DOI:10.5281/zenodo.10445726 ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

Aile Sağlığı Merkezine Başvuran Kadınların Bebek Bakımına İlişkin Kültürel ve Fonksiyonel Olmayan Uygulamaları

Cultural and Nonfunctional Infant Care Practices of Women Visiting Family Health Centers

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ÖZET

Amaç: Bazı kültürel uygulamalar yenidoğan ve bebeklerin sağlığını etkilemeye devam etmektedir. Bu nedenle kültürel uygulamalar üzerinde durulması gereken önemli bir konudur. Aile sağlığı merkezleri, ailelerin sıklıkla başvurduğu kurumlar arasında yer almaktadır. Bu çalışmada birinci basamağa başvuran annelerin uyguladıkları kültürel uygulamaların belirlenmesi ve bunları etkileyen faktörlerin belirlenmesi amaçlanmıştır. **Yöntem:** Tanımlayıcı bir çalışmadır. Veriler, Kültürel Bebek Bakımı Uygulamaları Anketi ve İşlevsel Olmayan İnançlar ve Uygulamalar Tutum Ölçeği aracılığıyla toplanmıştır. Çalışma verileri, Türkiye'nin batısında bir ilde Sağlık Müdürlüğüne bağlı beş farklı Aile Sağlığı Merkezinde (ASM) toplanmıştır. Katılımcılar 18-49 yaş arası en az bir çocuğu olan kadınlardan oluşmaktadır (n= 208). **Bulgular:** Kısıtlayıcı kundaklama, yenidoğanın vücudunu tuzla ovma ve yenidoğanlarda bitkisel yağların kullanılması zararlı olma potansiyeline sahip uygulamalardır. Eğitim düzeyi ve yaşı, annelerin kültürel uygulamalara başvurmasını etkilemektedir. Kültürel uygulamalara başvuran annelerin bebek bakımı konusunda uygunsuz bilgi ve inançlara sahip oldukları belirlenmiştir**. Sonuç:** Birinci basamakta çalışan hemşireler, halen güncel bir sorun olan kültürel uygulamaların bebek sağlığı üzerindeki etkilerinin farkında olmalı ve genç yaşta veya eğitim düzeyi düşük anneleri bebek bakımı konusunda bilgilendirmelidir.

Anahtar Kelimeler: Geleneksel ve Kültürel Uygulamalar; Fonksiyonel Olmayan Uygulamalar; Bebek Bakımı; Hemşirelik

ABSTRACT

Aim: Some cultural practices continue to affect the health of newborns and infants. Therefore, cultural practices are an important issue that should be emphasized. Family health centers are among the institutions that families frequently apply to. In this study, it was aimed to determine the cultural practices applied by mothers who applied to primary care and to determine the factors affecting them. **Material and Methods:** This is a descriptive study. Data were collected via a Cultural Infant Care Practices Questionnaire, and the Nonfunctional Beliefs and Implementations Attitude Scale. Study data were collected in five different Family Health Centers (FHCs) affiliated with the Health Directorate in a province in the west of Turkey. Participants were women aged 18-49 with at least one child (n= 208). **Results:** Potentially harmful practices include restrictive swaddling, rubbing a newborn's body with salt, and using vegetable oils on newborns. Education level and age affect mothers' recourse to cultural practice. It has been determined that mothers who apply to cultural practices have inappropriate knowledge and beliefs in infant care. **Conclusion:** Nurses working in primary health care should be aware of the effects of cultural practices, which is still a current problem, on infant health and should inform mothers who are mothers at a young age or low educational level about infant care.

Keywords: Traditional and Cultural Practices; Non-Functional Practices; Baby Care; Nursing

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INTRODUCTION

Culture is a basic factor that characterizes society and social relations (1). Each society has its own unique culture, lifestyles, social norms, beliefs, customs, and traditions. Culture shapes the religious thoughts and rituals of a society, its attitudes and behaviors, lifestyles, health-related behaviors, and attitudes in case of illness (2). It has a significant impact on every aspect of our lives, including our health (3). Studies show that cultural and nonfunctional practices mostly affect women with pregnancy, mothers, and babies (4).

