

Sistemik Derleme/ Systematic Review

Factors Affecting Breastfeeding During COVID-19: A Systematic Review

COVID-19 Sürecinde Emzirmeyi Etkileyen Faktörler: Bir Sistemik Derleme

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ABSTRACT

Objective: Breastfeeding management is an area where women who have new babies need information. It is thought that the need for information on breastfeeding has increased even more in the COVID-19 pandemic.

Methods: This research is planned as a systematic review to examine the literature on breastfeeding during the COVID-19 pandemic, where the literature is constantly updated, and to present up-to-date information systematically. In this study, Pubmed, Scopus, Science Direct, Cochrane, Wiley Online Library, Ulakbim Medical Database, Google Scholar databases were searched.

Results: 2436 articles were reached, and according to the inclusion/exclusion criteria, 7 studies were selected for this systematic review (n=7). Disruptions in professional and social support systems, emotional problems seen as a result of isolation in the postpartum period, and problems in accessing current data with accurate information sources are among the factors affecting breastfeeding during the pandemic period.

Conclusion: Individuals need more up-to-date information and support systems about breastfeeding and breast milk during the pandemic period. It is considered important that health professionals inform society frequently during sensitive periods.

Keywords: Breastfeeding, COVID-19 pandemic, nursing

ÖZ

Amaç: Emzirme yönetimi, yeni bebek sahibi olan kadınların bilgiye ihtiyaç duyduğu bir alandır. COVID-19 pandemisinde emzirme ile ilgili bilgi ihtiyacının daha da arttığı düşünülmektedir.

Yöntem: Bu araştırma, literatürün sürekli güncellendiği COVID-19 pandemisi sürecinde emzirme ile ilgili literatürü incelemek ve güncel bilgileri sistemik olarak sunmak amacıyla sistemik bir derleme olarak planlanmıştır.

Bulgular: Bu çalışmada Pubmed, Scopus, Science Direct, Cochrane, Wiley Online Library, Ulakbim Medical Database, Google Scholar veritabanları tarandı. 2436 makaleye ulaşıldı ve dahil etme/dışlama kriterlerine göre 7 çalışma bu sistemik derleme için seçildi (n=7). Profesyonel ve sosyal destek sistemlerindeki aksamalar, doğum sonrası dönemde izolasyon sonucu görülen duygusal sorunlar, doğru bilgi kaynakları ile güncel verilere ulaşmada yaşanan sorunlar pandemi döneminde emzirmeyi etkileyen faktörler arasında yer almaktadır.

Sonuç: Pandemi döneminde emzirme ve anne sütü konusunda bireylerin daha güncel bilgi ve destek sistemlerine ihtiyacı vardır. Sağlık profesyonellerinin hassas dönemlerde toplumu sıklıkla bilgilendirmesi önemli görülmektedir.

Anahtar Kelimeler: Emzirme, COVID-19 pandemisi, hemşirelik

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Introduction

According to the results of many evidence-based studies, it is an indisputable fact that breast milk and breastfeeding have numerous benefits for mother and baby (American Heart Association, 2012; Kayhan Tetik, 2016; Turkish Nurses Association, 2018). In terms of maternal benefits, breastfeeding is associated with less medical care, fewer cardiovascular problems, respiratory problems, gastrointestinal and emotional problems. It is known that the risk of depression is high due to the emotional changes experienced by women in the postpartum period. The importance of breastfeeding in reducing emotional problems experienced in the postpartum period is emphasised (American Heart Association, 2012; Topal et al., 2017).

Breast milk is described as “the most ideal food” for babies. Protein, fat, iron, vitamins and anti-infective factors in its content make breast milk unique and indispensable. With the antibodies it contains, it supports the immunity of the baby both in the short term and long term (World Health Organization, 2020). In Turkyilmaz's study (2016), it was reported that the incidence of lower respiratory tract infections, otitis media or allergic rhinitis is low in breastfed infants (Turkyilmaz, 2016).

The COVID-19 pandemic, which affects human life at all ages and in all areas, spread all over the world in a short time after it emerged in Wuhan, China, continues its effects. It is known that the COVID-19 virus is transmitted by close contact (0-2 m), contact with the body fluids of the infected individual, or sneezing-coughing (droplets). The unavoidable spread of the virus and the necessity of taking precautions about close contact have caused many existing information to be questioned and shaped according to the “new normal” (Centers for Disease Control and Prevention, 2020). The “new normal” conditions have also raised many questions about breastfeeding and breast milk.

