BMC Public Health

RESEARCH

Open Access

Traditional care practices known and/or used by different ethnic groups for newborns during the postpartum period

Vasfiye Bayram Deger[1] and Ahmet Butun[1*]

Abstract

Background Traditional care practices play a significant role in shaping care provided to newborns across different ethnic groups. Understanding traditional care practices is crucial for integrating culturally sensitive approaches into modern healthcare systems. This study aims to fill the gap in the literature regarding the different traditional care practices across ethnic groups. The aim of this study was to determine the traditional beliefs and practices of women from different ethnic groups living in Mardin regarding newborn care.

Methods This study is a descriptive cross-sectional study. The sample consisted of women from four ethnic groups who volunteered to participate in the study with at least one child living in Mardin, Turkey. Snowball and convenience sampling methods were used to recruit participants. The study was completed with 188 Assyrian, 197 Turkish, 181 Arab, and 175 Kurdish women. In total, 741 women participated in this study. Data were collected between 18 December 2023 and 14 June 2024. The data were collected face-to-face using a questionnaire. The data were analysed using SPSS for Windows 22.0.

Results This study identified significant differences in traditional care practices across four ethnic groups (Assyrian, Turkish, Arab, and Kurdish). Traditional care practices regarding umbilical cord care, swaddling the baby, alleviating gas pain, preventing neonatal jaundice, care for canker sores, and alleviating diaper rash were identified. Assyrian participants were more likely to apply salt to the umbilical cord (14.9%), while Arab participants rarely used this practice (0.6%). Traditional practices for relieving gas pain included drinking herbal teas such as anise, fennel, linden, and cumin. Rubbing and rubbing breast milk on the abdomen, patting on the back, and massaging were other practices for alleviating gas pain. Arab participants were more likely to use anise tea to alleviate gas pain (75.1%), while Kurdish participants preferred fennel tea (22.3%). Practices regarding alleviating diaper rash included applying saturated fat, olive oil, and powder. Arab participants were more likely to apply olive oil for diaper rash (45.9%), while Assyrian participants commonly used dry earth ('Höllük'). These results highlight the cultural diversity in newborn care practices and underscore the importance of culturally sensitive healthcare interventions.

Conclusion This study highlighted the significance of traditional care practices in newborn care across four ethnic groups. There are many differences between ethnic groups regarding traditional care practices during the postpartum period. Understanding such differences is crucial for developing culturally sensitive interventions that support maternal well-being and enhance health outcomes for both mothers and infants.

Keywords Traditional practices, Newborn, Infant, Postpartum, Ethnic

*Correspondence:
Ahmet Butun
ahmetbutun@artuklu.edu.tr

Introduction

Particular care procedures should be followed throughout the postpartum period to protect the health of both the mother and newborn. Traditional care practices are defined as medical practices related to the belief, tradition, and value systems of societies [1, 2]. Individuals seek assistance from traditional healers, reliable individuals, and health professionals for their health concerns, depending on their culture, education, and beliefs. Cultural beliefs and practices regarding postpartum care for newborns have been studied in various regions [3]. While some traditional practices may be beneficial, others pose risks to the health of the mother and newborn. Investigating traditional care practices for newborns provides valuable insights into the cultural context [4]. Góes et al., [5] emphasised the importance of family dynamics in effective postnatal care practices. Based on research on newborn care practices in South Asia, communication strategies have been developed to enhance newborn health outcomes in resource-limited regions [6].

Assessing newborn care methods in different cultural contexts is crucial for designing training programmes and improving newborn health [7]. Misperceptions about newborn care contribute to neonatal mortality and illness severity [8]. Exploring traditional newborn care beliefs and practices is important for developing interventions to reduce neonatal morbidity and mortality [9]. Although different newborn care practices between ethnic groups may exist, however, efforts to minimise such differences are important for improving overall newborn health outcomes. Traditional and cultural practices have a significant influence on newborn care across different ethnic groups. Quality of care and neonatal health outcomes can be greatly enhanced during the postpartum period by recognising and integrating traditional and cultural practices into modern newborn care.

Recognising and integrating culturally specific traditional care practices can enhance newborn health outcomes. By understanding these traditional care practices, healthcare staff could provide effective care, ultimately leading to increased trust and cooperation between families and healthcare providers. Furthermore, such studies can highlight the potential benefits of traditional methods and encourage their incorporation into modern medical practices as appropriate. This approach could help reduce healthcare costs and improve patient outcomes, and provide a better understanding of how different cultures approach healthcare. Traditional care practices play a significant role in shaping the care provided to newborns from different ethnic groups. Understanding traditional care practices is crucial for integrating culturally sensitive approaches into modern healthcare systems [10]. This study aimed to fill the gap in the literature regarding the different traditional care practices across ethnic groups. The aim of this study was to determine the traditional beliefs and practices of women from different ethnic groups living in the city of Mardin regarding newborn care.

