding during the COVID-19 pandemic is motivation. The mother's ability to provide exclusive breastfeeding also dramatically affects the mother's psychology.



5	Gebretsadik GG, Tadesse Z, Mamo L, Adhanu AK, Mulugeta A.	Knowledge, attitude, and determinants of exclusive breastfeeding during COVID-19 pandemic among lactating mothers in Mekelle, Tigrai: a cross sectional study, BMC Pregnancy and Childbirth, 2022, Vol. 22 (850).	Cross-sectional	The findings of this study highlight that programs that increase women's participation in education and decision-making can improve EBF practices. In addition, during the COVID-19 pandemic, providing breastfeeding mothers with adequate and upto-date breastfeeding information can significantly enhance EBF practices.
3	Setyowati H, Sofiyanti I, Rezeki IT.	Husband's Support in Giving Exclusive Breastfeeding during the COVID-19 Pandemic, Annals of the Romanian Society for Cell Biology, 2021, Vol. 25 (6).	sectional	The husband's support greatly influences the mother's success in giving exclusive breastfeeding. Husbands must increase their knowledge about exclusive breastfeeding and support their wives.
6	Chertok IA, Medvedik RA, Arendt M, Sacks E, Otelea MR, Rodrigues C, Costa R, Linden K, Zaigham M, Elden H, Drandic D, Baeschlin SG, Miani C, Valente EP, Covi B, Lazzereni M, Mariani I.	Factors associated with exclusive breastfeeding at discharge during the COVID-19 pandemic in 17 WHO European Region countries, International Breastfeeding Journal, 2022, Vol. 17 (83).	Cross- sectional	The study results highlight the need to educate mothers and families about the importance of exclusive breastfeeding, reduce mother-infant separation, increase professional breastfeeding support, and follow evidence-based practice guidelines to promote breastfeeding in a comprehensive and multi-level manner.
7	Nanishi K, Okawa S, Hongo H, Shibanuma A, Abe SK, Tabuchi T.	Influence of the COVID-19 pandemic on breastfeeding support for healthy mothers and the association between compliance with WHO recommendations for breastfeeding support and exclusive breastfeeding in Japan, PeerJ, 2022, Vol. 10.	Cross- sectional	Multiple logistic regression analysis shows that positive breastfeeding support is the most influential in exclusive breastfeeding during the COVID-19 pandemic. In addition, the mother's age, education level, gravida, and intention to breastfeed are also significant.
8	Behesti MAZ, Alimoradi Z, Bahrami N, Allen KA, Lissack K.	Predictors of breastfeeding self-efficacy during the COVID-19 pandemic, Journal of Neonatal Nursing, 2022, Vol. 28	Cohort	The results of this study indicate that fear of COVID-19 is not a significant predictor of exclusive breastfeeding. Still, social support, support from husbands, and intention to breastfeed are more positively related to complete breastfeeding practices.
9	Nuampa S, Ratinthorn A, Patil CL, Kuesakul K, Prasong S, Sudphet M.	Impact of personal and environmental factors affecting exclusive breastfeeding practices in the irst six months	Mix- method	This study shows that mothers with higher socioeconomic status and working from home have higher EBF success during the COVID-19



		during the COVID-19 pandemic in Thailand: a mixed-methods approach, International Breastfeeding Journal, 2022, Vol. 17 (73).		outbreak.
10	Coca KP, Lee EY, Chien LY, Souza ACP, Kittikul P, Hong SA, Chang YS.	Postnatal women's breastfeeding beliefs, practices, and support during the COVID-19 pandemic: a cross-sectional comparative study across fve countries, International Breastfeeding Journal, 2022, Vol. 17 (58).	Cross- sectional	The results of this study indicate that positive breastfeeding beliefs, family support, and support from health workers affect exclusive breastfeeding practices. The government must emphasize and socialize the importance of safe breastfeeding, especially in Asian countries.

Based on Table 1, seven studies using a cross-sectional design (Samaria et al., 2023; Nisa et al., 2022; Gebretsadik et al., 2022; Setyowati et al., 2021; Chertok et al., 2022; Nanishi et al., 2022; Coca et al., 2022)^{9,11-15,18}, two studies used a mix method design (Agrina et al., 2022; Nuampa et al., 2022)^{10,17}, and one study used a cohort design (Behesti et al., 2022)¹⁶.

