

EVALUATION OF BREASTFEEDING SELF-EFFICACY DURING THE PANDEMIC PERIOD IN THE PERSPECTIVE OF WHO RECOMMENDATIONS

DSÖ TAVSİYELERİ PERSPEKTİFİNDE PANDEMİ SÜRECİNDE EMZİRME ÖZ YETERLİLİĞİNİN DEĞERLENDİRİLMESİ

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Abstract

Objectives: The aim of this study is to determine the effect of knowing and applying WHO recommendations on breastfeeding self-efficacy of breastfeeding women during the pandemic.

Materials and Methods: The sample of the study consisted of 382 women. The data were collected using the 'Patient Identification Form', 'Breastfeeding Self-Efficacy Scale (BSES)', and 'Breastfeeding Information and Behavior Form in the Covid-19 Process'.

Results: Postnatal breastfeeding self-efficacy scale mean score of the participant was determined as 54.97±10.14. According to 31.7% of the participants, they stated that the pandemic period negatively affected the act of breastfeeding. It was determined that 59.2% of the women were not informed about breastfeeding specific to the pandemic process in line with the WHO Covid-19 breastfeeding recommendations. In this study, it was determined that in the conditions of the Covid-19 pandemic, women who had skin-to-skin contact at birth and mothers who breastfed their baby in the first 30 minutes after birth had a higher mean score on the BSES ($p<0.05$).

Conclusion: It was determined that the women who had knowledge in line with WHO recommendations and applied these recommendations during the Covid-19 pandemic process has higher breastfeeding self-efficacy.

Keywords: Breast milk, Covid-19, Breastfeeding, Breastfeeding self-efficacy, Nursing

Özet

Amaç: Bu çalışmanın amacı, pandemi sırasında emziren kadınların DSÖ emzirme önerilerini bilmelerinin ve uygulamalarının emzirme öz yeterlilikleri üzerindeki etkisini belirlemektir.

Gereç ve Yöntem: Çalışmanın örneklemi 382 kadından oluşmaktadır. Veriler 'Hasta Tanıtım Formu', 'Emzirme Öz Yeterlilik Ölçeği (EÖYÖ)' ve 'Covid-19 Sürecinde Emzirme Bilgi ve Davranış Formu' kullanılarak toplanmıştır.

Bulgular: Katılımcıların doğum sonrası emzirme öz-yeterlilik ölçeği puan ortalaması 54.97±10.14 olarak belirlenmiştir. Katılımcıların %31,7'si pandemi döneminin emzirme eylemini olumsuz etkilediğini belirtmiştir. Kadınların %59,2'sinin pandemi sürecine özgü DSÖ Covid-19 emzirme önerileri doğrultusunda bilgilendirilmediği tespit edildi. Bu çalışmada, Covid-19 pandemisi koşullarında, doğumda ten tene temas kuran kadınların ve doğumdan sonraki ilk 30 dakika içinde bebeğini emziren annelerin Emzirme Özyeterlilik Ölçeği (EÖYÖ) puan ortalamalarının daha yüksek olduğu belirlenmiştir ($p<0,05$).

Sonuç: DSÖ önerileri doğrultusunda bilgi sahibi olan ve Covid-19 pandemisi sürecinde bu önerileri uygulayan kadınların emzirme öz yeterliliklerinin daha yüksek olduğu belirlenmiştir.

Anahtar Kelimeler: Anne sütü, Covid-19, Emzirme, Emzirme öz yeterliliği, Hemşirelik

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INTRODUCTION

The postpartum period is a complex period in which parents adapt to new roles and experience physiological and psychological changes (1). The postpartum period and breastfeeding process were also affected by the changing lifestyle with the Covid-19 pandemic process (2,3). During the pandemic process, World Health Organization (WHO), UNICEF (United Nations International Children's Emergency Fund), RCOG (Royal College Of Obstetrics And Gynecology) etc. many international organizations recommend that breastfeeding should be supported by taking appropriate precautions since it has long and short-term benefits (4,5). In addition, the value of breastfeeding in terms of maternal and infant health should not be ignored due to the low level of evidence that mothers with Covid-19 should not breastfeed (6,7).

