



# The Effect of Video-assisted Breast Milk and Breastfeeding Training Given to the Mothers of Hospitalized Newborns on the Breastfeeding Self-efficacy Success: A Semi-experimental Study

## Hastanede Yatan Yenidoğan Annelerine Verilen Video Destekli Anne Sütü ve Emzirme Öz Yeterlik Eğitiminin ve Emzirme Başarısına Etkisi: Yarı Deneysel Bir Çalışma

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### ABSTRACT

**Objective:** This study was carried out to determine the effect of video-assisted breast milk and breastfeeding training given to the mothers of hospitalized newborns on the breastfeeding self-efficacy and success.

**Methods:** This was a non-randomized semi-experimental study with a pretest-posttest design including two groups. It was carried out with a total of 84 mothers who met the inclusion criteria including 41 mothers in the experimental group and 43 mothers in the control group. Data were collected by a breastfeeding Charting System and Documentation Tool (LATCH) and Postpartum Breastfeeding Self-Efficacy Scale-Short Form (PBSES-SF). While experimental group was given a video-assisted breastfeeding training together with an educational booklet on breastfeeding, control group was given a training only through an educational booklet on breastfeeding. Descriptive statistics were used in statistical analysis; besides, one-way analysis of variance (ANOVA) was used for the comparison of LATCH and PBSES-SF scores between the groups and paired samples t-test was used for comparisons within groups.

### ÖZ

**Amaç:** Bu araştırma, hastanede yatan yenidoğanların annelerine verilen video destekli anne sütü ve emzirme eğitiminin, emzirme öz yeterlilik ve emzirme başarısı üzerine etkisini belirlemek amacıyla yapılmıştır.

**Yöntemler:** Araştırma iki gruplu öntest-sontest tasarımıyla randomize olmayan yarı deneysel bir araştırmadır. Çalışma, araştırmaya alınma kriterlerine uyan girişim grubunda 41 ve kontrol grubunda 43 anne olmak üzere toplam 84 anne ile gerçekleştirildi. Girişim grubuna anne sütü ile beslenme eğitim kitapçığı ile birlikte video destekli emzirme eğitimi verilirken, kontrol grubuna sadece anne sütü ile beslenme eğitim kitapçığı kullanılarak emzirme eğitimi verildi. Veriler LATCH Emzirme Tanılama Ölçüm Aracı (LATCH) ve Postpartum Emzirme Öz yeterlilik Ölçeği-Kısa Şekli (PEÖÖ) ile toplandı. Verilerin değerlendirilmesinde tanımlayıcı istatistikler, gruplar arası PEÖÖ ve LATCH puanları karşılaştırması için tek yönlü varyans analizi (ANOVA) ve gruplar içinde karşılaştırması için eşli örnekler t-testi kullanıldı.

**Bulgular:** Gruplar arasında ortalama öntest emzirme özyeterlilik ve emzirme başarısı puanları benzerdi ( $p>0,05$ ), fakat video destekli

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**ABSTRACT**

**Results:** Mean pretest breastfeeding self-efficacy and breastfeeding success scores were similar between the groups ( $p>0.05$ ); however, breastfeeding self-efficacy and breastfeeding success scores were found to be higher in the experimental group compared to the control group ( $p=0.00$ ). Moreover, it was found that mean breastfeeding self-efficacy score following the training in the experimental group was significantly increased compared to the score before the training ( $p=0.00$ ). A moderate level, positive and significant correlation was found between the differences in the breastfeeding self-efficacy and breastfeeding success scores of the mothers before and after the intervention ( $r=0.470$ ,  $p<0.01$ ).

**Conclusion:** The results of the study revealed that video-assisted breast milk and breastfeeding training was more effective than the routine training given by an educational booklet on breastfeeding in enhancing breastfeeding self-efficacy and success.