The postpartum period is seen as a sensitive period in many different cultures, and different cultural and non-functional practices are applied to protect the mother and baby's health. (5). Cultural practices during infancy include after three prayers to feed the baby, discarding colostrum, giving sugar water as the first food, swaddling, salting, oiling the umbilical cord, saying prayers to protect the baby from evil eyes, and wearing amulets (6). Although the effects of some of the cultural practices on human health are not known, most of them have been determined to be harmful (4).

Today, many mothers and babies die due to some cultural and traditional practices during pregnancy, birth and postpartum, and newborn and infancy periods in developing countries. Cultural and nonfunctional practices continue to be a primary problem in Turkey
(7). Cultural and non-functional practices applied in infant care can lead to dehydration, aspiration, infection, allergy, and prolongation of the treatment process in infants and affect the health and development of infants, causing sequelae and death (8, 9). For example, it was reported in a study that some parents put a coin on the umbilicus of the infant after its umbilical cord fell off, which resulted in infection, and that others gave soda water to the baby to relieve gas, which resulted in vomiting and dehydration in infants (8).

The care given by nurses and midwives especially in the birth / postpartum period and infant care are very important. Healthcare professionals play an important role in identifying harmful cultural and nonfunctional practices, giving education, and preserving those which are thought to be beneficial, thus protecting cultural traditions (6). Our study is different from other studies and will contribute to the literature, because it provides up-to-date data on practices in infant care, the form of a Cultural Infant Care Practices Questionnaire is more comprehensive and the scale is used.

Purpose of the study the cultural and nonfunctional infant care practices of women who presented to family health centers.

Research Questions;

1. What are the cultural and nonfunctional practices of women in infant care?
2. Do the cultural infant care practices of women differ according to their sociodemographic characteristics?
3. Do the nonfunctional infant care practices of women differ according to their sociodemographic characteristics?

METHOD

Study Design and Sample

This is a descriptive study.

Research Place

Data were collected at five different Family Health Centers (FHCs) in a province in western Turkey.

Population and Sample Of The Research

The study population consisted of women aged between 18 and 49 (N: 76.066) registered to the FHCs in the district. The sample size was determined as 128 people using the G-power program (0.05 error and 80% power). Considering losses that may occur during the data collection process, data were collected from at least 30 women who met the inclusion criteria of the study from each FHCs by using the stratified sampling method, and a total of 208 women were reached.

Inclusion And Exclusion Criteria

Inclusion criteria were determined as volunteering, being aged between 18 and 49, speaking and understanding Turkish, and having at least one child. The exclusion criteria of the study were having a cognitive impairment that hindered communication, not having children, being younger than 18 and older than 49, and not being able to understand or speak Turkish.

Data Collection Tools

Descriptive Information Form, Cultural Baby Care Practices Survey and Dysfunctional Beliefs and Practices Attitude Scale were used to collect research data.

Descriptive Information Form: Descriptive Information Form: This form was developed by the researchers 7, 10). The form contains 10 questions about the participant's age, marital status, profession, education level, family type, economic situation, total number of births, number of children, information about baby care and place of residence.

Cultural Infant Care Practices Questionnaire: The form was prepared by the researchers in line with the literatüre (7, 10, 11). It consists of a total of 18 open-ended questions about the first feeding time of the infant, the first food given, bathing time, and cultural/traditional infant care/health practices. Opinions were received from three experts within the scope of face validity. Experts stated that the items in the form were appropriate.

Nonfunctional Beliefs and Implementations Attitude Scale (NBIAS): This scale was developed in 2012. It consists of four sub-dimensions: pregnancy, birth, puerperium, and infant care. It is a 5-point Likert-type scale. Low scores on the scale indicate that the woman has inappropriate knowledge and beliefs about nonfunctional practices, while high scores on the scale indicate that the woman has appropriate knowledge and is more conscious about infant care practices. Each sub-dimension of the scale can be used independently. In this study, the nonfunctional infant care (NBIAS) practices sub-dimension of the scale was used. The NBIAS consists of 18 items. The lowest score that can be obtained from the scale is 18 and the highest score is 90 (12). Cronbach’s alpha value was found as 0.86 in the study of Yalçın and 0.80 in this study.