When evaluated in terms of the rate of spread, the virus is also common in newborns, but it has been reported that the data on the prognosis of the infection in newborns are limited, and the data on vertical transmission of maternal origin in the fetal period is also limited (Erdeve et al., 2020; Karimi-Zarchi et al., 2020). Considering the effects of a strong immune system in overcoming COVID-19 with mild symptoms, the importance of breastfeeding emerges once again. Today, guidelines and studies published report the importance of continuing breastfeeding by taking

preventive measures during the pandemic period (Centers for Disease Control and Prevention, 2020; Royal College of Obstetricians and Gynecologists, 2020; World Health Organization, 2020).

This research is a systematic review made to examine the literature on breastfeeding during the pandemic, where the literature is constantly updated, and to present up-to-date information systematically.

Research Questions

1. Does the pandemic and isolation have an effect on breastfeeding?
2. Is there a difference in perceived support for breastfeeding during the pandemic process?

Methods

Research Design and Type

This study was designed as a systematic review to examine the studies on the effects of the COVID-19 pandemic on breastfeeding.

Search Strategy

In this study, research conducted from December 1, 2019, to March 30, 2021, which was reported as the onset date of COVID-19, was conducted by two independent researchers using the keywords “COVID-19 OR Pandemic AND Breastfeeding” or “COVID-19 and Breastfeeding”. Pubmed, Scopus, Science Direct, Cochrane, Wiley Online Library, Ulakbim Medical Database, Google Scholar databases were searched. Clinical studies that were available with full-text access and met the inclusion criteria and exclusion criteria were evaluated in terms of title, abstract and keyword suitability. This systematic review was carried out in accordance with the flow chart of PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis) (Page et al., 2021) (Figure 1).

The criteria for inclusion in the review are (1) that it is a research article, (2) it is written in Turkish or English, and (3) the full text is accessible.

Exclusion criteria were (1) limited access to the text, (2) systematic review, review, case report, case series or validity-reliability study.

The quality assessment of the studies included in the systematic review was made by two independent researchers (EC, HT) through a 15-item scoring list. A method for evaluation known as a “quality assessment” evaluates the content, methodology, and statistical assessment of research in significant detail. In quality assessment, items are evaluated as yes (1) and no (0) (Van Uffelen et al. 2010). The total score as a result of the evaluation is indicated at the end of Table 1.

