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Original Article

Effect of breastfeeding counseling before cesarean section on initiation time of breastfeeding and newborn's body temperature in Turkey

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ABSTRACT

Background & Aim: The effect of the anesthetic substance given to the mother during cesarean section, and the pain experienced by the mother after the intervention practiced on the mother during cesarean section delay the mother-infant interaction and the initiation breastfeeding time. This study has been conducted to determine the effects of breastfeeding counseling given to the mothers that gave birth by cesarean section on initiation breastfeeding time and body temperature of newborn in Turkey.

Methods & Materials: The study has been conducted in the gynecology and obstetrics service of State Hospital between April 15, 2013, and November 14, 2013, on 95 with suitable criterion for the research (45 experimental and 50 controls) newborns with mothers who have had cesarean birth using quasi-experimental design. In data analysis, frequency distribution, correlation, chi-square test, t-test for independent groups have been used.

Results: Initiation breastfeeding time among mothers in the experimental group was 49.97 ± 12.78 minutes which was shorter than in the control group (101.56 ± 42.56 minutes). The incidence of hypothermia in newborns of the control group was significantly higher than those of newborns in the experimental group. As the time of initial breastfeeding got shorter, the body temperature of newborns in control and experimental groups after 30 minutes, the 4th and 10th hour after the birth increased.

Conclusion: It has been observed that breastfeeding counseling shortens the initial time of breastfeeding, and rises body temperature of the newborn. Breastfeeding counseling is important for early mother-infant interaction after cesarean section, starting breastfeeding within the first 1 hour and protecting the newborn from hypothermia.

Introduction

Cesarean section is an obstetric intervention that saves the lives of the mother and the infant in cases that vaginal birth is not possible (1). The rate of 10-15% is recommended as the fastest cesarean rate by the World Health Organization (WHO) and it is indicated that maternal, perinatal mortality and morbidity shall increase in the event that the rate goes higher or lower than this level (2). The WHO specifies that averagely 18.5 million cesarean sections a year were performed worldwide, in 2010, and half of the cesarean sections had a higher level than the rate of 15% (2).

According to the 2012 data of the Ministry of Health of Turkey, it is stated that 48% of the births gave at hospitals in Turkey were cesarean sections (3). The effect of the anesthetic substance given to mother during cesarean section and the pain experienced by the mother after the intervention practiced on the mother during ce-

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sarean section delay the mother-infant interaction and the first breastfeeding time (4-6). In developing countries, it is observed that 39% of infants are breastfed within the first 1 hour after birth (7). According to 2003, data of Turkish Population and Health Research the rate of breastfeeding within the first 1 hour after birth were 54% in Turkey (8), whereas in the 2008 data of it is observed that this rate decreased to 39% (9). The fact that the rate of breastfeeding within the first 1 hour after birth decreased compared to the previous 5 years makes us think that breastfeeding practices are ignored in Turkey, and this arises from the fact that cesarean births showed an increase (10). Çetin et al. (10) stated that 82.9% of mothers who had a normal vaginal delivery and only 37.9% of mothers who had cesarean sections started to breastfeed their infants within the first 1 hour after delivery. On the other hand, Kutlu and Marakoglu (11) indicated that 35.6% of infants that were born through normal vaginal delivery and 64.4% of infants who were born through cesarean section were breastfed within the first 2 hours after delivery. Starting to breastfeed earlier is important for the mother and the infant. It also decreases the risk of hypothermia which is one of the reasons of early neonatal deaths and especially seen in infants with low birth weight (10). Hypothermia which causes neonatal diseases and deaths in the developing and developed countries is defined by the WHO as an axillary temperature below 36.5° C (2, 12-14).

All newborns, particularly children with growth retardation and mental retardation, face the risk of hypothermia within the first 12 hours of their lives (15). Body temperature decreases about 1° C within the first 15 minutes after birth and it continues to decrease gradually within 1 hour (13). Stabilization of the body temperature of a full-term infant occurs within the 10th hour after birth (15). Thermoregulation through shivering is not in question within the first 3 months after birth and it takes 2 years to reach its level in adults. The newborn uses its muscle activity, position changes and brown fat metabolism for heat production. Failure to stabilize body temperature causes decrease of surfactant production, increase of oxygen consumption, depletion of calorie reserves and metabolic acidosis and results in coldness, fatigue, irritability, lethargy, hypotony, weak sucking reflex, hypoglycemia and even death if it cannot be controlled (15-17).