Independent Variables

The independent variables of the study included of participants age, marital status, number of children, income level, education level, occupation, place of residence, health insurance and family type.

Dependent Variables

The scores obtained from the nonfunctional infant care practices scale and the cultural infant care practices of women made up the dependent variables of the study.

Data Collection Method

Study data were collected by the researcher via face-to-face interview method.

Ethical Aspects of the Study

At the outset, the approval of the Non-Interventional Research Ethics Committee was obtained (date: October 26, 2020; issue: 2020/26-52). Written institutional permission of the Provincial Health Directorate in the province where the study was conducted was obtained. Women who volunteered to participate in the study submitted written consent by filling out the Informed Voluntary Consent Form, which included information about the purpose of the study.

Permission of the researcher who developed the scale used in the study was obtained via e-mail. The principles of the Declaration of Helsinki were taken into account in the study.

Data Analysis

Research data were analyzed in a statistical software package. Descriptive statistics were used to evaluate the data, and the Shapiro-Wilk test was used to test the suitability of the variables for normal distribution (13). Mann-Whitney U test was used to compare non-normally distributed scale scores between two independent groups, and Kruskal-Wallis and Dunn multiple comparison tests were used to compare more than two independent groups. Descriptive statistics are presented as mean and standard deviation values, and $p<0.05$ was considered statistically significant.

RESULTS

Of the women, 31.3% were in the 30-34 age group, 50.0% were secondary school/high school graduates, 87% had social security, 86.5% had a nuclear family, 40.9% had two children, and 73.6% lived in a province. It was found that 78.4% of the women had not received any education on infant care before. The mean score of participants on the total NBIAS was 81.08 ± 8.63, and the median was 84 (min: 42- max: 90).

Regarding the first food given to infants, 86.1% of women had been given breast milk, 10.1% sugar water, and 3.8% formula. It was determined that 29.8% of women bathed their babies before the umbilical cord fell off, 51.4% after the umbilical cord fell off, and 18.8% 20 days or more after birth. Also, 71.2% stated that they salted their baby, and 59.1% swaddled it. It was found that 19.7% of women used various vegetable oils for the umbilical cord to fall off earlier, 51% cleaned the oral thrush with carbonated water, and 3.8% used black mulberry syrup to clean it (Table 1).

Table 1. Cultural Infant Care Practices of Women

Cultural Practices for Baby Care	*n*	%
First food given to infants		
Breast milk	179	86.1
Sugar water	21	10.1
Formula	8	3.8
First infant bathing time		
Before the umbilical cord fell off	62	29.8
The umbilical cord fell off	107	51.4
20 days or more after	39	18.8
Salting		
Yes	148	71.2
No	60	28.8
Practices in hyperbilirubinemia		
Yellow scarf	38	18.3
Giving sugar water	16	7.7
Sleeping them under the light	11	5.3
Frequently breastfed	56	26.9
Did not practice anything	87	41.8
Swaddling		
Yes	123	59.1
No	85	40.9
Practices in umbilical cord to fall off earlier		
Vegetable oil (a)	41	19.7
Did not practice anything (b)	167	80.3
Practices after umbilical cord falls		
Flush	33	15.9
Did not practice anything	143	68.8
Put money in the belly	32	15.4
Practices in oral thrush		
Cleaned with carbonated water (a)	106	51.0
Didn't have oral thrush. (b)	94	45.2
Black mulberry syrup (c)	8	3.8
Nail clipping time		
The longer (a)	190	91.3
Forty days after birth (b)	18	8.7
Practices for crying and restless baby		
Breast(a)	51	24.5
Prayer reading (b)	8	3.8
Did not practice anything (c)	83	39.9
Shake / Massage (d)	66	31.7
Practices for cough		
Go to the doctor (a)	177	85.1
Honey/ herbal tea (b)	16	7.7
Hit on the back(c)	15	7.2

There was a difference between women's educational attainment and NBIAS scores ($p = 0.022$), and further analysis showed that statistical significance was between primary school graduates and university and middle/high school graduates. A significant difference ($p=0.021$) was found between where the participants lived and the scores they received from the scale. Further

analysis showed that the scores of women living in villages/towns were significantly lower than the scores of those living in a province ($p = 0.015$). A significant difference was found between the participants' marital status and NBIAS scores ($p = 0.049$). A statistically significant difference was found between the age of the youngest child and NBIAS ($p = 0.002$). There was no difference between the participants' NBIAS scores and age, family type, social security, occupation, economic status, age at first birth, total number of births, and number of children ($p > 0.05$) (Table 2).