Methods

Background information about the study area (Mardin)

Mardin is a metropolitan city with a population of 840,000 and is located in southeast Turkey. Mardin is a multicultural city with diverse ethnic and religious communities. Mardin has a much more heterogeneous population in terms of culture and ethnicity than any other city in Turkey. Different ethnic groups, consisting mostly of Kurdish, Arab, Turkish, and Assyrian people, live peacefully in Mardin, where the official language is Turkish. The Kurdish, Arab, and Turkish ethnic groups are usually Muslims, while the Assyrians are usually Christians.

Design

This study is a descriptive cross-sectional study.

Participants, sampling, and setting

The population of this study consists of women from four ethnic groups (Assyrian, Turkish, Arab, and Kurdish) living in the multicultural city of Mardin. The sample of the study consisted of women from four different ethnic groups (Assyrian, Turkish, Arab, and Kurdish) who volunteered to participate, had at least one child, and were living in the multicultural city of Mardin, Turkey. Women who had communication skills and were willing to participate were included in the study. Women who did not meet the inclusion criteria (e.g., those without children or those living outside the city centre of Mardin) were excluded from the study. In addition, women who were unable to provide informed consent or complete the survey due to cognitive or language barriers were excluded. Since the universe of the study is unknown, the sample size was calculated using the Cochran formula. As a result of the calculations with a confidence level of 95% and a margin of error of 5%, the minimum sample size was determined as 384 individuals. The study was completed with 188 Assyrian, 197 Turkish, 181 Arab, and 175 Kurdish women. In total, 741 women participated in this study.

The study used a combination of convenience and snowball sampling techniques to recruit participants. Convenience sampling was used to identify initial participants from four ethnic groups (Assyrian, Turkish, Arab, and Kurdish) living in Mardin. The participants were approached through face-to-face interactions in community settings. After obtaining informed consent, the initial participants were asked to refer other

women from their ethnic group who met the inclusion criteria (e.g., having at least one child and living in Mardin). This snowball sampling approach helped us reach a larger and more diverse group of participants within each ethnic group.

All participants in this study were able to provide informed consent themselves. No participants who could not complete the survey or provide consent were included in the study. The face-to-face data collection method was chosen to ensure that participants fully understood the questions and provide accurate responses. For participants who required assistance (e.g., due to literacy issues or language barriers), the researchers provided additional support to ensure that the questions were clearly understood. While this method required more time and effort, it helped ensure that all participants, including those who needed assistance, could provide clear and concise information.

Data collection

Data were collected between 18 December 2023 and 14 June 2024. The data were collected face-to-face using a questionnaire technique with a data collection form consisting of two parts (supplementary file). The questionnaire was designed based on a comprehensive review of the literature on traditional newborn care practices across different ethnic groups [11–15]. While expert opinions were not formally obtained during the development of the questionnaire, the questions were carefully designed based on a comprehensive review of the literature and pilot testing with a small group of participants. This approach ensured that the survey was relevant and comprehensive in capturing traditional newborn care practices. The questions were designed to capture a wide range of practices, including umbilical cord care, swaddling, alleviating gas pain, preventing neonatal jaundice, and postpartum rituals. The questionnaire was originally developed and administered in Turkish, as it is the official language of Turkey and is widely spoken in Mardin. The time taken to complete the questionnaire was approximately 20 min. Before starting to fill out the questionnaire, the women who volunteered to participate in the study were informed about the aim of the study, and consent forms were signed by the participants. Data collection form included two sections. Section 1 was the individual introduction form consisting of 15 questions on mother's age, income status, age at first pregnancy, and duration of marriage. Section 2 consisted of questions related to traditional practices for newborns (18 questions).

Data analysis

The data were analysed using SPSS (Statistical Package for Social Sciences) for Windows 22.0. In the data analysis, the number, percentage, mean, and standard deviation were used as descriptive statistical methods. The differences between the ratios of categorical variables in the independent groups were analysed by Chi-Square tests. One-Way Analysis of Variance (ANOVA) was applied to normally distributed variables. The results were evaluated using a 95% confidence interval and a significance level of $p < 0.05$.

Ethical considerations

Ethical approval was obtained from the Mardin Artuklu University Non-Interventional Research Ethics Committee (Date: 05.12.2023, REF: 2023/12–35). Informed consent forms were obtained from all participants. The research was conducted in accordance with the principles of the Declaration of Helsinki.