The WHO states that the newborn should be breastfed within the first 1 hour after birth in order for him/her to preserve its body temperature (18, 19). Preserving and maintaining the newborn's body temperature is one of the most important responsibilities of the healthcare personnel working in neonatal units, particularly nurses. Delay of breastfeeding is a risk factor for establishing a mother-infant attachment, starting breastfeeding for the 1st time and hypothermia for the newborn. This study was conducted to determine the effects of breastfeeding counseling given to the mothers that gave birth by cesarean section on initiation breastfeeding time and body temperature of newborn in Turkey.

Methods

The study was conducted as a quasi-experimental model with experimental and control groups. The population of the study consisted of mothers and their newborns who had birth through cesarean section a State Hospital in Turkey between April 15, 2013, and November 14, 2013. Newborns and mothers who met the inclusion criteria (having a full-term newborn through cesarean section, feeding only with breast milk, newborn has no health problem that may prevent him/her from being breastfed, mother has no health problem that may prevent her from breastfeeding) of the study within the specified population, constituted the sample group of the study. Calculation Program of Russ Lenth's Java Applets for Power and Sample Size was used to calculate the sample size (20). Alpha = 0.05, the difference predicted between the experimental and control groups in terms of the first breastfeeding time = 60 minutes, standard deviation = 3 and power of study = 80% were used to calculate the sample size. Accordingly, the sample sizes for experimental and control groups were calculated as 45 newborns and mothers in each group. Then, 50 newborns and mothers were taken into experimental and control groups by considering possible losses during

the implementation. However, during the implementation of the study, losses occurred in the experimental group due to early discharge and the study was completed according to the data obtained from 95 newborns and mothers, 45 of which were in the experimental group and 50 of which were in the control group.

In the study, to prevent effects of the control group from the experimental group, first the mothers in the control group were studied, and then the mothers in the experimental group were examined. No intervention was performed on mothers in the control group, and the routine hospital protocol was performed. As the intervention, mothers in the experimental group received breastfeeding counseling 1 hour before the cesarean section.

After mothers in the control group and control group were informed about the study in their rooms when they were brought to the maternity ward, their participation approvals for the study were received. Afterward, the questions on the personal information form were answered using the method of a face-to-face interview with mothers. Pre-operative preparation was performed by the ward midwife/nurse for the mother ½ hour before the cesarean section. Before going to the delivery room for cesarean section, official documents of the mother were issued by the ward midwife/nurse. After the official documents were completed, researcher and midwife/nurse took the mother to the delivery room for cesarean section. Midwife/nurse switched on the radiant heater in the delivery room before the cesarean section started and the clothes of the newborn to be worn after birth were brought to the delivery room. Subsequently, the cesarean section operation started. After the cesarean section was performed, the researcher measured the body temperature of the newborn within the first 5 minutes after birth, its Apgar score in the 1st minute, Apgar score in the 5th minute, birth height and weight. The ward midwife/nurse clothed the newborn and the researcher measured the body temperature of the newborn before being sent to the maternity ward and recorded it on the newborn evaluation form. Then, midwife/nurse and researcher took the newborn to the maternity ward. Newborn's body temperature was measured 10 minutes before breastfeeding and was recorded on the newborn evaluation form in the ward. Researcher measured the body temperature of the newborn 30 minutes and 4 hours after the initiation time of breastfeeding and 10 hours after birth and recorded the newborn's data on the newborn evaluation form in the ward. This study may have some limitations. Conducting our study in only one city. This study was non-randomized. Due to the design of the study, blinding could not be done. Before data collection tools starting application, it was applied 10 mothers and their newborns who did not participate in the current study. Then, necessary arrangement was done.

Experimental group; breastfeeding counseling was provided to the mothers in the experimental group 1 hour before the cesarean section and it was aimed to enable the initiation time of breastfeeding process early, increase the body temperature of the newborn. Researcher told the mothers that he/she would be with them during cesarean section operation. Researcher answered the questions of mothers in the experimental group such as "How long does the cesarean section operation take?" "When can I breastfeed after birth?" and "Will I have much pain?" Mothers were informed about the difficulties they may encounter after the cesarean section. It was stated that these difficulties could not prevent breastfeeding and mothers were encouraged to breastfeed infants. Training booklets prepared for mothers giving birth through cesarean section in their own rooms at the hospital were given to mothers in the experimental group. Information about breastfeeding which is also provided in training booklet was given to mothers and visual materials in the training booklet were shown. The researcher showed the mother in which positions she will need to breastfeed the infant after cesarean section in her bed through demonstration method using a doll and afterwards asked the mother to try the positions.