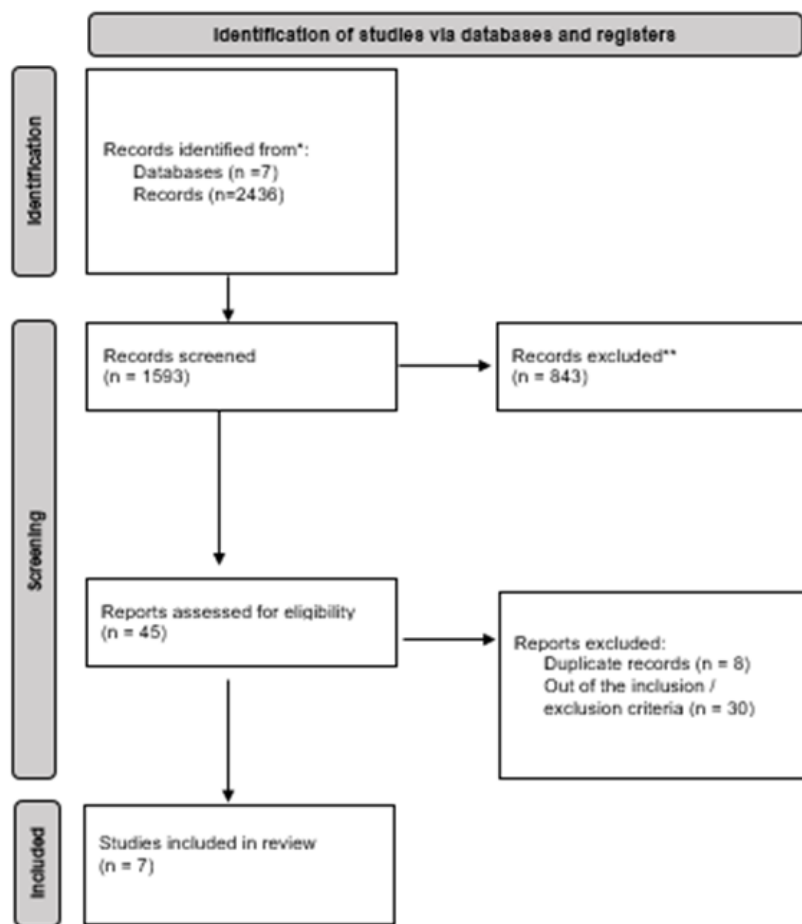


Figure 1. Flowchart of the selection procedure adapted from the Preferred Reporting Items Systematic (Page et al. 2021)

Results

To this study, 7 research papers were included, 2 from the UK, one each from Turkey, Italy, Iran, Canada and Belgium. It was determined that 4 of the studies were cross-sectional, 1 was cross-sectional and observational, one was mixed method and the other was case-control design (Table 1).

Online survey (Ahmad Zadeh Beheshti et al., 2022; Brown and Shenker, 2021; Ceulemans et al., 2020; Fry et al., 2021; Vazquez-Vazquez et al., 2021) was used as the data collection method in 5 of the studies (71%), and telephone interviews in one (Nalbantoglu et al. 2020) and patient records were used in one (Zanardo et al. 2021). While data collection forms were used in all studies, it was found that scales were used together with these forms in 3 studies. In the research conducted in Italy, Edinburgh Postnatal Depression Scale (EPDS), in the research conducted in Iran, Spouse Postpartum Social Support Questionnaire, Multidimensional

Perceived Social Support Scale (MSPSS) Questionnaire, Hospital Anxiety and Depression Scale (HADS) Questionnaire, Fear of COVID-19 Questionnaires, Breastfeeding Self-Efficacy Questionnaire, and the Perceived Stress Scale (PSS) in a study conducted in Canada were used (Ahmad Zadeh Beheshti et al., 2022; Fry et al., 2021; Zanardo et al. 2021; Table 1).

It was determined that the sample size of the studies varied between 28-6470 participants (Ceulemans et al., 2020; Nalbantoglu et al. 2020). In most studies (n=6; 85%) participants were “pregnant or mother” (Ahmad Zadeh Beheshti et al., 2022; Brown and Shenker., 2021; Ceulemans et al., 2020; Nalbantoglu et al. 2020; Vazquez-Vazquez et al., 2021; Zanardo et al. 2021) were found to constitute “baby caregivers” in only one study (Fry et al., 2021; Table 1).

Table 1. Articles included in the research

References and Year	Country	Research design/ Data collection tool	Participants	Purpose of the study	Quality assessment of the study (Score out of 15)
Ahmad Zadeh Beheshti et al. 2022	Iranian	Cross sectional (online) -A questionnaire form prepared by researchers -Spouse Postpartum Social Support Questionnaire -MSPSS -HADS -Fear of Covid-19 Questionnaire -Breastfeeding Self-Efficacy Questionnaire	324 breastfeeding mothers	Identification of variables of breastfeeding self-efficacy in breastfeeding mothers during the COVID-19 pandemic	13
Brown and Shenker, 2021	United Kingdom	Mixed Methods (online) -A questionnaire form prepared by researchers (qualitative and quantitative questions)	1219 breastfeeding mothers (<12 month old baby)	Evaluation of the impact of the COVID-19 pandemic on infant feeding attitudes	13
Ceulemans et al. 2020	Belgium	Cross-sectional, observational (online) -A questionnaire form prepared by researchers	2647 pregnant 3823 breastfeeding mother (<4 weeks old baby)	Determination of covid-19 infection status among pregnant and lactating women and evaluation of the perceived effects of medical/social support on breastfeeding practices.	10
Fry et al. 2021	Canada	Cross sectional (online) -A questionnaire form prepared by researchers - PSS	Baby caregivers (332 women and 3 men)	Determining the changes in the nutritional practices of the caregivers regarding the COVID-19 process	9
Nalbantoglu et al. 2020	Turkey	Cross-sectional (phone call) -A questionnaire form prepared by researchers	28 breastfeeding mothers contacted or diagnosed with Covid-19 (1-6 month old baby)	Evaluation of the knowledge and attitudes of mothers who have been exposed to or diagnosed with COVID-19 regarding breastfeeding and breast milk.	10
Vazquez et al. 2021	United Kingdom	Cross-sectional (online) -A questionnaire form prepared by researchers	1365 breastfeeding mothers (<12 month old baby)	Evaluation of maternal experience, emotional state, and infant feeding practices during the quarantine period	11
Zanardo et al. 2021	Italy	Non-concurrent Case-control -A questionnaire form prepared by researchers -Edinburg Postnatal Depression Scale (EPDS)	152 women who gave birth in 2020 (case), 147 women who gave birth in 2019 (control)	Evaluation of breastfeeding practices and emotional stress of women who gave birth during the regional quarantine period.	13