Table 2. Results of Comparison Women's Socio-Demographic Characteristics and Their Mean Scores On the Total NBIAS Indicated ($n = 208$)

Characteristics		NBIAS			
	n (%)	Mean±SS	Mean Rank	Test Statistics	*p*
Age				*KW* = 3.879	0.275
19-24	39(18.8)	80.87 ± 8.60	102.81		
25-29	54(26.0)	82.33 ± 8.26	114.61		
30-34	65(31.3)	81.95 ± 7.13	106.85		
35 and over	50(24.0)	78.76 ± 10.44	91.85		
Marital Status				*Z* = -1.964	**0.049***
Married	198(95.2	81.38 ± 8.29			
Single	10(4.8)	75.10 ± 13.05			
Education level				*KW* = 7.610	**0.022***
Primary school **(a)**	61(29.3)	78.06 ± 10.95	87.23		*c>a, c>b*
Secondary school/high school **(b)**	104(50.0	81.89 ± 7.67	109.47		
University education **(c)**	43(20.7)	83.39 ± 5.61	116.98		
First Birth Age				*KW* = 5.286	0.152
15-19	47(22.6)	78.91 10.51	90.15		
20-24	99(47.6)	81.14 ± 8.53	105.64		
25-29	43(20.7)	82.95 ± 7.32	119.01		
30 and over	19(9.1)	81.89 ± 5.70	101.21		
Education On Infant Care				*Z* = -1.867	0.062
Yes	45(21.6)	78.77 ± 10.09			
No	163(78.4	81.71 ± 8.11			
Youngest Child Age				*Z* = -3.039	**0.002***
0-24 month	138(66.3	82.84 ± 6.29			
25 month and over	70(33.7)	77.61 ± 11.25			
Place of residence				*KW* = 7.682	**0.021***
Village /town	10(4.8)	72.30 ± 14.81	67.00		
District	45(21.6)	78.71 ± 10.64	91.49		
Province	153(73.6	82.35 ± 6.88	110.78		

**p<0.05; SS: Standard deviation, Z: Mann Whitney U test, KW: Kruskal Wallis test- Dunn Test*

There was a significant difference ($p = 0.003$) between the first time women bathed their infants and their mean score on the total NBIAS. In further analyses, it was determined that the statistical significance was between women who first bathed their infant 20 days after birth and those who did it after the umbilical cord fell off ($p = 0.001$) (Table 3).

There was a significant difference (p = 0.004) between women's practices to prevent jaundice in their babies and their mean scores on the total NBIAS. It was found that there was a significant difference between women who wrapped their babies with a yellow scarf and those who breastfed frequently (p = 0.009), and between women who wrapped their babies with a yellow scarf and those who did nothing (p = 0.001).

A significant difference (p = 0.016) was found between women's practices for oral thrush in their infants and their mean score on the total NBIAS. There was a statistically significant difference between those who used black mulberry syrup for oral thrush and those who cleaned it with carbonated water (p = 0.001), and between women who used black mulberry syrup and those whose babies did not have oral thrush (p = 0.001) (Table 3). A statistically significant difference (p = 0.049) was found between what the women first fed the baby with and the mean total score of the NBIAS. In the analyzes, it was determined that the mean scores of women who fed their babies with formula were significantly lower than those who fed their babies with breast milk. A statistically significant difference (p = 0.000) was found between the salting practice status of the women and the mean NBIAS total score. A statistically significant difference (p = 0.000) was found between the arson practice status of the women and the mean total score of the NBIAS. Women who practiced swadling had a lower mean total score on the scale. A significant difference was found in the mean NBIAS scores of women who practiced the umbilical cord to fall off earlier (p = 0.000) (Table 3).