When the mother was brought to the ward, post-operative care was provided to mother; body temperature of the newborn was measured 10 minutes before breastfeeding and was recorded on the newborn evaluation form. Mother was asked if she was ready to breastfeed. Mothers

who decided to breastfeed were enabled to take the right positions and to start breastfeeding. Breastfeeding was supported by giving mothers positive reinforcers during breastfeeding. Mothers who had difficulties in breastfeeding were helped by the researcher and it was ensured that they breastfed for 10 minutes from the right breast and 10 minutes from the left breast, 20 minutes at total. The participants were also assured that their identities would be kept confidential, and that their information would be used exclusively in this particular research. To conduct the study, legal permissions were obtained from the relevant institutions. This study was reviewed and approved by the Research Ethics Committee of Atatürk University Health Science institution (dated 25.01.2013 and numbered 2013.1.1/6) and registered in Iranian Registry of Clinical Trials as IRCT2015122625678N1.

Data collection tools

"Personal information form" which involved descriptive characteristics of mother and 10 questions regarding some obstetrical and cesarean-related characteristics; "form of evaluation of newborn at birth" which involves information regarding the newborn's birth date, gender, Apgar scores in the 1st and 5th minutes, body temperature taken within first 5 minutes after birth, birth weight, birth height and body temperature before being sent to maternity section; "form of evaluation of newborn in ward" which consists of four measurements of body temperature follow-up of the newborn (newborn's body temperature 10 minutes before and 30 minutes after breastfeeding, 4 hours after breastfeeding and 10 hours after birth). A weighing instrument was used to measure the newborn's weight; a tape measure was used to measure the newborn's height, a via an FDT01 model digital thermometer was used to measure the newborn's body temperature. Intervention tools: A training booklet prepared for mothers giving birth through cesarean section which involves the information about the importance of breast milk, advantages of breast milk and breastfeeding, preparing the mother for breastfeeding and breastfeeding positions, and a doll resembling a healthy term infant which is suitable for natural breastfeeding training were used as intervention tools in this study.

Data were analyzed using Statistical Package for Social Science (SPSS 15.0, SPSS Inc., Chicago, IL., USA) software program. Percentage distribution, chi-square test, independent samples t-test, correlation, and Cronbach's alpha coefficient (for internal consistency of scale items) were used to assess the data.

Results

In this study, 48.9% of mothers in the experimental group were in the age group of 29-39; 53.3% were high school graduates, 66.7% were housewives, 97.8% had nuclear families, 62.2% were multipara, 44.4% were in the 39th gestational week, and 68.9% had incomes equal to their expenses. 57.8% of mothers in the experimental group asserted that their reason for giving birth through the cesarean section was their previous cesarean sections, and the regional anesthesia was used in the deliveries of 62.2%. 58.0% of mothers in the control group were in the age group of 29-39, 46.0% were high school graduates, 74.0% were housewives, 94.0% had nuclear families, 54.0% were multipara, 49.5% were in the 39th gestational week, and 50.0% had incomes equal to their expenses. 50.0% of mothers in the control group asserted that their reason for giving birth through the cesarean section was their previous cesarean sections, and regional anesthesia was used in the births of 48.0% ($P > 0.005$, Table 1).

Average birth weight of newborns in the experimental group was 3250.66 ± 433.94 g, their average birth height was 50.28 ± 1.47 cm, their APGAR means score for 1st minute was 7.93 ± 0.61, and their APGAR mean score for 5th minute was 9.57 ± 0.49. Average birth weight of newborns in the control group was 3210.00 ± 482.32 g, their average birth height was 50.20 ± 2.03 cm, their Apgar mean score for 1st minute was 8.12 ± 0.71, and their Apgar mean score for 5th minute was 9.48 ± 0.57 ($P > 0.005$, Table 2).

