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Risks In The Safety Circle: Newborn Care Practices of Mothers

Güvenlik Çemberindeki Riskler: Annelerin Yenidoğan Bakım Uygulamaları

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RISKS IN THE SAFETY CIRCLE: NEWBORN CARE PRACTICES OF MOTHERS

ABSTRACT

Aim: This study was conducted to evaluate the newborn care practices of mothers in terms of newborn safety risk.

Method: This research is descriptive. The study included 248 mothers with newborn babies. The study was carried out in Nevşehir State Hospital between May 2018 and August 2019. The data were collected using the Questionnaire Form and the Neonatal Safety Information Form developed by the researchers.

Results:Of the mothers, 44.8% experience the risk of falling their infant, they fall asleep while breastfeeding at night, 10.5% rock their infant hard to put them to sleep, 35.5% swaddled their infant tightly, 52.0% put hot water with a thermophore on their infant's feet when in the presence of gas discomfort. Of the mothers, 25.4% used detergent and bleach while washing the infant's clothes, 48.0% used pacifier clip/holders, and 54.0% used powder for diaper rash.

Conclusions and Suggestions: In the study, it was determined that infants might be exposed to risks such as aspiration, infection, falling, swing fast, burns and trauma due to swaddling, unsafe travel, exposure to chemicals, and suffocation of infants. For newborn safety, mothers should be trained in newborn care beginningfrom their pregnancy and ensure the continuity of these pieces of training.

Keywords: Newborn Safety, Mothers, Care Practices, Risks.

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GÜVENLİK ÇEMBERİNDEKİ RİSKLER: ANNELERİN YENİDOĞAN BAKIM UYGULAMALARI

ÖZ

Amaç: Bu çalışma, annelerin yenidoğan bakım uygulamalarını yenidoğan güvenliği açısından değerlendirmek amacıyla yapılmıştır.

Yöntem: Bu araştırma tanımlayıcı bir araştırmadır. Çalışmaya yeni doğan bebeği olan 248 anne dahil edilmiştir. Çalışma Nevşehir Devlet Hastanesinde, Mayıs 2018- Ağustos 2019 tarihleri arasında yürütülmüştür. Veriler, araştırmacılar tarafından geliştirilen Anket Formu ve Neonatal Güvenliği Bilgi Formu kullanılarak toplanmıştır.

Bulgular: Annelerin; %44.8'inin bebeğini düşürme riski yaşadığı, gece emzirirken uykuya daldığı, %10.5'inin uyutmak için bebeğini sertçe salladığı, %35.5'inin bebeğini sıkıca kundak yaptığı, %52.0'sinin gaz sancısı olduğunda bebeklerinin ayaklarına termoforlu sıcak su koyduğu belirlenmiştir. Annelerin; %25.4'ünün bebeğin kıyafetlerini yıkarken deterjan ve çamaşır suyu, %48.0'ının emzik klipsi/tutucu, %54.0'ının pişik için pudra kullandığı belirlenmiştir.

Sonuçlar ve Öneriler: Çalışmada bebeklerin kundaklanma, güvenli olmayan seyahat, kimyasallara maruz kalma, aspirasyon, enfeksiyon, düşme, hızlı sallanma, yanık ve travma gibi risklere maruz kalabileceği belirlendi. Annelere gebeliklerinden itibaren yenidoğan bakımı konusunda eğitim verilmesi ve bu eğitimlerin sürekliliğinin sağlanması yenidoğan güvenliği açısından önemli olacaktır.

Anahtar Kelimeler: Yenidoğan Güvenliği, Anneler, Bakım Uygulamaları, Riskler.