Table 3. Results of Comparison Women's Cultural Infant Care Practices And Their Mean Scores On The Total NBIAS Indicated (n = 208)

Cultural Practices for Baby Care	n(%)	Mean±SS	NBIAS Mean Rank	Test Statistics	p
First food given to infants				KW = 5.687	**0.049***
Breast milk	179(86.1)	81.64 ± 8.22	108.09		
Sugar water	21(10.1)	79.52 ± 8.14	89.57		
Formula	8(3.8)	72.50 ± 14.11	63.38		
First infant bathing time				KW = 11.892	**0.003***
Before the umbilical cord fell off	62(29.8)	81.25 ± 7.39	101.94		
The umbilical cord fell off	107(51.4)	82.76 ± 7.44	115.86		
20 days or more after	39(18.8)	76.17 ± 11.46	77.38		
Salting				Z = -4.573	**0.000***
Yes	148(71.2)	79.52 ± 9.16			
No	60(28.8)	84.91 ± 6.18			
Practices in hyperbilirubinemia				KW = 15.289	**0.004***
Yellow scarf	38(18.3)	76.89 ± 10.47	74.50		
Giving sugar water	16(7.7)	79.87 ± 9.38	94.97		
Sleeping them under the light	11(5.3)	79.18 ± 8.43	86.73		
Frequently breastfed	56(26.9)	82.03 ± 8.41	112.48		
Did not practice anything	87(41.8)	82.75 ± 7.18	116.47		
Swaddling				Z = -3.754	**0.000***
Yes	123(59.1)	79.52 ± 9.0			
No	85(40.9)	83.34 ± 7.58			

Practices in umbilical cord to fall off earlier				*Z* = -3.777	**0.000***
Vegetable oil (a)	41(19.7)	76.12 ± 11.28		*b>a*	
Did not practice anything (b)	167(80.3)	82.29 ± 7.40			
Practices after umbilical cord falls				*KW* = 11.217	**0.004***
Flush	33(15.9)	79.12 ± 9.48	90.03		
Did not practice anything	143(68.8)	82.58 ± 6.98	113.65		
Put money in the belly	32(15.4)	76.40 ± 12.04	78.53		
Practices in oral thrush				*KW* = 8.275	**0.016***
Cleaned with carbonated water (a)	106(51.0)	80.14 ± 9.73	99.65	*a>c , b>c*	
Didn't have oral thrush. (b)	94(45.2)	82.56 ± 7.12	114.09		
Black mulberry syrup (c)	8(3.8)	76.12 ± 6.17	56.13		
Nail clipping time				*Z* = -3.047	**0.002***
The longer (a)	190(91.3)	81.51 ± 8.64		*a>b*	
Forty days after birth (b)	18(8.7)	76.50 ± 7.32			
Practices for crying and restless baby				*KW* = 23.927	**0.000***
Breast(a)	51(24.5)	80.23 ± 8.48	94.08		
Prayer reading (b)	8(3.8)	74.00 ± 15.67	75.75	*c>d>a>b*	
Did not practice anything (c)	83(39.9)	84.28 ± 6.03	128.98		
Shake / Massage (d)	66(31.7)	78.56 ± 9.14	85.26		
Practices for cough				*KW* = 15.682	
Go to the doctor (a)	177(85.1)	82.18 ± 7.36	110.79	*a>b>c*	
Honey/ herbal tea (b)	16(7.7)	78.37 ± 9.78	85.59		
Hit on the back (c)	15(7.2)	70.93 ± 13.60	50.43		**0.000***

DISCUSSION

When the descriptive characteristics of the women and the average scores they received from the NBIAS total were examined, it was determined that there was a significant difference (p = 0.022) between their education levels and the scores they received from the scale, and that the difference was between primary school graduates and university and secondary school/high school graduates. It was found that as the education level decreased, women did more cultural practices and their scale scores decreased. Our findings were consistent with the literature. For example, Sakar et al. (2015) determined that as the education level decreased, participants' scores on the scale decreased, as well (14). In the study of Çınar et al., (2015) it was determined that mothers with higher education levels did less cultural practices (15). It can be said that as the level of education increases, women access and apply more accurate knowledge and they turn to cultural practices less. A statistically significant difference (p = 0.021) was found between participants' place of residence and their score on the scale. In further analyses, it was seen that the scores of women living in villages/towns were significantly lower than the scores of those living in a province (p = 0.015). In a study, it was determined that the mean score of those living in a province was higher and that they did fewer cultural practices (14). It is thought that living far from a province affected women's application of cultural practices.