However, the guidelines and practices published in the early stages of the pandemic contain some limitations on the protection and promotion of breastfeeding (8). For example; separation of mothers from their babies, preference for formula food (9,10) women's experience of giving birth without support like their spouses (11) restriction of skin-to-skin contact and breastfeeding (12) early postpartum discharge (13), lack of breastfeeding counseling during the pandemic rates and mothers' perception of well-being in health (14).

In a study conducted in the United States, 116 expectant mothers who were diagnosed with Covid-19 were followed, and in the follow-ups of 82 babies in which the mother and baby stayed together, 64 babies' mothers wore masks and breastfed their babies by following the hygiene rules (hand hygiene, wiping the breast), breastfeeding period and care. It has been suggested that, when babies are monitored in an incubator outside the room, no virus is detected in any of these babies, therefore, Covid-19 positive mothers can breastfeed their babies by following the

necessary rules (15). In a study conducted in Turkey, 125 babies were examined and the rate of babies fed with formula was 56.8%. It has been determined that the rate of infants fed with expressed breast milk is 36% (16). As in other epidemics, the protection and maintenance of breastfeeding during the pandemic process is very important for the growth of healthy generations. Because breast milk contains bioactive and immunological factors, as well as having unique components, it is very effective in protecting the newborn against diseases (17).

In addition, a mother's breastfeeding her baby increases the level of oxytocin hormone in the mother's blood, and has a protective effect against depression. Therefore, breastfeeding of the mother in extraordinary situations such as epidemics makes her feel better psychologically (18). However, the fact that families have concerns about the safety of breastfeeding during the pandemic and the inadequacy of getting breastfeeding counseling by healthcare professionals negatively affects the breastfeeding process (19). In the study conducted by Brown and Shenker (2021), it was determined that 70% of breastfeeding mothers stopped breastfeeding due to the lack of support system (9).

Many international organizations such as WHO, CDC (Centers for Disease Control and Prevention), UNICEF and ABM (Academy of Breastfeeding Medicine) have accepted breastfeeding as safe during the Covid-19 pandemic and have made many up-to-date recommendations that can guide mothers and health workers in this process (4,5,7). Mother's wearing a mask while breastfeeding or expressing milk, washing the hands effectively for 20 seconds before breastfeeding, frequent ventilation of the environment, washing the clothes with normal detergent at 60-90 °C, consuming plenty of fluids, eating a balanced diet and Paying attention to regular sleep are some of these

suggestions (4–7,18). In this pandemic process, nurses should be aware of this rapidly changing information, recommendations and algorithms, and should provide information, counseling and support services to breastfeeding mothers both face-to-face in clinics and via teleconsulting. Studies in the literature to determine the problems they experience regarding breastfeeding during this period are very limited.

Therefore, the aim of this study was to determine the effect of knowing and applying WHO recommendations on the breastfeeding self-efficacy of breastfeeding women during the pandemic period.

In this study, we seek to answer the following questions:

- Are there differences in breastfeeding self-efficacy between women who are informed about WHO recommendations and women who are not informed about WHO recommendations during the pandemic period?
- What is the effect of breastfeeding women's knowledge and implementation of WHO recommendations on their breastfeeding self-efficacy during the pandemic?

MATERIALS AND METHODS

Study Type and Sample

This descriptive/correlational cross-sectional study was conducted between 15.02.2021-31.08.2021. The sample size for the study consists of women who apply to the hospital for any reason in the first 6 months of puerperium and continue to breastfeed their babies. In the study, we were participated 382 people between the ages of 18-35 who birth during the pandemic period, started breastfeeding after birth, had no communication problems (speaking Turkish), and had not been diagnosed with Covid-19.

Data Collection Process and Tools

The data was collected from women who agreed to participate in the study by face-to-face interview method, using the Patient

Identification Form, Breastfeeding Self-Efficacy Scale and Breastfeeding Information and Behavior Form during Covid-19 Process. The research process was explained to the participants by the primary researcher and their permission was obtained. Participants completed the data collection forms in an average of 15-20 minutes in a place where they could express themselves comfortably.