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INTRODUCTION

The neonatal period is the most vulnerable time for a child's survival. The global neonatal mortality rate in 2021 is stated to be an average of 18 per 1,000 live births (UNICEF, 2023). Children who die within the first 28 days of delivery suffer from conditions and diseases that result from a lack of quality care at or soon after birth and in the first days of life. World Health Organization (WHO) recommends strengthening the care of newborn babies. (WHO, 2023)

The care practices of mothers and health professionals affect the health of the newborn from the beginning of life (Özkan & Üst, 2016). In the studies, researchers determined that mothers had inadequate knowledge of newborn care. (Berhan & Gulema, 2018; Bulto et al., 2019; Leta, 2022; Singh et al., 2019). The lack of knowledge about infant care or the wrong traditional beliefs, knowledge and practices learned by mothers who take the primary responsibility for the care of babies negatively affect the health of babies (Aydemir & Ekti Genç, 2020).

The need for security is one of the basic human needs (Birol, 2018). When the concept of safety in the field of health is mentioned, the first thing that comes to mind is patient safety. Patient safety is defined as preventing patients from being harmed by preventable errors that occur in the healthcare process or ensuring that the harm is minimized (Şenoğlu et al., 2020). In other words, not only diagnosis and treatment but also errors that may occur in the care process threaten patient safety. When care is not provided by the person himself but by someone else responsible for his care, a safety issue arises. It is important to mention that safety

is a concern not only for patients but also for every individual who cannot care for themselves, who needs care and whose care is provided by someone else, such as newborns.

After discharge from the hospital, mothers take on the responsibility for the care of newborns, and almost all of the care that will enable them to sustain their vital activities is provided by mothers being primary caregivers. It is a known fact that newborns depend entirely on others to maintain their vital activities such as feeding, excretion, sleep and hygiene. For the most basic right to life, newborns at the beginning of life should be protected from all threats (Yıldız & Boyacı, 2019). It is important to make the baby's environment safe, including the postnatal period. (Ministry of Health, 2019). It is important to recognise the risks that may occur while providing the care needs of the newborn and to take the necessary measures to ensure the newborn's safety. Ensuring the safety of the newborn is essential for the protection of its health. In the literature review, no study was found that examined mothers' care practices regarding newborn safety.

For this reason, this study was conducted to evaluate the newborn care practices of mothers in terms of newborn safety, and it was aimed to make an important contribution to the literature.

Research Questions

- What are the newborn care practices of mothers?
- Are there any neonatal care practices that may jeopardize the newborn safety of mothers, and if so, what are they?

METHOD

Research Type

This research is a descriptive.

Study Setting and Sample

The population of the study consisted of mothers (N= 780) with newborn babies who applied to the hospital for one year. At the end of the study, power analysis and effect size calculation were made. The power of the study was found to be 0.93 in the post-study power analysis performed with an effect size of 0.20 and a confidence interval of 95%. Taking the opinion of the statistician, the researchers decided that the power of the study was sufficient, and the study was completed with 248 samples.

Data Collection

The data of the study were collected in the Nevşehir State Hospital between May 2018 and August 2019. The sample of the study consisted of all mothers who applied to the hospital between May 2018 and August 2019, agreed to participate in the study, and had newborn babies. The data were collected by the researchers through face-to-face interviews with mothers in the pediatric outpatient clinic/ lactation room. Prior to the study, the purpose of the study was explained to the mothers, and it was reminded that they were free to participate in the study or leave it any time they wished. Then, the questionnaire forms were applied to the mothers who volunteered to participate in the study. The implementation of the questionnaires took approximately 15 minutes.

Data Collection Tools

The data of the study were collected using the Questionnaire Form and the Neonatal Safety Information Form.

Questionnaire Form:This form consists of 26 questions, including some socio-demographic and introductory information about the mothers.