Colostrum provides the infant's fluid requirement and is very important to meet the needs of the newborn in the first five days, thanks to the IgA, growth factors, and other protective components it contains (16). According to the data obtained in this study, one in every 10

women in the sample gives their baby sugar water as the first food. There was no significant difference between the first feeding time and the total NBIAS score ($p > 0.05$). It is thought that having secondary school and below education, not having received education on infant care, and being aged over 30 were effective in giving sugar water to the infant as the first food, which was one of the cultural and nonfunctional practices. Although breastfeeding is common in Jordan, feeding with sugar water is among the practices that will affect breastfeeding (17). In China, 39.8% of mothers give sugar water to their babies (18). In Egypt, it was stated that 45.5% of women postponed feeding for hours or even days because they thought that colostrum was dirty after delivery. In the same study, use of sugar water in infant feeding was determined as 10.9% (19). When the literature was examined, it was seen that the use of sugar water as the first food continued with a variation between 5.3% and 27.5%, but there were differences in the regions where the studies were conducted (10, 20, 21). In the study conducted by Yiğitalp and Gümüş (2017), it was determined that women who gave sugar water to their infant as their first food included those who had a primary school and below education (20).

There was a difference (p=0.003) between the women's first baby bath time and their mean scores on the NBIAS. In further analyses, it was determined that the statistical significance was between women who first bathed their infant 20 days after birth and those who did it after the umbilical cord fell off ($p = 0.001$). In this study, it was determined that the majority of women (51.4%) bathed their infants after the umbilical cord fell off. In a study, it was determined that 15.1% of the mothers gave their babies their first bath on the day they were born, and 66.3% of them took their first bath between 1 and 10 days. (22). In another study, the rate of women who first bathed their infant after the umbilical cord fell was 61.6% (15). In the study of Sezer Efe et al., the rate of women who bathed their infants after the umbilical cord fell was 41.4 % (23). The first bath of the infant should be done as a wiping bath until the umbilical cord falls off, and bathing the infant after the umbilical cord falls off is important in terms of preventing infections that may develop.

Since the connection between the epidermis and dermis is weak and the skin is thin and more sensitive in infants, chemical exposure should be avoided in skincare applications and skin integrity should be preserved (24). Salting application is not recommended because it is a risky practice in terms of skin irritation and hypernatremia in infants (25). In this study, three out of every four women (71%) were found to salt their infants, and women who practiced salting were mostly primary school graduates. The mean total NBIAS score of those who salted their infants was found to be lower than the scores of those who did not ($p < 0.05$). In the study of Arabiat et al., it was reported that the majority of mothers salted their newborns (26). In the study of Al-Sagarat and Al-Kharabsheh, it was determined that women salted their babies because they believed it protected them from diaper dermatitis and helped them to become healthier individuals (27). In various studies, it was determined that the rate of salting application was between 11.7% and 82.8% (10, 20, 21, 25). Akçay et al. reported that salting practice was more common among mothers with low education levels (21). In this sense, mothers can be educated about the harms of salting practice by health professionals in institutions providing primary health care services.

The majority of newborns have elevated bilirubin levels in the first week of life. High bilirubin levels that are not detected and treated on time can cause serious neurological sequelae (28). It

is stated that some cultural and nonfunctional practices in newborns may cause elevated bilirubin levels (8). In this study, it was determined that women practiced some cultural practices, such as covering their babies with a yellow scarf, giving sugar water, and sleeping them under the light so that their babies would not get jaundice. There was a significant difference ($p = 0.004$) between the practices performed by women to prevent jaundice in their infants and their mean score on the total NBIAS. It was determined that there was a statistically significant difference between the scores of women who wrapped their infants in a yellow scarf and the scores of those who frequently breastfed ($p = 0.009$) and between the scores of women who wrapped their infants in a yellow scarf and the scores of those who did not practice anything ($p = 0.001$). In a study conducted in Jordan, it was reported that women performed some practices to protect their infants against jaundice, such as giving sugar water, exposure to the sun, putting garlic necklaces on infants, and exposure to room light (27). In a similar study conducted in Turkey, it was determined that 53.5% of women performed traditional practices so that their babies would not have jaundice (29). In another study, it was determined that women performed some practices to protect their infants against jaundice, such as covering them with a yellow scarf, dressing up their babies with yellow clothes, breastfeeding frequently, washing in water with gold, and giving sugar water (10,21).