**Keywords:** Breastfeeding, training, self-efficacy, video

**ÖZ**

emzirme eğitimi sonrası emzirme özyeterlik ve emzirme başarıları puanları girişim grubunda kontrol grubuna göre daha yüksekti ( $p=0,00$ ). Ayrıca girişim grubunda eğitim sonrası ortalama emzirme özyeterlik puanının, eğitim öncesine göre anlamlı olarak arttığı bulundu ( $p=0,00$ ). Annelerin emzirme özyeterlik ve emzirme başarıları puanlarındaki girişim öncesi ve sonrası farklılıklar arasında orta düzeyde pozitif anlamlı bir ilişki olduğu saptandı ( $r=0,470$ ,  $p<0,01$ ).

**Sonuç:** Araştırmanın sonuçları, video destekli anne sütü ve emzirme eğitiminin, emzirme öz-yeterliğini ve başarısını artırmada emzirmeye yönelik bir eğitim kitapçığı tarafından verilen rutin eğitime göre daha etkili olduğunu ortaya koymuştur.

**Anahtar Sözcükler:** Emzirme, eğitim, öz yeterlilik, video

**Introduction**

Breastfeeding is the most fundamental right of the newborn. Breast milk is not only beneficial for the mother and infant, it also has many benefits for the family, society and economy of the country. As breast milk has many benefits, it is also required for mothers to be informed adequately about breastfeeding, to be supported and to feed their babies accurately for improving breastfeeding success and self-efficacy. It has been known that breastfeeding training and support facilitate initiation to breastfeeding and extend its duration (1,2). You et al. (3) reported that individualized perinatal breastfeeding training given to the expectant mothers with gestational diabetes based on self-efficacy theory showed positive effects on postnatal breastfeeding self-efficacy and breastfeeding rates.

It is important to start breastfeeding education during antenatal period and to continue it also during the postnatal period together with group sessions, home visits and individual support (2,4). Breastfeeding support is different than breastfeeding training; it generally starts during postnatal period and covers breastfeeding support services that may be accessed with psychological, physical and financial support (1,5). Among the healthcare professionals, nurses have a key position in empowering, supporting, consulting and guiding the mother during prenatal and postnatal periods (2,6). The training given to the mother by the nurse has a great impact on the continuation of breastfeeding, prevention of breast complications and successful breast feeding (1,2,7,8) The nurses should encourage the mothers about breastfeeding and they should be knowledgeable about psychosocial effects, challenges met and the ways to resolve them (6,9).

World Health Organization recommends to enrich breastfeeding training with written materials and videos in individual or group sessions (2). It has been indicated that breastfeeding training programs should be supported by using new methods such as

web-based instructions, videos and written materials in line with the current technological advances in order to be successful (2,7). Recent studies have shown that videos are used commonly in breastfeeding trainings in developing countries due to its cost-effectiveness (10,11). In this context, we consider that video-assisted training given to the mothers of hospitalized babies will be important to determine their breastfeeding self-efficacy and will provide a source to the future studies that will be conducted with various training methods. Therefore, this study was carried out to determine the effect of video-assisted breast milk and breastfeeding training given to the mothers of the hospitalized newborns on breastfeeding self-efficacy and success.

**Hypotheses**

**Hypothesis 01:** Video-assisted breast milk and breastfeeding training given to the mothers of the hospitalized newborns does not affect breastfeeding self-efficacy of the mothers.

**Hypothesis 1:** Video-assisted breast milk and breastfeeding training given to the mothers of the hospitalized newborns increases breastfeeding self-efficacy of the mothers.

**Hypothesis 02:** Video-assisted breast milk and breastfeeding training given to the mothers of the hospitalized newborns does not affect breastfeeding success of the mothers.

**Hypothesis 2:** Video-assisted breast milk and breastfeeding training given to the mothers of the hospitalized newborns increases breastfeeding success of the mothers.

**Methods****Study Design**

This was a non-randomized, semi-experimental study with a pretest-posttest design including two groups.