Neonatal Safety Information Form: This form was developed by the researchers (Agran et al., 2003; Kahn et al., 2017; Arısoy et al., 2014; Arıkan & Bekar, 2015; Berhan & Gulema, 2018; Erdoğan & Turan, 2018; Erkut & Yıldız, 2017; Gao & Simpson, 2014; Garlich & Nelson, 2011; Kahn et al., 2017; Kural & Gökçay, 2018; Lipke et al., 2018; Monson et al., 2008; Örün, 2015; Whiteside-Mansell et al., 2017). The Neonatal Safety Information Form consisted of a total of 61 questions. After the form was developed, opinions were received from three experts. The pre-application of the questions in the form was tested on five mothers, and then the form was given its final version. The questionnaire form consisted of 9 questions related to the sociodemographic and pregnancy characteristics of the mothers and the characteristics of the care of their infants. The Neonatal Safety Information Form consisted of questions aiming to determine the practices ensuring safety, such as the care, feeding, sleep, etc. of the infants of the mothers. The Neonatal Safety Information Form included practices following: aspiration risk (11 questions), practices concerning determine the risk of infection (10 questions), practices concerning trauma and home accidents (16 questions), in-car practices (3 questions), practices concerning clothing safety (4 questions), practices that could cause choking (4 questions), practices that may cause trauma during bathing (4 questions), practices concerning the environment (4 questions), practices concerning the tools and equipment used (1 question), practices concerning breastfeeding (2 questions) and practices concerning health seeking behavior (2 questions).

Statistical Analysis

Data were evaluated using IBM SPSS Statistics Standard Concurrent User V 25 (IBM Corp., Armonk, New York, USA). Descriptive statistics (number and percentage) were used to evaluate the data. G*Power 3.1 package program was used for power analysis.

Ethics

In this study, ethics committee approval (No: 84902927-2017.05.08) from the Ethics Committee of Hacı Bektaş Veli University and study permission were obtained from Nevşehir Provincial Health Directorate. Before starting the study, the purpose of the study was explained to the mothers and verbal consent was obtained from them.

RESULTS

Of the mothers participating in the study, 37.9% were secondary school graduates, 48.0% lived in the province, 89.1% did not work, and 65.3% had a middle-income level. The mothers' mean age was 27.21 ± 5.79 years. It was determined that of the mothers, 85.1% had a planned pregnancy, 73.0% received information about infant care during their pregnancy, 19.4% experienced difficulties in infant care, 27.8% needed training in infant care, and 85.5% had a relative who can support infant care. In addition, the husbands of 78.6% of mothers participated in infant care.

In the current study, it was defined that 63.3% of the mothers covered their infant's face while sleeping, 28.2% breastfed in a lying position during the day, and 31.0% breastfed in a lying position at night, 32.3% kept toys in their crip, 36.7% attached their infant's crib and clothes such as amulet and hooked needle. In addition, 23.8% of the mothers stated that when they placed their infant in a side-lying position to sleep, they put a pillow on its back so that the infant did not turn supine (Table 1).

Table 1. The practices of mothers that may cause aspiration risk in newborn care

Practices Concerning Aspiration Risk	Yes n(%)	No n(%)
While breastfeeding, I make sure my infant's nose level of my nipple.	242(99.2)	2(0.8)
I feed the infant in upright position.	233(94.0)	15(6.0)
I burp my infant after breastfeeding.	242(97.6)	6(2.4)
I place my infant in side-lying position to sleep.	240(96.8)	8(3.2)
I place my infant down as way I can see.	245(98.8)	3(1.2)

I cover my infant's face while sleeping.	91(36.7)	157(63.3)
I breastfeed in lying position during the day.	70(28.2)	178(71.8)
I breastfeed in lying position at night.	77(31.0)	171(69.0)
I keep toys in my infant's crib.	80(32.3)	168(67.7)
I attach objects such as amulet and hooked needle to my infant's crib/clothes.	91(36.7)	157(63.3)
When I place my infant in a side-lying position to sleep, I put a pillow on her/his back so that my infant does not turn in the supine position.	189(76.2)	59(23.8)

It was determined that 8.9% of the mothers gave infant a bath before their infant's umbilical stump fell off, 13.7% made their infant wear new clothes bought without washing them, 48.0% did not restrict the number of visitors, 31.5% allowed their infant to be kissed, 11.3% did not wash their hands before breastfeeding, and 32.3% did not change their clothes before touching with their infant when coming back home (Table 2).