The first breastfeeding time of the mothers in the experimental group was 49.97 ± 12.78 minutes, which was shorter than in the control group (101.56 ± 42.56 minutes) which was statistically significant difference between them ($P < 0.005$, Table 3). Starting time of breastfeeding among mothers in the experimental group,

who received general anesthesia, was longer (57.88 ± 16.40) than mothers who received regional anesthesia (45.17 ± 6.62). Starting time of the mothers in the control group, who received general anesthesia, for first breastfeeding was longer (112.34 ± 39.39) than the initiation times of breastfeeding of mothers who received regional anesthesia (89.87 ± 43.57). While the difference between the first breastfeeding times of mothers in experimental group who received general and regional anesthesia was statistically significant (P < 0.005), the difference between the initiation time of breastfeeding of mothers in the control group who received general anesthesia and regional anesthesia was not statistically significant (P > 0.005, Table 4).

Table 1. Comparison of descriptive characteristics of mothers in experimental and control groups

Characteristics	Experimental (N = 45) N (%)	Control (N = 50) N (%)	Total (N = 95) N (%)	P value in chi-square test
Mother age				
18-28	21 (46.7)	18 (36.0)	39 (41.0)	$\chi^2 = 1.132$
29-39	22 (48.9)	29 (58.0)	51 (53.7)	P = 0.568
40 age and over	2 (4.4)	3 (6.0)	5 (5.3)	
Education attainment				
Primary school graduate	6 (13.4)	9 (18.0)	15 (15.8)	$\chi^2 = 4.526$
Secondary school graduation	4 (8.9)	11 (22.0)	15 (15.8)	P = 0.210
High school graduation	24 (53.3)	23 (46.0)	47 (49.5)	
University graduation	11 (24.4)	7 (14.0)	18 (18.9)	
Occupation of mother				
House wife	30 (66.7)	37 (74.0)	67 (70.5)	$\chi^2 = 0.714$
Officer	12 (26.7)	11 (22.0)	23 (24.2)	P = 0.700
Worker	3 (6.6)	2 (4.0)	5 (5.3)	
Type of family				
Nucleus	44 (97.8)	47 (94.0)	91 (95.8)	$\chi^2 = 0.838$
Extended	1 (2.2)	3 (6.0)	4 (4.2)	P = 0.360
Parity				
Primiparaus	17 (37.8)	23 (46.0)	40 (42.1)	$\chi^2 = 0.657$
Multiparaus	28 (62.2)	27 (54.0)	55 (57.9)	P = 0.418
The income of family				
Low	10 (22.2)	14 (28.0)	24 (25.3)	$\chi^2 = 4.325$
Middle	31 (68.9)	25 (50.0)	56 (58.9)	P = 0.115
High	4 (8.9)	11 (22.0)	15 (15.8)	
Gestational age				
38	14 (31.2)	9 (18.0)	23 (24.2)	$\chi^2 = 2.233$
39	20 (44.4)	27 (54.0)	47 (49.5)	P = 0.327
40	11 (24.4)	14 (28.0)	25 (26.3)	
Reason of cesarean section				
Fetal stress	14 (31.1)	15 (30.0)	29 (30.5)	$\chi^2 = 1.462$
Breech	5 (11.1)	10 (20.0)	15 (15.8)	P = 0.482
Previous cesarean section	26 (57.8)	25 (50.0)	51 (53.7)	
Type of anesthesia				
General anesthesia	17 (37.8)	26 (52.0)	43 (45.3)	$\chi^2 = 1.934$
Regional anesthesia	28 (62.2)	24 (48.0)	52 (54.7)	P = 0.164

Table 2. Comparison of descriptive characteristics of newborns in experimental and control groups

Characteristics	Experimental group $\bar{X}$ ± SD	Control group $\bar{X}$ ± SD	t	P
Birth weight	3250.66 ± 433.94	3210.00 ± 482.32	-0.430	0.668
Birth height	50.28 ± 1.47	50.20 ± 2.03	-0.242	0.809
Apgar mean score for 1st minute	7.93 ± 0.61	8.12 ± 0.71	1.351	0.180
Apgar mean score for 5th minute	9.57 ± 0.49	9.48 ± 0.57	-0.876	0.383

SD: Standard deviation

Table 3. Comparison of first breastfeeding times of mothers in experimental and control groups

Groups	First breastfeeding time (minutes) $\bar{X} \pm SD$	t	P
Experimental group	49.97 ± 12.78	7.815	< 0.001
Control group	101.56 ± 42.56		