## Setting and Sample

The universe of the study consisted of mothers whose babies were hospitalized in neonatal intensive care 2<sup>nd</sup> level unit of a university hospital located in a big city in the northern part of Turkey between 06.01.2021-12.25.2021 and who came to breastfeed their babies. A power analysis was done by using G\*Power (v3.1.7) program in order to determine sample size. In the calculations assuming that the assessments made between two independent groups in terms of Breastfeeding Self-Efficacy Scale-Short Form scores would have a great impact ( $d=0.80$ ), it was determined that each group had to include at least 36 individuals in order to obtain a power of 80% ( $1-\beta$ ) at a level of  $\alpha=0.05$ . Considering that some losses might occur during the study, it was planned to enroll 44 individuals into each group. Among the mothers who met the inclusion criteria, three in the experimental group (EG) and one in the control group (CG) discontinued and left the study. In this case, the study was completed with 41 mothers in EG and 43 mothers in the CG. Mothers who approved to participate in the study (1), who were healthy (2), who were aged 18 years and older (3), whose babies were hospitalized and found to be suitable for breastfeeding by the neonatologists (4), who were literate (5), who did not have a psychiatric problem (6) and who knew Turkish (7) were included. Those who did not approve to participate (1), who were sick (2), whose babies were not found to be suitable for breastfeeding by the neonatologists (3), who experienced a breast problem that might prevent breastfeeding (4), who had mental, cognitive, psychiatric, auditory and visual problems (5), who were illiterate (6) and who did not know Turkish (7) were excluded from the study.

## Data Collection Tools

Data were collected by Demographic Information Form, A Breastfeeding Charting System and Documentation Tool (LATCH) and Postpartum Breastfeeding Self-Efficacy Scale-Short Form (PBSES-SF).

**Demographic Information Form:** This form was prepared in line with the literature (8,9,11) and consisted of a total of 20 questions including some sociodemographic data (age, education status, income status, employment status, place of residency, family type) and obstetric data (pregnancy planning, number of pregnancies, status of experiencing any health problem during pregnancy, gestational weeks, type of childbirth) regarding the mother, data regarding the newborn (sex, weight) and breastfeeding-related characteristics (status of previous breastfeeding, first postpartum breastfeeding time, current feeding pattern, status of any education and the amount of time she wants to breastfeed).

**LATCH Breastfeeding Charting System and Documentation Tool:** LATCH Breastfeeding Charting System and Documentation Tool was generated by Jensen et al. (12). The instrument is composed of five assessment criteria [L (Latch on the breast), A (Audible swallowing), T (Type of the nipple), C (Comfort breast/nipple) and H (Hold)]. Each item is scored between 0-2 points. Maximum score that can be obtained from

the scale is 10 points. As the score taken from the scale increases, breastfeeding success also increases. Turkish adaptation of the scale was carried out by Yenal and Okumuş (13) and Cronbach alpha value was found as 0.95. In this study, cronbach alpha coefficient was calculated as 0.90.

**Postpartum Breastfeeding Self-Efficacy Scale-Short Form:** This 33-item scale was developed by Dennis and Faux (14); and it was turned into a short form including 14 items by Dennis (15). The scale assesses how competent mothers feel themselves about breastfeeding. All items included in this 5-likert type scale (1= I am not sure at all, 5= I am always sure) have a positive meaning. Minimum score that can be taken from the scale is 14 and the maximum is 70. Higher scores indicate higher breastfeeding self-efficacy. Turkish adaptation of the scale was conducted by Tokat et al. (16) and Cronbach alpha value was found as 0.86. In this study, cronbach alpha coefficient was calculated as 0.85.

## Procedures

The eligibility of the mothers who came to the neonatal intensive care unit to breastfeed their babies was evaluated by the researcher. Necessary information was given to the eligible and volunteer mothers and their written informed consents were taken. There were one experimental (intervention) and one control group in the study. The researcher firstly gave video-assisted breast milk and breastfeeding training to the intervention group. When these trainings were completed, the researcher assigned the other eligible mothers to the control group. Mothers in the control group were just given routine breastfeeding training of the hospital and no other intervention was made. Socio-demographic and obstetric data of the mothers were collected at first by using demographic information form; data regarding the babies were obtained from the infant files by the researcher. Breastfeeding self-efficacy was assessed by Postpartum Breastfeeding Self-Efficacy Scale-Short Form and breastfeeding success levels were assessed by LATCH before (pretest) and after breastfeeding trainings lasting for three days (posttest). Intervention time was limited to three days in this study since mean weekly hospitalization time of the newborns in neonatal intensive care 2<sup>nd</sup> level unit was 5 days. LATCH form was completed by the researcher through observation. LATCH form was simultaneously completed with the researcher and a nurse with 10 mothers and their babies before starting the study, and the concordance between the observers was evaluated. No significant difference was found between the observers for LATCH scores ( $p>0.05$ ) and thus, LATCH was completed by the observation of one researcher. Mothers and newborns enrolled in the pre-application were not included in the study. All these data were collected in the hospital when the mothers came for breastfeeding and when they were available. Data collected and interventions made were carried out without disturbing routine care, follow-up and breastfeeding process of the newborns.