Most research results in the articles reviewed stated that husband support, family support, health worker support, and information support, such as health education and outreach programs, were the factors that most influenced the success of exclusive breastfeeding during the COVID-19 pandemic.

Discussion

During the COVID-19 pandemic, breastfeeding mothers faced various challenges and changes, including breastfeeding practices. This literature study aims to summarize the factors that can affect breastfeeding mothers during the COVID-19 pandemic because the practice of breastfeeding during the COVID-19 pandemic has decreased in Indonesia and other countries. Many mothers are worried about the transmission of COVID-19 to mothers and babies, even though WHO has issued recommendations to continue giving exclusive breastfeeding to babies.^{3,4,5}

WHO has recommended that babies born to mothers infected with COVID-19 should still be given breast milk. This is because breast milk contains substances that can increase the body's immunity to protect it from COVID-19. Breastfeeding is still carried out by paying attention to and implementing strict health protocols, so the baby does not contract COVID-19. Breastfeeding protects neonates, infants and children from morbidity and death. The protective effect is powerful against infectious diseases due to the immediate transfer of antibodies and anti-infective factors and the transfer of long-lasting immunological competence and memory.^{4,19}

WHO stated, in the research that had been conducted, as many as 46 mother-infant pairs had their breast milk samples tested for COVID-19. All mothers were



positive for COVID-19, while 13 babies tested positive for COVID-19. Breast milk samples from 43 mothers were negative for the COVID-19 virus, while samples from 3 mothers tested positive for virus particles by RT-PCR. Among the 3 infants whose mothers' breast milk tested positive for virtual RNA particles, not a live virus, one tested positive for COVID-19, but the infant's feeding practices were not reported. Two other babies tested negative for COVID-19; one was breastfed, and the other was given breast milk after the viral RNA particles were no longer detectable. This is evidence that exclusive breastfeeding can still be carried out during the COVID-19 pandemic according to WHO guidelines.⁴

Based on the results of this literature study, various supports from husbands, families, and health workers, information, motivation, beliefs, self-efficacy, delivery settings, age, educational level, and work situations influence exclusive breastfeeding. Older mothers, lower education levels, and overly tiring work situations can make it difficult for mothers to receive correct information regarding exclusive breastfeeding during the Covid 19 pandemic. ^{10,15}

While most factors related to exclusive breastfeeding are husband and family support, the success of exclusive breastfeeding during a pandemic cannot be separated from the husband's support for breastfeeding mothers. The husband's support is a dominant component of successful exclusive breastfeeding.²⁰ Husband's support can be in the form of emotional, informational, and instrumental support. Mothers will be more capable and confident if they have the support of those closest to them when breastfeeding their babies.²¹

Next is support from health workers or professional staff. Health workers, especially midwives, have a role as educators and counselors to provide breastfeeding support.²² Support from health workers can also be done by holding health education programs. During the COVID-19 pandemic, health education can be provided via tele-education. The COVID-19 pandemic creates challenges and requires health workers to innovate in delivering virtual education. This includes support by professionals and providing informational support to mothers.²³

Hospitalization and place of delivery were also factors related to exclusive breastfeeding during the Covid 19 pandemic. The type of health care provider at birth, professionalism, and promptness of attention was associated with exclusive breastfeeding in a multivariable model. This shows the critical role of healthcare providers in breastfeeding practice. In this case, the critical role of health professionals is needed in providing breastfeeding support during the early postpartum period.²⁴

In addition, the motivation and intentions of the mother also influenced the success of exclusive breastfeeding during the COVID-19 pandemic. Motivation is a psychological force that makes a person able to take action. Motivation is the power of individuals to do what must be done, including when and how to achieve their goals. When an individual has strong motivation and intention, this will make the individual not give up easily. Mothers who have high motivation to give exclusive breastfeeding to their babies will have the desire to continue breastfeeding. Strong motivation can help

mothers to stimulate their milk production so that breast milk is sufficient for their babies.¹¹

Limitation

The limitations of this literature study still need to be improved sources of related articles.

Conclusion

From the several articles reviewed, the factors that most influenced the practice of exclusive breastfeeding were support from husbands, families, health workers, and information support. Motivation, belief, self-efficacy, birth setting, age, education level, and work situation are other influencing factors. It is hoped that policymakers and health workers will be more active in making socialization programs about the importance of providing exclusive breastfeeding during the COVID-19 pandemic.

Ethical Considerations

This research has considered ethical principles.

Conflict of Interest

There is no conflict of interest.

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