Swaddling is a cultural and nonfunctional practice that increases the risk of hip dysplasia and dislocation and is not suitable for the anatomy of infants. In this study, it was determined that more than half of women swaddled their babies. In addition, it was determined that the mean score of the women who practiced swaddling on the NBIAS was significantly lower than the scores of those who did not ($p = 0.000$). In two different studies conducted in Jordan, it was found that mothers swaddled their infants (17,27). Various studies found that swaddling varied between 28% and 88% (21, 25, 30). It is important for health professionals working in primary health care services to be careful about swaddling practice and to inform women about its harms.

In a healthy newborn, the umbilical cord falls off spontaneously within 7-14 days and no extra care is required (31). Cultural and nonfunctional practices performed so that the umbilical cord falls off quickly may cause the development of infection (8). In this study, it was determined that 20% of women applied vegetable oil to the umbilical cord. It was found that the mean scores of women who applied oil on the umbilical cord on the total NBIAS were significantly lower than the scores of those who did not apply any treatment. It was determined that 2.3% of mothers in the study of Çınar et al. (2015) and 9.6% of mothers in the study of Ergin et al. (2020) applied olive oil to the umbilical cord so that it would fall off quickly (15, 25). In a study conducted in Pakistan, it was determined that 69% of participants applied various substances (mustard oil, antimony, and pure butter) on the umbilical cord so that it would fall off quickly (32). In a study conducted in Kenya, only 4 mothers (1%) knew that the cord should be left clean and dry without applying any substance (33).

Oral thrush can cause restlessness or refusal to feed in babies (34). In this study, it was determined that half of the women wiped the infant's mouth with carbonated water and that some used black mulberry syrup, albeit at a low rate (3.84%), when the infant had oral thrush. A statistically significant difference ($p = 0.016$) was found between women who performed some practices when their babies had oral thrush and their mean score on the total NBIAS. A statistically significant difference was determined between the scores of women who used black

mulberry syrup and those who wiped the infant's mouth with carbonated water and the scores of those whose infants did not have thrush ($p = 0.001$). Our findings were consistent with some study results in the literature (10,15). It was determined that women participating in our study used baby powder, diaper rash cream, and olive oil/centaury oil for diaper dermatitis. In the study by Aşılar and Bekar (2018) and Akçay et al. (2019), it was determined that women used ointment, olive oil, breast milk application, and powder for diaper dermatitis (10, 21).

The study was limited to one district of a province. It was also limited to the number of mothers reached because some of them coming to FHCs did not meet the inclusion criteria and some others were not voluntary to participate in the study.

In conclusion, it was determined that women who participated in the study applied cultural and nonfunctional infant care practices. Our study showed that some harmful practices, such as salting, swaddling, applying various substances on the umbilical cord, giving honey to a coughing infant, giving sugar water to an infant with jaundice, and giving sugar water as the first food, still existed.

Conclusion and Recommendations

It was determined that women who were high school and university graduates lived in a province, received education on infant care, fed their infant first with breast milk after birth, and had children aged between 0-24 months used nonfunctional practices less and had higher mean scores on the NBIAS. Nurses working in primary health care services should recognize and evaluate the cultural structure of society and families, be aware that harmful practices in infant care prevail, take a history of cultural and nonfunctional practices during pregnancy follow-up and infant follow-ups as of the antenatal period, plan education on infant care, and encourage parents to cooperate with institutions to increase their educational status so that cultural and nonfunctional practices can be reduced. It is recommended to conduct large-scale studies covering different provinces on the subject.

Conflict of Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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