**Intervention group:** The mothers in the experimental group were given a breastfeeding training with an educational booklet which was prepared by the training nurse of the relevant hospital and which was used routinely in breast milk training by the nurses in intensive care units for 3 days. During the training,

mothers were allowed to watch a video about breast milk and breastfeeding. In this video which was prepared by the researchers, there were practical information including breastfeeding positions, breast holding style, initiation and maintenance of breastfeeding, breastfeeding duration and frequency and the signs showing that the baby was breastfeeding actively and had adequate milk. The duration of video was 15 minutes. Mothers' feedbacks were taken for the information and skills in the video at three days following the training; and the questions of the mothers were answered.

**Control group:** The mothers in the control group were given a general breastfeeding training with breastfeeding education booklet which was prepared by the training nurse of the relevant hospital and which was routinely used by the nurses in the neonatal units for breastfeeding training for 3 days; and the questions of the mothers were answered. They underwent routine breastfeeding process and no other intervention was made in this group.

### Statistical Analysis

Data were analyzed by using the IBM SPSS v.23 (IBM Corp. Armonk, NY, USA) program. Continuous data were presented with descriptive statistics such as number, percentage, arithmetic mean and standard deviation. Chi-square test, Continuity correction test and Fisher's exact test were used for categorical variables to confirm differences in sociodemographic and obstetric characteristics between the groups. PBSES-SF and LATCH scores were compared between groups by one-way analysis of variance (ANOVA); and comparisons within groups were done by Paired samples t-test. The correlations between PBSES-SF and LATCH scores were evaluated by Pearson correlation test. A value of  $p < 0.05$  was accepted as statistically significant.

### Ethical Considerations

Ethics approval to conduct the study was obtained from the Clinical Research Ethics Committee of a university located in the northern part of Turkey (date: 05/28/2021, no: 2021/239); and was conducted in compliance with the Helsinki Declaration. Additionally, all participants were informed about the purpose of the study before the implementation of data collection form and those, who approved to participate, provided a written informed consent (clinical trials: NCT05221463).

### Results

Some sociodemographic characteristics of the mothers participated in the study were given in Table 1. No statistically significant differences were found between the groups in terms of mothers' age, education status, income status, employment status, occupation, place of residency and family type ( $p > 0.05$ ). Accordingly, mothers were found to show a homogenous distribution in respect to sociodemographic characteristics.

Some obstetric and newborn-related characteristics of the mothers were given in Table 2. No statistically significant differences were found between the groups in terms of number of pregnancies, pregnancy planning, type of childbirth,

birth week, birth weight, postpartum skin-to-skin contact, breastfeeding experience, first postpartum breastfeeding time, sex of the newborn, current feeding pattern of the newborn, status of having breast milk and breastfeeding training, time to consider breastfeeding the baby and weight of the baby in the intensive care ( $p > 0.05$ ). Accordingly, obstetric and newborn-related characteristics of the mothers were found to show a homogenous distribution.