SD: Standard deviation

Table 4. Comparison of the first breastfeeding times of mothers in experimental and control groups according to the anesthesia type used during cesarean section

Anesthesia type	First breastfeeding starting time (minutes) $\bar{X} \pm SD$	t	P
Experimental group			
General anesthesia	57.88 ± 16.40	3.657	0.001
Regional anesthesia	45.17 ± 6.62		
Control group			
General anesthesia	112.34 ± 39.39	1.915	0.061
Regional anesthesia	89.87 ± 43.57		

SD: Standard deviation

When average body temperatures of newborns in the experimental and control groups after birth were compared between groups, no difference was observed between the two groups within the first 5 minutes after birth (P > 0.005); however, a significant difference was observed in average body temperatures measured before newborns were sent to maternity ward, 10 minutes before breastfeeding, 30 minutes and 4 hours after breastfeeding and 10 hours after birth. This difference was found to be statistically significant for the followed periods except for the first 5 minutes (P < 0.005, Table 5). It was observed that as the mothers in the control group delayed to start the initiation time of breastfeeding, body temperatures of newborns decreased 10 minutes before breastfeeding, 30 minutes and 4 hours after breastfeeding and 10 hours after birth. It was specified that there was a significant negative relationship between the initiation time of breastfeeding of mothers and body temperatures of newborns in the control group (P < 0.005, Table 6).

Discussion

In the study, it has been observed that initiation time of breastfeeding of mothers in the experimental group after birth was earlier (49.97 ± 12.78 minutes) than the initiation time of breastfeeding of mothers in the control group after birth (101.56 ± 42.56 minutes). It was also observed that initiation time of breastfeeding of mothers in the experimental group who received general anesthesia was longer than the initiation time of breastfeeding of mothers who received regional anesthesia, on the other hand, there was no difference between the initiation time of breastfeeding for mothers who received general and regional anesthesia in the control group. Hawas and Seyhan (21) stated in their study that the initiation time of breastfeeding of mothers who received spinal anesthesia (137 ± 92 minutes) was earlier than the initiation time of breastfeeding of mothers who received general anesthesia (181 ± 201 minutes). When the literature was examined, it was seen that one of the advantages of regional anesthesia compared to general anesthesia was that mother-infant attachment was established sooner after birth (21, 22). This study and the study conducted by Hawas and Seyhan (21) revealed that initiation time of breastfeeding among mothers who received regional anesthesia is shorter compared to the mothers who received general anesthesia, which was in line with the literature.

It was indicated that breastfeeding the infant within the first 1 hour, providing breastfeeding counseling before birth, health conditions of the infant and mother, conditions of the hospital and behaviors of healthcare personnel toward breastfeeding are effective factors in feeding with breast milk (23, 24). In this study, the fact that the initiation times of breastfeeding of mothers in the experimental group who received breastfeeding counseling were earlier than the mothers in the control group demonstrated that the counseling, training, and support received by mothers were effective in the initiation of breastfeeding. These results conform with the literature information (23, 24).

Table 5. Comparison of average body temperatures of newborns in experimental and control groups

Followed periods	Body temperature (° C)		t	P
	Experimental group $\bar{X} \pm SD$	Control group $\bar{X} \pm SD$		
Within the first 5 minutes after birth	36.89 ± 3.09	36.78 ± 2.97	-1.751	0.083
Before being sent to maternity ward	36.35 ± 3.43	36.00 ± 3.71	-4.748	< 0.001
10 minutes before breastfeeding	36.28 ± 3.43	35.83 ± 3.56	-6.258	< 0.001
30 minutes after breastfeeding	36.65 ± 3.65	36.08 ± 4.18	-7.077	< 0.001
4 hours after breastfeeding	36.67 ± 2.36	36.16 ± 4.03	-7.465	< 0.001
10 hours after birth	36.74 ± 2.10	36.38 ± 2.69	-7.201	< 0.001

SD: Standard deviation

Table 6. Relationship between first breastfeeding times of mothers in experimental and control groups and body temperatures of newborns

Measuring time of newborn's body temperature	First breastfeeding time (minutes)	
	Experimental group	Control group
10 minutes before breastfeeding	r = -0.003	r = -0.360*
30 minutes after breastfeeding	r = -0.092	r = -0.484**
4 hours after breastfeeding	r = -0.119	r = -0.435**
10 hours after birth	r = -0.051	r = -0.491**