Table 2. The practices of mothers in newborn care that may cause risk of infection

Practices That May Cause Risk of Infection	**Yes n (%)**	**No n (%)**
I give not infant a bath until my infant's umbilical stump falls off.	226(91.1)	22(8.9)
I clean the pacifiers and nipple by boiling.	223(89.9)	25(10.1)
I use dish soap to clean pacifiers and nipple.	92(37.1)	156(62.9)
I don't let my infant wear new clothes I bought without washing them.	214(86.3)	34(13.7)
I restrict number of visitors to protect my infant from infections.	129(52.0)	119(48.0)
I do not allow my infant to be kissed to protect it from infection.	170(68.5)	78(31.5)
I wash my hands before breastfeeding my infant.	220(88.7)	28(11.3)
When I come back home, I change my clothes before touching my infant.	168(67.7)	80(32.3)
I can have a pet.	19(7.7)	229(92.3)
I fold the nappy down below the umbilicus.	236(95.2)	12(4.8)

Table 3 shows the practices of mothers in infant care that may cause trauma and home accidents. Of the mothers, 44.8% fell asleep while they breastfed in a lying position and faced the risk of falling their infant, 52.0% put hot water with a thermophore on their infant's feet when in the presence of gas discomfort, 35.5% swaddled their infant tightly, 10.5% rocked their infant hard to sleep.

Table 3. The practices of mothers in newborn care that may cause trauma and home accidents

Practices That May Cause Trauma and Home Accidents	Yes n(%)	No n(%)
While I breastfeed on lying position, I fall asleep.	21(8.5)	227(91.5)
If I fall asleep while breastfeeding at night, I experience the risk of falling my infant.	111(44.8)	137(55.2)
My infant's crib away from my bed.	35(14.1)	213(85.9)
I brought my infant's crib closer to my bed.	228(91.9)	20(8.1)
There is less distance between my infant's crib and my bed than my infant can fit.	163(65.7)	85(34.3)
There's no distance between my infant's crib and bed.	58(23.4)	190(76.6)
Our infant sleeps between me and my husband at night.	12(4.8)	236(95.2)
There is more than 2 inches wide between my bed and the crib.	140(56.5)	108(43.5)
The crib rails are wider than 6 inches.	76(30.6)	172(69.4)
I rock my infant hard to put my baby to sleep.	26(10.5)	222(89.5)
I wouldn't leave my infant alone with a child.	229(92.3)	19(7.7)
I support the head while holding my infant upright in my lap.	245(98.8)	3(2.1)
I put hot water with a thermophore on my infant's feet when in the presence of gas discomfort.	129(52.0)	119(48.0)
I am overswaddling my infant.	88(35.5)	160(64.5)
I check its temperature before feeding with formula.	238(96.0)	10(4.0)
I change my infant's nappy often.	235(94.8)	13(5.2)

Of the mothers, 77.8% sit in the backseat with their infant on their lap while travelling in the car, 25.4% used detergent and bleach to wash their infant's clothes, 52.0% used a pacifier clip/holder, 54.0% used powder for a diaper rash, 63.3% used a bath net so that infant does not slip out while bathing their infant, 96.8% put clothes into the baby bathtub to prevent slipping while bathing their infant, 18.5% applied to traditional methods when their infant had a health problem (Table 4).

Table 4. Other risky practices used by mother in infant care

Other Risky Practices	Yes n(%)	No n(%)
In-car practices		
I can leave my infant alone in the baby car seat for a while	72(29.0)	176(71.0)
I sit in the backseat with my infant on my lap while I travel in the car.	193(77.8)	55(22.2)
I sit next to my infant in her/his the pushchair/baby car seat while I travel in the car.	142(47.3)	106(42.7)
Practices concerning clothing		
I make sure that my infant's clothes are cotton.	217(87.5)	31(12.5)