The comparisons of mean PBSES-SF and LATCH scores of the mothers between and within the groups were given in Table 3. Mean pretest breastfeeding self-efficacy scores were similar between groups (EG:  $45.78 \pm 9.44$ ; CG:  $49.14 \pm 7.68$ ;  $p = 0.07$ ); however, breastfeeding self-efficacy scores were found to be higher in experimental group following video-assisted training compared to the control group (EG:  $64.59 \pm 4.82$  versus CG:  $58.28 \pm 7.19$ ;  $p = 0.00$ ). When differences within the groups were examined, mean breastfeeding self-efficacy score in the experimental group was found to be significantly increased in the experimental

**Table 1.** The distribution of some sociodemographic characteristics of the mothers based on groups

Characteristics		EG (n=41)	CG (n=43)	P value
Age (years)	20-25	4 (9.8)	4 (9.3)	0.74 <sup>a</sup>
	26-30	21 (51.2)	19 (44.2)	
	31-35	9 (22.0)	14 (32.6)	
	35 and older	7 (17.1)	6 (14.0)	
Education status	Elementary school	8 (19.5)	9 (20.9)	0.80 <sup>a</sup>
	Secondary school	12 (29.3)	9 (20.9)	
	High school	7 (17.1)	10 (23.3)	
	Undergraduate and higher	14 (34.1)	15 (34.9)	
Income status	Income less than expenses	0 (0.0)	2 (4.7)	0.13 <sup>a</sup>
	Income equal to the expenses	41 (100.0)	39 (90.7)	
	Income more than expenses	0 (0.0)	2 (4.7)	
Employment status	Employed	8 (19.5)	12 (27.9)	0.51 <sup>b</sup>
	Unemployed	33 (80.5)	31 (72.1)	
Occupation	Housewife	33 (80.5)	32 (74.4)	0.70 <sup>a</sup>
	Officer	6 (14.6)	7 (16.3)	
Place of residency	Worker	2 (4.9)	4 (9.3)	0.12 <sup>a</sup>
	Village	1 (2.4)	2 (4.7)	
	County	22 (53.7)	31 (72.1)	
Family type	City	18 (43.9)	10 (23.3)	0.71 <sup>c</sup>
	Core	38 (92.7)	38 (88.4)	
	Large	3 (7.3)	5 (11.6)	

Categorical variables were presented as n (%).

<sup>a</sup>Chi-square test, <sup>b</sup>Continuity correction test, <sup>c</sup>Fisher's exact test

**Table 2.** The distribution of some obstetric and newborn-related characteristics of the mothers based on groups

Characteristics		EG (n=41)	CG (n=43)	p value
Number of pregnancies	1	18 (43.9)	11 (25.6)	0.12 <sup>b</sup>
	2 and more	23 (56.1)	32 (74.4)	
Pregnancy planning	Planned	35 (85.4)	30 (69.8)	0.14 <sup>b</sup>
	Unplanned	6 (14.6)	13 (30.2)	
Type of childbirth	Vaginal	5 (12.2)	6 (14.0)	1.00 <sup>b</sup>
	Cesarean section	36 (87.8)	37 (86.0)	
Birth week	37 and below	22 (53.7)	21 (48.8)	0.82 <sup>b</sup>
	38-41	19 (46.3)	22 (51.2)	
Birth weight	2,499 gr and less	9 (22.0)	15 (34.9)	0.41 <sup>a</sup>
	2,500-3,500 gr	27 (65.9)	23 (53.5)	
	3,501-4,499 gr	5 (12.2)	5 (11.6)	
Postpartum skin-to-skin contact	Yes	8 (19.5)	9 (20.9)	1.00 <sup>b</sup>
	No	33 (80.5)	34 (79.1)	
Breastfeeding experience	Yes	17 (41.5)	20 (46.5)	0.80 <sup>b</sup>
	No	24 (58.5)	23 (53.5)	
First postpartum breastfeeding time	Within 60 minutes	8 (19.5)	6 (14.0)	0.55 <sup>a</sup>
	After 1 hour	13 (31.7)	11 (25.6)	
	After 24 hours	20 (48.8)	26 (60.5)	
Sex of the baby	Female	17 (41.5)	21 (48.8)	0.64 <sup>b</sup>
	Male	24 (58.5)	22 (51.2)	
Current feeding pattern of the newborn	Breast milk	7 (17.1)	6 (14.0)	0.92 <sup>b</sup>
	Breast milk and formula	34 (82.9)	37 (86.0)	
Status of education on breast milk and breastfeeding	Yes	27 (65.9)	30 (69.8)	0.88 <sup>b</sup>
	None	14 (34.1)	13 (30.2)	
Time to consider breastfeeding the baby	First 6 months	1 (2.4)	1 (2.3)	0.86 <sup>a</sup>
	6-12 months	1 (2.4)	2 (4.7)	
	12-24 months	39 (95.1)	40 (93.0)	
Weight of the baby in intensive care		2791.71±625.65	2776.86±632.760	0.91 <sup>c</sup>