Patient Identification Form: The patient identification form consists of 31 questions prepared by researchers to assess women's sociodemographic characteristics, obstetric history, breastfeeding practices, and their attitudes and behaviors toward breastfeeding during the Covid-19 pandemic (1,2,6,7).

Breastfeeding Self-Efficacy Scale (BSES): The scale was developed by Dennis in 1999, and in 2003, Dennis reduced the scale to 14 items and developed the Breastfeeding Self-Efficacy Scale-short form. Items of the 5-point Likert-type scale consisted of 1= 'not sure at all'; It is evaluated by grading up to 5= 'I am always sure' (20). The short form of Breastfeeding Self-Efficacy Scale was adapted into Turkish by Merlinda Aluř Tokat in 2009. The Cronbach's alpha value was found to be 0.86 and it was brought to the literature as a reliable scale. The lowest score that can be obtained from the test is 14, and the highest score is 70 and the highest score is 70 (21).

Breastfeeding Information and Behavior Form in the Covid-19 Process: In order to evaluate the knowledge and behaviors of breastfeeding women about breastfeeding during the Covid-19 pandemic process, it is a form that is answered as 'Yes-No and I am Undecided', consisting of 12 questions in total, prepared by researchers by scanning WHO's recommendations in line with the literature and taking the opinion of 5 experts.

Statistical Analyses

The data obtained from the research were evaluated using the SPSS program in computer environment. Frequency (n), percentage (%) for categorical (qualitative) variables, mean (X), standard deviation (sd),

minimum-maximum statistics for numerical (quantitative) variables were used as descriptive statistics in the data analysis. Quantitative variables were analysed using Independent Sample T-test, One-Way Analysis of Variance, Mann Whitney U Test, Kruskal Wallis test. The statistical results were analysed within a 95% confidence interval and an alpha value below 0.05 was considered significant.

RESULTS

It was determined that the mean age of the participants included in the study was 28.91 ± 3.36 years, all of them were married, 57.9% had an income equal to their expenses, 55.5% had a university or higher education level, 56.0% were unemployed, and all of their wife were working.

The participants in our study stated that they were afraid of birth during the pandemic with 72.3%, and they also stated that the pandemic process affected breastfeeding with 31.7%. The breastfeeding process of affected women, 43.8% stated that they experienced restlessness or decreased breast milk in their babies due to stress, 27.3% had a fear of infecting their baby with Covid-19 through breast milk, 16.5% said that this process negatively affected their psychology and 12.4% said that they had a fear of separation if the mother/baby got sick. It was determined that 59.2% of the mothers did not receive special breastfeeding training for the pandemic process, and 51.3% of the mothers received breastfeeding training from nurses/midwives (Table 1).

Table 1. Distribution of some characteristics of women regarding breastfeeding during the pandemic process (n=382)

Features	N	%
Fear of giving birth during the pandemic		
Afraid	276	72.3
Not afraid	106	27.7
How the pandemic process affects breastfeeding		
Affected	121	31.7
Not Affected	261	68.3
How the pandemic has impacted breastfeeding¹		
Fear of transmitting covid-19 to baby through breast milk	33	27.3
Fear of being separated if mother/baby gets sick	15	12.4
Irritability/decreased milk in the baby due to stress	53	43.8
It negatively affects my psyche.	20	16.5
The status of getting information about breastfeeding specific to the pandemic process		
Information receiving	156	40.8
Not informed	226	59.2
Source of information about breastfeeding specific to the pandemic process²		
Nurse/midwife	80	51.3
Doctor	13	8.3
Media communication tools	29	18.6
Friends	34	21.8
Time to first breastfeed the baby after birth		
Within the first 30 minutes	114	29.8
Within the first hour	186	48.7
Unknown	31	8.1
Didn't suck	51	13.4
Frequency of breastfeeding the baby now		
Once an hour	92	24.1
Every two hours	199	52.1
Every three hours	79	20.7
Every four hours	12	3.1

¹Percentages are taken from n=121. ²Percentages are taken from n=156

Table 2. Distribution of women's postnatal breastfeeding self-efficacy scale (BSES) min., max. and total score averages (n=382)

	Number	$\bar{X} \pm SS$	Min.	Max.
BSES	382	54.97±10.14	15.00	70.00

It was determined that the postnatal breastfeeding self-efficacy scale mean score of 382 participants participating in the study was 54.97±10.14, the minimum score was 15.00, and the maximum score was 70.00 (Table 2).