I wash my infant's clothes with soap, I do not use detergents and bleach.	185(74.6)	63(25.4)
I dry my infant's clothes in outdoors/in the sun.	231(93.1)	17(6.9)
I iron my infant's clothes.	159(64.1)	89(35.9)
Practices that may cause choking		
The pacifier clip/holder can be used when using a pacifier	129(52.0)	119(48.0)
My infant's bed is too hard.	133(53.6)	115(46.4)
I don't plan on putting a pillow until my infant is one year old.	125(50.4)	123(49.6)
I don't use powder for diaper rash.	114(46.0)	134(54.0)
Practices that may cause trauma during bathing		
While bathing my infant, I use a bath net so that it does not slip out.	157(63.3)	91(36.7)
I put clothes into baby bathtub to prevent slipping while bathing my infant.	240(96.8)	8(3.2)
I measure the temperature of the water with the inside of my arm while bathing my infant.	226(91.1)	22(8.9)
I prefer products for babies while bathing my infant (Shampoo, Soap).	201(81.0)	47(19.0)
Environment concerning practices		
I measure the temperature and moisture of my infant's room.	162(65.3)	86(34.7)
I ventilate my infant's room at least once a day.	235(94.8)	13(5.2)
I use baby monitor when my infant is sleeping.	63(25.4)	185(74.6)
I check every 15/30 minutes while my infant is sleeping.	238(96.0)	10(4.0)
Practices corcerning the tools and equipment used		
I make sure that the nipple/pacifiers I use are not plastic and do not contain harmful substances.	216(87.1)	32(12.9)
Practices concerning breastfeeding		
I don't eat spicy food since I am breastfeeding.	219(88,3)	29(11,7)
Since I am breastfeeding, I limit the use of medication.	234(94.4)	14(5.6)
Practices concerning health-seeking behavior		
When my infant has a health problem, I first take her to the doctor.	238(96.2)	10(4.0)
I try to solve my infant's health problems with traditional methods.	46(18.5)	202(81.5)

DISCUSSION

The American Academy of Pediatrics recommends a safe sleep environment to reduce the risk of all sleep-related infant deaths. For a safe sleeping environment, it is recommended that babies sleep in the supine position, on a hard sleeping surface and without soft objects in the bassinet (American Academy of Pediatrics, 2022). Since sudden infant death syndrome, the etiology of which is not completely explained, mostly occurs in an unsafe sleeping environment, environmental conditions that may be risky for newborn safety are considered from various perspectives (Newberry, 2019; Whiteside-mansell et al., 2017). It was found that 32.3% of the mothers kept toys in their infant's crib. In addition, almost all mothers stated that

they put their babies to sleep by placing them in the side-lying position. In other studies, it was determined that mothers mostly put their babies to sleep in the side-lying position (Erdoğan &Turan 2018; Ergin et al., 2020; Özbörü Aşkan et al., 2018). It is thought that this may be the anxiety of aspiration or suffocation when sleeping on their back, which implies that the mothers need information on this subject. This shows that the sleep care practices of mothers could be interpreted as risky in terms of sleep safety and newborn safety.

In this study, 44.8% of the mothers answered that if they fell asleep while breastfeeding at night, they experienced the risk of falling their infant. This result suggests that mothers sleep together with their infants. In addition, in this study, 4.8% of mothers stated that their babies slept between the mother and her husband. On the other hand, it has been shown in the literature that the duration and frequency of breastfeeding are higher in mothers sleeping with their infants. Although bed-sharing of mothers with their infants affects (Kural & Gökçay, 2018), it is recommended to room-in in different beds in order to prevent SIDS (Newberry, 2019; Whiteside-mansell et al., 2017). In the study of Erdoğan & Turan (2018), 42% of mothers stated that they shared the same bed with their baby. Kuzlu Ayyıldız et al. (2020) bed-sharing of mothers with their babies is 48%. The results of both our study and other studies show that mothers share beds with their babies. This result shows that it can be considered a risky care practice for newborn safety.