Categorical variables are presented as n (%).  
<sup>a</sup>Chi-square test, <sup>b</sup>Continuity correction test, <sup>c</sup>Independent sample t-test

group following the training (p=0.00). The increase in the mean breastfeeding self-efficacy score in the experimental group (18.80) was significantly higher than the increase in the control group (9.13) (p=0.00). Mean pretest breastfeeding success scores were also comparable between the groups (EG: 3.66±1.97; CG: 4.14±2.34; p=0.31); but, breastfeeding success scores following video-assisted training in the experimental group were found to be significantly higher than the control group (EG: 9.07±1.38 versus CG: 6.67±2.06; p=0.00). Moreover, mean breastfeeding success score following the training in the experimental group was significantly increased compared to the score before the training (p=0.00). The increase in the breastfeeding success score in the experimental group (5.41) was significantly more than the increase observed in the control group (2.53) (p=0.00). Based on these data, it was determined that video-assisted breast milk and breastfeeding training was more effective than the breastfeeding training routinely given in the hospital in enhancing breastfeeding self-efficacy and success levels.

**Table 3.** The comparison of mean PBSES-SF and LATCH scores between and within the groups

	EG (n=41)	CG (n=43)	Between groups p-value <sup>a</sup>
<b>PBSES-SF</b>			
Pre-test	45.78±9.44	49.14±7.68	0.07
Post-test	64.59±4.82	58.28±7.19	<b>0.00</b>
Within group p-value <sup>b</sup>	<b>0.00</b>	<b>0.00</b>	
Difference	18.80±6.76	9.13±6.39	<b>0.00</b>
<b>LATCH</b>			
Pre-test	3.66±1.97	4.14±2.34	0.31
Post-test	9.07±1.38	6.67±2.06	<b>0.00</b>
Within group p-value <sup>b</sup>	<b>0.00</b>	<b>0.00</b>	
Difference	5.41±2.23	2.53±1.96	<b>0.00</b>

Data were presented as mean ± SD. <sup>a</sup>One-way analysis of variance (ANOVA), <sup>b</sup>Paired samples t-test. SD: Standard deviation

Moreover, a positive and significant correlation was found between total breastfeeding self-efficacy and breastfeeding success scores before and after the intervention at a moderate level ( $r=0.470$ ,  $p<0.01$ ). Accordingly, breastfeeding success increased as breastfeeding self-efficacy level of the mothers increased.

## Discussion

There is a huge effort made on the breastfeeding of babies in our country and mothers need a significant support on this issue (4,9,17,18). Nurses have an important role and responsibility in providing this support. In this study, it was determined that both routine briefing and video-assisted breast milk and breastfeeding training were effective in improving breastfeeding self-efficacy and success levels. Previous studies have reported that training and breastfeeding consulting provided to expectant mothers before childbirth and to the mothers during postpartum period positively affect breastfeeding initiation time, breastfeeding rate and breastfeeding duration (2,9,17-19).