Table 3. Distribution of postnatal breastfeeding scale (BSES) mean scores according to some characteristics of women regarding birth and breastfeeding (n=382)

Features	Postnatal breastfeeding self-efficacy scale $\bar{X} \pm SS$	Test/ <i>p</i>
Postnatal breastfeeding self-efficacy scale		
Skin to skin contact at birth		
Applied	56.72±9.22	test ¹ =-2.680 <i>p</i> =0.006
Not Applied	53.88±10.55	
The status of getting information about breastfeeding in the current pregnancy		
Information receiving	54.76±10.20	test ¹ =1.846 <i>p</i> =0.476
Not informed	55.67±9.97	
First time to breastfeed the baby after birth		
In the first 30 minutes	58.92±8.36*	test ³ =10.495 <i>p</i> =0.000
Within the first hour	54.15±10.44	
Unknown	54.33±9.61	
Didn't suck	50.78±9.07	
Frequency of breastfeeding last baby		
Once an hour	55.27±9.53	test ² =0.096 <i>p</i> =0.962
Every two hours	55.05±10.19	
Every three hours	54.53±10.92	
Every four hours	54.33±9.61	

¹Independent Sample T-Test, ²One-Way Analysis of Variance * Group with difference

The distribution of postnatal breastfeeding self-efficacy scale mean scores according to some characteristics of women regarding birth and breastfeeding is given in Table 3. According to the results obtained that the postnatal breastfeeding self-efficacy mean

scores of women who were exposed to skin contact at birth were higher than those who did not apply skin contact, and the difference was statistically significant (p<0.05). It was determined that the postnatal breastfeeding self-efficacy scale mean scores of the mothers

who breastfed their babies within the first 30 minutes after birth were statistically significantly higher than the other groups ($p<0.05$). It was determined that the frequency of getting information about breastfeeding in

her current pregnancy did not affect the postnatal breastfeeding self-efficacy scale mean score ($p>0.05$) (Table 3).

Table 4. Some characteristics of women regarding breastfeeding during the pandemic and the distribution of postnatal breastfeeding scale (BSES) mean scores (n=382)

Features	Postnatal breastfeeding self- efficacy scale $\bar{X} \pm SS$	Test/p
Fear of giving birth during the pandemic process		
Afraid	53.51±10.25	test ¹ =-4.679
Not afraid	58.79±8.82	<i>p=0.000</i>
The effect of the pandemic process on breastfeeding		
Affected	51.57±10.60	test ¹ =-4.584
Did not affect	56.55±9.53	<i>p=0.000</i>
How the pandemic has affected breastfeeding		
Fear of transmitting covid-19 to baby through breast milk	50.78±9.77	
Fear of being separated if mother/baby gets sick	51.40±8.34	test ² =2.882
Irritability/decreased milk in the baby due to stress	54.11±10.61	<i>p=0.039</i>
It negatively affects my psyche.	46.25±11.87	
The status of getting information about breastfeeding specific to the pandemic process		
Information receiving	54.78±10.34	test ³ =-.155
Not informed	55.10±10.02	<i>p=0.877</i>
Source of information about breastfeeding specific to the pandemic process		
Nurse/midwife	59.94±7.27*	
Doctor	54.38±10.68	test ² =20.198
Media communication tools	47.89±10.09	<i>p=0.000</i>
Friends	48.58±10.41	

¹ Independent Sample T-Test, ² One-Way Analysis of Variance, ³ Mann Whitney U, * Group with difference

It was determined that the mean scores of the postpartum breastfeeding self-efficacy scale were higher for women who were not afraid to give birth during the pandemic process and who thought that the pandemic process did not affect breastfeeding ($p<0.05$). It was determined that the difference between the way the participants' breastfeeding processes were affected and the average score of the postpartum breastfeeding self-efficacy scale was statistically significant. In further analyses, it was found that the difference originated from the group reporting 'infant restlessness/milk reduction due to stress' and the group stating 'it affects my psychology negatively', with the average postpartum

breastfeeding self-efficacy scores of women reporting negative psychological effects being higher than the other group ($p<0.05$). It was determined that the mean scores of the postpartum breastfeeding self-efficacy scale of women who were informed about breastfeeding by the nurse/midwife during the pandemic process were higher than the women who were not informed about breastfeeding by the nurse/midwife ($p<0.001$) (Table 4).