Discussion

In this research, the discussion will be examined under two main headings.

The Pandemic Process and the Effect of Isolation on Breastfeeding

The successful initiation and continuity of the breastfeeding process is affected by many factors (Cangol and Sahin, 2014). It is known that many factors have an effect, especially in the postpartum period, from smoking to working life, and research on the effects of the pandemic process and isolation is still ongoing. In studies, it has been reported that among mothers who did not differ in breastfeeding rates before the pandemic, mothers diagnosed with COVID-19 were less likely to breastfeed their infants than mothers who were in contact, and that the infant usually stayed in a different room, and this includes many concerns and physician recommendations (Nalbantoglu et al. 2020). It has been reported that the women who gave birth during the isolation periods were less likely to feed their babies with breast milk only (Zanardo et al. 2021).

There are two studies evaluating the change in infant nutrition during the pandemic period. In both studies, the majority of the participants reported no change, while women who reported a change reported an increase in breastfeeding frequency (Ceulemans et al., 2020; Vazquez-Vazquez et al., 2021). It can be thought that this situation is related to the fact that women spend more time at home as a result of isolation.

Perceived Support and Access to Support for Breastfeeding During the Pandemic Process

Although the effect of perceived support on the initiation and maintenance of breastfeeding is mentioned in the literature, the effect of access to support on breastfeeding is also considered (Cangol and Sahin, 2014). In the study of Brown and Shenker (2021), lack of professional support was shown as one of the reasons for women to stop breastfeeding (Brown and Shenker, 2021). In most studies, it has been reported that both professional counseling and social support are affected during breastfeeding after hospital discharge (Ceulemans et al., 2020; Fry et al., 2021; Vazquez-Vazquez et al., 2021).

In studies, women reported that their partners were the greatest support and had a significant influence on the baby's nutrition. Following this, it has been reported as health professional, online support groups, television/radio, family/friends and WHO in different studies (Ahmad Zadeh Beheshti et al., 2022; Vazquez-Vazquez et al., 2021). It has been reported in research results that online

platforms, like the opinions of health professionals, are also effective in maintaining breastfeeding (Brown and Shenker, 2021; Fry et al., 2021). It is important that health professionals, who are the most reliable source of information that the society can access, update their knowledge, and inform the society about the issue quickly.

Conclusion

During the COVID-19 process, families' access to up-to-date information about breastfeeding and breast milk has been restricted. The uncertainty brought by the process and the lack of sufficient research, especially in the first stages, caused health professionals to have problems in informing the public. It is recommended to establish support systems in order to raise awareness of the society about breastfeeding.

Ethics Committee Approval: Ethics committee approval was not obtained since the study was a systematic review.

Peer-review: External referee evaluation.

Author Contributions: Idea/concept: EC; Design: EC, NS; Consulting: NS; Data collection and/or Data Processing: EC, HT; Analysis and/or Interpretation: EC, HT, NS; Research scanning: EC; Manuscript Writing: EC, HT; Critical review: NS.

Conflict of interest: The authors have no conflicts of interest to declare.

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What did the study add to the literature?

- Factors affecting breastfeeding during the pandemic period were emphasized.
- It has been determined that individuals cannot get enough information about the breastfeeding process during the pandemic period.
- The role and importance of nurses in reaching scientific knowledge and raising awareness of the society was emphasized.

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