In the study, video-assisted breast milk and breastfeeding training was determined to be more effective than the verbal training given through an educational booklet on breastfeeding in promoting breastfeeding success as well as breastfeeding self-efficacy. In many studies, it was determined that breastfeeding consulting trainings given in the hospital during early postpartum period were carried out verbally as face-to-face, online and through phone and visual training materials such as brochures (2,7,8,19,20). Video-assisted breastfeeding training given during pregnancy in our country has been determined to be effective in enhancing breastfeeding success and self-efficacy of the mothers (4,17). In the study by Tokat and Okumuş (21), it was found that methods used together with videos in the breastfeeding training given to the mothers in the study group such as slides, models, role-play, peer and case discussions affected breastfeeding self-efficacy perception of the group in a more positive way compared to the control group. Moreover, Mizrak et al. (4) found in their study that breastfeeding training given to the expectant mothers during prenatal period through methods including slides, models and videos promoted breastfeeding self-efficacy and success of the mothers at postpartum first and eighth weeks. Again, in some postpartum studies, video-assisted breastfeeding consulting was found to be effective in gaining knowledge as well as gaining attitudes and behaviors (11,22). In their study, Aditya et al. (22) stated that video-assisted breast milk consulting training helped mothers to understand the procedure and the process better and enhanced their knowledge levels and breastfeeding motivation about baby feeding. A study, which was conducted in Malasia, found that videos about breastfeeding aided mothers to change their attitudes towards breastfeeding. In the same study, educators stated that video-assisted breastfeeding training supported mothers in presenting important issues (23). In addition, videos which were prepared for health education in Africa were found to be effective in developing knowledge and positive attitudes for mother and child health among the rural semi-literate communities (10). In the web-based education which was provided by Nicholson et al. (24) for the pregnant women with

gestational diabetes, some animation videos on breastfeeding were displayed and 75% of postpartum mothers were found to feed their babies only with breast milk. As different from these, it was reported in another study that making pregnant women in low-income populations to watch educational videos on breastfeeding, prenatal diet and exercise during the third trimester did not affect postpartum hospitalization time, breastfeeding initiation rates and breastfeeding duration (11).

In the current study, it was also determined that breastfeeding success increased as breastfeeding self-efficacy level of the mothers increased. Similarly in the previous studies, a positive and weak/moderate correlation was found between mean LATCH scores and mean breastfeeding self-efficacy scores of the mothers during postpartum period and it was also observed that breastfeeding success increased as their breastfeeding self-efficacy perception increased (25,26). Kılıcı and Çoban (27) stated that breastfeeding success at early postpartum period enhanced breastfeeding self-efficacy perception at late postpartum period. In addition, Gökçeoğlu and Küçükoğlu (28) found in their study that mothers perceived their breast milk as more sufficient as their breastfeeding self-efficacy levels increased. Besides, breastfeeding self-efficacy was indicated to be the main potential postpartum assessment tool in the hospital to determine mothers at risk of premature weaning (29).

## Study Limitations

There were some limitations of this study. First of all, the results could not be generalized to all mothers of hospitalized newborns since it was a single-center study. Secondly, long-term efficiency of the intervention was not evaluated since no follow-up was made during breastfeeding period.

## Conclusion

The results of the study revealed that video-assisted breast milk and breastfeeding training was more effective than the routine training given by an educational booklet on breastfeeding in enhancing breastfeeding self-efficacy and success. Moreover, breastfeeding success of the mothers increased as their breastfeeding self-efficacy level increased.

In order to enhance the efficiency of educational programs on breastfeeding, it is crucial to use new methods in line with the current technological advances such as videos besides written materials. Breastfeeding training and support should be continued together with home visits during postnatal period starting from pregnancy period at healthcare institutions. Besides, it is recommended to conduct other quantitative studies with two or three groups using different training materials and methods together as well as qualitative studies that may determine the quality of training and the opinions and suggestions of the mothers on this issue.

## Ethics

**Ethics Committee Approval:** Ethics approval to conduct the study was obtained from the Clinical Research Ethics Committee of a university located in the northern part of Turkey (date:

05/28/2021, no: 2021/239); and was conducted in compliance with the Helsinki Declaration.

**Informed Consent:** Additionally, all participants were informed about the purpose of the study before the implementation of data collection form and those, who approved to participate, provided a written informed consent (clinical trials: NCT05221463).

**Peer-review:** Externally peer reviewed.

### Authorship Contributions

Surgical and Medical Practices: Ş.Ç., Concept: E.T.B., N.B., Ş.Ç., Design: E.T.B., N.B., Ş.Ç., Data Collection or Processing: Ş.Ç., Analysis or Interpretation: E.T.B., N.B., Literature Search: E.T.B., N.B., Ş.Ç., Writing: E.T.B., N.B., Ş.Ç.

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