Table 5. Distribution of women's knowledge and opinions about breastfeeding during the pandemic and postnatal breastfeeding scale (BSES) mean score (n=382)

Features	Postnatal breastfeeding self-efficacy scale $\bar{X} \pm SS$	Test/p
Are pregnant women informed about breastfeeding during the pandemic?		
Yes	59.39±7.09*	test ¹ =6.572 p=0.002
No	53.75±10.83	
I do not know	55.23±9.50	
Breastfeeding is beneficial for the baby during the pandemic		
Yes	56.91±9.44*	test ¹ =26.444 p=0.000
No	41.16±12.98	
Indecisive	49.56±9.56	
It is necessary to wear a mask while breastfeeding during the pandemic process**		
Yes	55.94±9.61	test ¹ =3.304 p=0.038
No	55.84±10.35	
Indecisive	53.04±10.08	
Wash your hands before and after breastfeeding during the pandemic process.		
Yes	55.03±10.36	test ² =0.326 p=0.745
No	54.48±8.15	
During the pandemic, the nipple should be washed before breastfeeding.		
Yes	57.46±9.39	test ² =3.733 p=0.000
No	53.51±10.30	
Health personnel who help breastfeeding during the pandemic should use protective equipment		
Yes	55.53±10.07	test ³ =-3.230 p=0.001
No	50.02±9.53	
Hospital/home room should be ventilated for healthy breastfeeding during the pandemic process.		
Yes	56.03±10.00	test ³ =-5.160 p=0.000
No	48.51±8.53	
Touched surfaces should be disinfected for healthy breastfeeding during the pandemic process.		
Yes	57.45±9.74	test ³ =-7.295 p=0.000
No	49.68±8.91	
Accompanying / house guests can be taken during the pandemic process.		
Yes	52.08±9.55	test ³ =-2.497 p=0.013
No	55.52±10.17	
The status of milking during the pandemic process		
Yes	55.43±10.26	test ² =0.699 p=0.485
No	54.69±10.08	
Hands and nipples should be washed before and after milking during the pandemic process.		
Yes	54.94±10.41	test ² =-1.127 p=0.261
No	57.24±9.84	
Frequency of changing the baby's clothes during breastfeeding during the pandemic process		
1-2 times a day	55.05±10.15	test ⁴ =2.245 p=0.326
1-2 times in two days	54.43±10.21	
1-2 times in three days	61.75±5.90	
Frequency of changing the clothes of breastfeeding women during the pandemic process		
1-2 times a day	55.47±10.56	test ¹ =0.655 p=0.520
1-2 times in two days	54.21±9.78	
1-2 times in three days	55.00±8.26	

¹ One Way Analysis of Variance, ²Independent Sample T Test, ³ Mann Whitney U, ⁴ Kruskal Wallis H, * The group from which the difference originated, ** no difference was found between the groups in the further analysis.

It was determined that postnatal breastfeeding self-efficacy scale scores were higher in women who thought that pregnant women were informed about breastfeeding during the pandemic period, that breastfeeding was beneficial during the pandemic period, that it was necessary to wash the nipple before breastfeeding, and that healthcare personnel should use protective equipment while providing breastfeeding support ($p<0.05$). In addition, postnatal breastfeeding self-efficacy scale scores were found to be higher in women who stated that the hospital/home room should be ventilated, touched surfaces should be disinfected, and companions/visitors should not be allowed ($p<0.05$). It was determined that the necessity of washing hands before and after breastfeeding, performing the milking process, washing the hands and nipples before and after the milking process, the frequency of changing the clothes of the baby and the mother during the breastfeeding period did not affect the mean scores of the postnatal breastfeeding self-efficacy scale ($p>0.05$) (Table 5).