*Correlation is significant at 0.01 level, **Correlation is significant at 0.005 level

When average body temperatures of newborns measured within the first 5 minutes after birth, before being sent to the maternity ward, 10 minutes before initiation time of breastfeeding, 30 minutes and 4 hours after breastfeeding and 10 hours after birth were compared between experimental and control groups; while no difference was observed between groups within the first 5 minutes after birth a significant difference was observed in average body temperatures measured before being sent to the maternity ward, 10 minutes before the initiation time of breastfeeding, 30 minutes and 4 hours after breastfeeding and 10 hours after birth. When literature was examined, it has been reported that the body temperatures of newborns can decrease up to 1° within 15 minutes after birth and continue to decrease for 1 hour (16, 17, 25). In this study, while the body temperatures of newborns in the experimental and control groups within the first 5 minutes after birth were similar; the body temperatures of newborns decreased before being sent to the maternity ward and 10 minutes before breastfeeding, and the decrease in the body temperatures was higher compared to the newborns in the control group. The WHO states that proper clothing, early breastfeeding and prevention of hypothermia are required in the heating chain recommended to preserve the newborn's body temperature (18). WHO defines the axillary body temperature below 36.5° C as hypothermia (17, 18, 25). When studies conducted on newborn hypothermia incidences regardless of the delivery methods in developed countries were examined, it was seen that body temperatures of newborns were measured in the 10^{th}, 30^{th}, 60^{th}, and 90^{th} minutes after birth in the study conducted by Byaruhanga et al. (26) in Uganda, and the body temperatures of, respectively, 29%, 82%, 83%, and 79% of newborns were below 36.5° C. In a study conducted by Nayeri and Nili (27) in Iran, body temperatures of newborns were measured 20 minutes after birth and 53.3% of them had hypothermia (below 36.5° C). In a study conducted by Anderson et al. (28) in Nepal, 81% of the newborns were found to have hypothermia after 5-6 measurements a day (below 35.5° C). Sarman et al. (29) confirmed that 88% of ill newborns in Turkey had hypothermia (below 36° C), when they were accepted to the neonatal unit. Furthermore, in this study, it was observed that average body temperatures of newborns in the experimental and control groups before being sent to the maternity ward and 10 minutes before breastfeeding were hypothermic (below 36.5° C). This result showed similarity between the study results. The study revealed that while average body temperatures of newborns in the experimental group were normal when measured 30 minutes and 4 hours after the first breastfeeding and 10 hours after birth (above 36.5° C),

average body temperatures of those in the control group were below 36.5° C. While body temperature averages of the newborns in the experimental group were lower according to the conducted (26-29), average body temperatures of the newborns in the control group showed similarity with the results of the study (26-29).

In the study conducted by Laptook et al. (30), it was stated that 50% of infants who were not breastfed within the first 24 hours after birth had body temperatures lower than 36.5° C. Conducted studies (31, 32) indicate that body temperatures of newborns decrease after birth and it may cause serious problems and even danger the baby's life if no precautions are taken. It is emphasized that heating chain should be followed and the newborn should be breastfed as soon as possible after birth to preserve the newborn's body temperature (2, 24). It was observed in the study that there was a positive relationship between the first breastfeeding times of mothers in the experimental group and the body temperatures of newborns 30 minutes and 4 hours after the first breastfeeding and 10 hours after birth. While there was no significant relation between initiation time of breastfeeding of mothers in the experimental group and the body temperatures of newborns, as initiation time of breastfeeding of mothers in the control group shortened, body temperatures of newborns increased. This result was in line with the results of the studies conducted on the subject.

It was determined that initiation time of breastfeeding of mothers in the experimental group were earlier than mothers in the control group. Moreover, the body temperatures of newborns in the experimental group measured 30 minutes and 4 hours after breastfeeding and 10 hours after birth were higher compared to the newborns in the control group. It was also determined that as initiation time of breastfeeding of mothers in the control group gets longer, the body temperatures of newborns decreased. In accordance with these results, it could be recommended that mothers who had cesarean section could be provided with prenatal breastfeeding counseling in order to establish the mother-infant attachment in the early post-partum period and shorten initiation time of breastfeeding of mothers.

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Conflict of interest

The authors declare no conflict of interest.

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