Infant deaths due to injury should also be evaluated within the scope of sleep safety. Among other causes of infant mortality, including jamming between furniture and bed, choking-related injuries (i.e., choking due to jamming) have been reported (Centers for Disease Control and Prevention, 2019). This study determined that approximately one-third of the mothers covered their infant's face while sleeping, kept toys in the infant's crib and attached objects such as amulets and hooked needles on the infant's crib/clothes. In the study by Özbörü Askan et al. (2018), 11.2% of the mothers stated that their babies had soft objects in their cribs. In their study, Gürsoy et al. (2020) stated that 11.2% of mothers wear blue beads against the evil eye on their babies' clothes. In our study, we can say that mothers' newborn care practices are risky practices for sleep safety.

It is not unusual for a mother to fall asleep in bed while feeding the infant (Lipke et al., 2018). In the study, 8.5% of the mothers stated that they breastfeed in a lying position, and 44.8% stated that they experienced the risk of falling their infant when they fell asleep. In a study in which pediatric injury rates were determined at 3-month intervals in children aged 0-3 months, the cause of injury for 0-2 months was determined as falling (Agran et al., 2003). In a study examining total neonatal falls over 3.5 years in a hospital, it was reported that the majority of newborn falls occurred while infants were in their parent's laps. (Kahn et al., 2017). It has been determined that half of these neonatal falls occur while the baby is in bed

or on a chair and because the mother falls asleep (Monson et al., 2008). The current study's result is significant in showing that infants are at risk of falling out of bed.

Parents are responsible for taking safety measures to prevent or minimize harm to infants and children in traffic accidents (Celasin & Sevinç, 2019). In this study, 77.8% of mothers said they sit in the backseat with their infant on their lap while travelling in the car. In another study, most respondents (69%) reported that their children were not in a car seat while traveling (Atayoglu & Atayoglu, 2023). In this study, that the majority of mothers did not use a child car seat for their infants and travel in the back seat with their infant on their lap is risky for the safety of infants as they may expose infants to more trauma in case of an accident. This may be due to the mothers' lack of knowledge on this subject.

In this study, 95.2% of the mothers folded the nappy below the umbilicus; 91.1% did not bathe their infant until the umbilical stump fell off. Despite the tradition in Anatolia that infants should be bathed frequently after birth, it is pleasing that mothers do not bathe their infants until the umbilical stump falls off to prevent infections. In the studies, the rate of mothers giving the first bath to the baby after the umbilical cord falls is 32.6% and 63.3%. (Ergin et al.,2020; Yıldız & Boyacı, 2019). In the study, it can be thought that the umbilical cord care practices are mostly correct and safe to prevent infections.

Care should be taken to ensure that the product to be selected for doing children's laundry is fragrance-free, enzyme and bleach-free, dye-free, environment friendly, and softeners should not be used as they may be irritating. In addition, since house dust mites, which are an important trigger of allergic diseases and are found in significant amounts on clothes, for they vanish at high temperatures, laundry should be done or ironed at high temperatures (Örün, 2015). In the study, it was determined that a quarter of the mothers used bleach and detergent while washing their infant's clothes, and 35.9% did not iron their infant clothes. As a result, it could be said that mothers carry out risky practices related to laundry of their infants' clothes.

In our study, it was determined that 63.3% of the mothers used a bath net so that the infant does not slip out, while bathing their infant, 96.8% of them put clothes into baby bathtub to prevent slipping. Although it is stated in the literature how much the temperature of the bath water will be, mothers usually control the temperature of the water with the inner surface of the arm, which is tought to be a practical method. Similarly, in this study, the majority of the mothers measure the temperature of the water with the inner surface of their arms while bathing their infants. The results of Aşut and Gözen's (2020) study are also similar to our study.

Newborns' skin is thinner, more sensitive and more prone to dryness than adult skin. Especially the skin of children under one-year-old is more sensitive to chemicals. (Rengin et al. 2021). For this reason, the products to be used for infants should be produced especially for them. In this study, it was determined that one-fifth of the mothers did not prefer baby products as cleaners. This result showed that mothers needed to be informed about the products they use to clean their infants' clothes.