DISCUSSION

The perception of breastfeeding self-efficacy reflects whether a mother is emotionally ready to breastfeed her baby, and the mother's thoughts and behaviors regarding breastfeeding (20). The mean BSES (Breastfeeding Self-Efficacy Scale) score of the mothers participating in our study was found to be 54.97 ± 10.14 . In the study conducted by İnce et al. (2017), the mean breastfeeding self-efficacy score of mothers was determined as 57.16 ± 6.92 (22). In the study of Aydın and Aba (2019), the mean total score of breastfeeding self-efficacy of mothers was 54.75 ± 10.59 . was detected. It can be said that the mean BSES scores of the mothers in our study during the pandemic process are similar to the breastfeeding self-efficacy of the mothers in the normal period (23).

In our study, it was determined that the mean BSES score of women who stated that

skin contact was applied in the postpartum delivery room or operating room during the pandemic process was higher than the women who did not apply skin contact, and the difference was statistically significant ($p<0.005$). In addition, it was determined that the mean BSES score of mothers who breastfed their babies within the first 30 minutes after birth was statistically significantly higher than the other groups ($p<0.005$). In addition to breastfeeding, skin-to-skin contact contributes to mother-baby bonding, increased milk production, healthy nutrition of the newborn and faster postpartum recovery of the mother (24). Studies in the literature show that skin-to-skin contact was restricted during the pandemic process, postpartum skin-to-skin contact and breastfeeding were not effectively managed, and despite WHO recommendations to support breastfeeding and skin-to-skin contact during the pandemic process, these recommendations were not followed in clinical settings (9,25,26). In a study conducted to determine breastfeeding self-efficacy in Covid-19 positive mothers in the postpartum period and the barriers to breastfeeding, it was found that the breastfeeding self-efficacy scores of Covid-19 positive mothers were significantly lower compared to Covid-19 negative mothers. In this study, 17.5% of mothers stated that experiencing symptoms related to Covid-19 disease was an obstacle to breastfeeding (27). In this study, it was determined that mothers' first breastfeeding times and skin-to-skin contact increased the average BSES score during the pandemic. In addition, although 27.3 percent of women are afraid of transmitting Covid-19 to their babies through breast milk, skin-to-skin contact appears to increase the BSES score. For this reason, it is very important for mothers to breastfeed their babies in a short time in accordance with the pandemic conditions and to ensure skin-to-skin contact in terms of breastfeeding self-efficacy.

It was determined that the mothers in our study received general information about breastfeeding in their current pregnancy and the frequency of breastfeeding their baby did not affect the mean BSES score ($p>0.005$). In addition, it was determined that the majority of the participants received breastfeeding education related to the pandemic process from outside the healthcare personnel. Despite this, it was determined that the mean BSES scores of the women who were informed about breastfeeding by the nurse/midwife during the pandemic process were statistically significantly higher than the other groups ($p<0.001$). In a study conducted before the pandemic, it was determined that receiving support for breastfeeding increased breastfeeding success (28). There are studies in the literature showing that there has been a decrease in health support for breastfeeding women during the pandemic and that women receive less counseling services about breastfeeding compared to before the pandemic (29,30). For example, according to findings from a study conducted during the pandemic, 67% of participants reported feeling less supported in breastfeeding during quarantine (9) and it was found that some women discontinued breastfeeding earlier than desired during the Covid-19 pandemic due to lack of support both in the hospital and at home (31). In this study, it was concluded that the routine breastfeeding training given during the pandemic process did not affect the breastfeeding self-efficacy of the participants. The main reason for this situation may be the lack of special training on breastfeeding during the pandemic process, the lack of knowledge about the management of breastfeeding in this process and the training of pregnant women by non-professionals. Therefore, in order to increase breastfeeding self-efficacy, nurses need to provide special training to the process, change and conditions.

Fear of the unknown, which is effective on people during pandemic periods, brings along many psychological disorders (19). In

our study, 72.3% of the participants stated that they were afraid of giving birth during the pandemic period. In this study, it was determined that women who were afraid of giving birth during the pandemic process and who thought that the pandemic process affected breastfeeding had a lower average BSES score. It was determined that during the pandemic, women residing especially in urban areas or regions with high Covid-19 rates had increased anxiety and stress levels in the postpartum period due to the measures taken to stop the further spread of the disease (quarantine, social isolation, etc.)(14,32,33). Mothers who are at risk for depression in the postpartum period should be followed more closely in terms of postpartum depression, since they also express that they also experience fear of the unknown that occurs with the pandemic (32). It can be thought that the fact that the women in our study were not given process-specific breastfeeding education caused them to experience fear in the postpartum period and negatively affect breastfeeding.

Organizations such as the WHO and CDC recommend that all mothers, regardless of their SARS-CoV-2 status, be encouraged to breastfeed their babies (4,6). Women can breastfeed their babies effectively during the pandemic process by cleaning their hands before breastfeeding and wearing a mask (10–12). In this study; The postpartum breastfeeding self-efficacy scale scores were found to be statistically significantly higher in women who thought that pregnant women were informed about breastfeeding during the pandemic period, that breastfeeding was beneficial during the pandemic period, that the nipple should be washed before breastfeeding and that healthcare personnel should use protective equipment while providing breastfeeding support ($p<0.05$). However, it was determined that the necessity of hand washing before and after breastfeeding, milking, the necessity of washing the hands and nipples before and after milking, the

frequency of changing the clothes of the baby and the mother during the breastfeeding period did not affect the postnatal breastfeeding self-efficacy scale mean scores ($p>0.05$) (Table 5). The literature mentions that breastfeeding is the best preventive measure available for healthy and at-risk infants and mothers during the Covid-19 pandemic (14,32,33). Therefore, breastfeeding should not be interrupted, mother and baby should not be separated and skin-to-skin contact should not be interrupted. General infection control measures should be applied and strictly followed during the pandemic period. Additional protection of the exposed or infected mother against droplets should be taken by the mother by wearing a surgical face mask when holding and feeding her baby (showing inside). When the mother is too sick to breastfeed, she should still be supported to express her milk and the baby should be fed by a healthy individual (34). As seen from the differences in the study data, it can be said that women were not adequately informed about the WHO's breastfeeding recommendations during the pandemic and they experienced inadequacies in implementing the recommendations.

Study Limitations

The study has some limitations. First of all, the study was carried out in a single center. Since the study was conducted in a province, the data obtained from the study have generalizability and validity only for lactating women in the province where the study was conducted. Multicenter studies are needed to generalize the findings. The study provides information on the short-term effects of the pandemic on breastfeeding self-efficacy. More detailed and long-term studies are needed to understand the long-term effects.

Conclusion

As a result; It has been determined that the BSES score of women who have skin contact application at birth and who breastfeed their baby within the first 30 minutes after birth are higher. It was determined that routine breastfeeding education and frequency of

breastfeeding did not affect the BSES score, but women who were informed about breastfeeding by the midwife/nurse specific to the pandemic process had a significantly higher BSES score. It has been determined that women who are not afraid of giving birth during the pandemic process and who think that the pandemic process does not affect breastfeeding have a higher BSES score.

In the light of all these data; even in the pandemic process, it is necessary to initiate sensual contact and breastfeed the baby within the first 30 minutes-1 hour in order to support mother-infant bonding by taking appropriate precautions after birth. Breastfeeding education should be given by midwives/nurses specific to the process, and all healthcare professionals should follow the published guidelines to convey accurate and up-to-date information to mothers during the pandemic process. The continuity of health care should be provided by providing online counseling and breastfeeding training to mothers who could not come to the hospital due to the pandemic, and psychological support should be provided to nursing mothers in order to remove the negative psychological factors in front of the breastfeeding process.

Ethical Considerations

Before starting the research, ethics committee approval was obtained from the University Scientific Research Committee (60174989-2021-21 dated January 28, 2021). For the scales used in the research, permission was obtained from the people who carried out the Turkish validity and reliability of the scale. In addition, permission was obtained from the participants in accordance with the Declaration of Helsinki.

CRedit authorship contribution statement

Concept: EİA, RHA. Design: EİA, RHA. Data Collection or Processing: EİA, RHA. Analysis or Interpretation: EİA, RHA. Literature Search: EİA, RHA. Writing: EİA

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Conflict of interest

There is no conflict of interest between the authors.

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