Swaddling is a significant risk factor for developmental hip dysplasia (Özdemir, 2020). It is a practice that has been used universally in infant care for centuries and is a common traditional practice in Turkish society, as well. In the study, 35.5% of mothers said they swaddle their infants tightly. In similar studies, the rates of mothers swaddling their babies were found to be 33.7% and 61% (Arısoy et al., 2014; Çınar et al., 2015; İnci et al., 2019). This result of the study is similar to the literature. This result suggests that mothers need education about the cultural practice of swaddling.

Sleeping infants with gentle rocking is very common because the rhythmic movement makes infants feel like they are in the uterus (Ko & Geh, 2018). In this study, 10.5% of mothers said that they rock their infant hard on their knees to sleep. The infant rock on the knees necessitates for the body to be stabilized. The mother's rocking the infant by stabilizing the infant's body with her hands causes the head of the infant to rock rampantly. Rocking the head hard might cause trauma to infants. In other studies, the rates of mothers rocking their babies to sleep were 34.6% and 58.7% (Çınar et.al. 2015; Durduran et al., 2019). In the current study, the results may have been lower than in other studies, as the mothers were asked whether they rocked their infants too hard while putting them to sleep. Rocking the infant to sleep is a cultural practice, and it is seen in other studies that it is quite common in our country. This study indicates that the fact that mothers rock their infants to make them sleep is a risky practice for newborn safety.

The powder is often used to prevent diaper rash in infants and relieve irritation from nappy use. When using powder, babies can inhale the talc particles contained in the powder. Talc is a natural mineral found in soil at a similar level to asbestos. Therefore, talc may be contaminated with asbestos (Rengin et al., 2021). When inhaled, talc could lead to serious respiratory infections (Garlich & Nelson, 2011). In the study, it was found that 50.8% of the mothers used powder for diaper rash. A study searching market trends in baby skin care products and implications for clinical practice determined the rate of baby powder use as 58% (Gao & Simpson, 2014). In some studies conducted in Turkey, the rate of use of talc in infants varies between 9.3% and 40.3 % (Arısoy et al., 2014; Ergin et al., 2020; Kaya, 2022; Uysal et al., 2019). The results of our study are high when compared with current studies on powder use by mothers. This result may be due to the fact that the studies were based on mothers with different cultural characteristics.

Newborns have a weak immune system, which makes them susceptible to bacterial and viral infections (Erkut & Yıldız, 2017). To protect them from infection, it is essential to restrict the number of visitors and ensure that anyone who handles the infant washes their hands and changes into clean clothes. However, the current study found that almost half of the mothers did not limit the number of visitors, one-third allowed their infant to be kissed, one-third did not change their clothes before touching their infant, and 11.3% did not wash their hands before breastfeeding. These practices increase the vulnerability of newborns to infection. We believe that mothers engage in such practices due to the traditional custom of "newborn visits" in Turkey.

Limitations of the Study

There are some limitations of the current study. The study was carried out with mothers of newborns in a province of Turkey; therefore, the generalizability of these results is unclear Because the study results are limited to the sample consisting of newborns and their mothers in a single province. It has been thought that data collection interrupts due to the crying of newborns during data collection in the study caused another limitation.

CONCLUSION AND SUGGESTIONS

In order to ensure the safety of the newborn, it is important to be aware of the risks that may occur while providing care needs of the newborn and to ensure that the necessary precautions are taken. The results of this study, which was conducted to evaluate the newborn care practices of mothers in terms of newborn safety, are as follows:

As a result of this study, it has been determined that infants could be exposed to various risks as aspiration, infection, falling, rocking to hard, burns and trauma due to swaddling, unsafe travel, exposure to chemicals and suffocation. It will be important for newborn safety to be provided train to mothers about newborn care as from their pregnancy and to be ensured the continuity of these trainings.

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Conflict of Interest

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

Credit Author Contributions

Design of Study: BK1(%60), BK2(%40)

Data Acquisition: BK2(%70), BK1(%30)

Data Analysis: BK1(% 70), BK2(% 30)

Writing Up: BK1(%60), BK2(% 40)

Submission and Revision: BK1(%50), BK2(% 50)

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