Results

There was a significant difference between the nationality groups in terms of the educational status of the participants ($X2 = 36.036$; $p = 0.002 < 0.05$). The percentage of illiterate people was 15.4% for Assyrians, 11.7% for Turks, 10.5% for Arabs, and 12.6% for Kurds. There was also a significant difference between nationality groups in terms of social security status ($X2 = 89.557$; $p < 0.001 < 0.05$). The proportion of those without social security was 37.8% for Assyrians, 51.3% for Turks, 85.1% for Arabs, and 54.9% for Kurds. The proportion of those with social security was 62.2% for Assyrians, 48.7% for Turks, 14.9% for Arabs, and 45.1% for Kurds. The proportion of Arabs without social security was quite high (Table 1).

Significant differences were found between nationality groups in terms of the number of children ($X2 = 34.278$; $p < 0.001 < 0.05$), in terms of the importance given to traditional methods ($X2 = 39.284$; $p < 0.001 < 0.05$), and in terms of the source from which information about traditional methods was obtained ($X2 = 70 < 626$; $p < 0.0010.05$). In our study, there was no significant difference between nationality groups in terms of employment status ($X2 = 3.922$; $p = 0.270 > 0.05$), income level ($X2 = 8.673$; $p = 0.193 > 0.05$), age at first pregnancy ($X2 = 12.002$; $p = 0.062 > 0.05$), family structure ($X2 = 7.886$; $p = 0.247 > 0.05$), or what was done primarily to address health problems ($X2 = 2857$; $p = 0.414 > 0.05$). These results demonstrate that the socioeconomic and cultural characteristics of different nationality groups differ in various aspects, and these differences are also effective for issues such as health and traditional practices. There was a significant difference between the nationality

Table 1 Descriptive characteristics of the participants

Descriptive characteristics of the participants		Assyrian		Turkish		Arab		Kurdish		*p*
		n (188)	%	n (197)	%	n (181)	%	n (175)	%	
Marital status	Married	142	75.5	172	87.3	158	87.3	158	90.3	$X^2 = 32.407$
	Widow	31	16.5	15	7.6	5	2.8	11	6.3	**$p < 0.001$**
	Divorced	15	8.0	10	5.1	18	9.9	6	3.4	
Education status	Illiterate	29	15.4	23	11.7	19	10.5	22	12.6	$X^2 = 36.036$
	Literate	32	17.0	33	16.8	14	7.7	21	12.0	**$p = 0.002$**
	Primary school	47	25.0	48	24.4	61	33.7	37	21.1	
	High school	62	33.0	51	25.9	46	25.4	50	28.6	
	Bachelor's degree	17	9.0	37	18.8	39	21.5	38	21.7	
	Postgraduate	1	0.5	5	2.5	2	1.1	7	4.0	
Employment Status	Working	48	25.5	61	31.0	43	23.8	40	22.9	$X^2 = 3.922$
	Not working	140	74.5	136	69.0	138	76.2	135	77.1	$p = 0.270$
Income	Income equals expenditure	74	39.4	74	37.6	84	46.4	72	41.1	$X^2 = 8.673$
	Income is more than expenses	31	16.5	44	22.3	25	13.8	39	22.3	$p = 0.193$
	Income is less than expenses	83	44.1	79	40.1	72	39.8	64	36.6	
Social security status	Not available	71	37.8	101	51.3	154	85.1	96	54.9	$X^2 = 89.557$
	Available	117	62.2	96	48.7	27	14.9	79	45.1	**$p < 0.001$**
Duration of marriage	1–5 years	41	21.8	66	33.5	46	25.4	52	29.7	$X^2 = 18.045$
	6–9 years	51	27.1	64	32.5	42	23.2	53	30.3	**$p = 0.006$**
	10 years and more	96	51.1	67	34.0	93	51.4	70	40.0	
Age at first pregnancy	18 years and less	38	20.2	46	23.4	55	30.4	39	22.3	$X^2 = 12.002$
	19–29 years	138	73.4	133	67.5	118	65.2	130	74.3	$p = 0.062$
	30 years or more	12	6.4	18	9.1	8	4.4	6	3.4	
Family type	Extended family	43	22.9	48	24.4	46	25.4	57	32.6	$X^2 = 7.886$
	Nuclear family	140	74.5	138	70.1	125	69.1	111	63.4	$p = 0.247$
	Separated family	5	2.7	11	5.6	10	5.5	7	4.0	
Number of children	1–2	69	36.7	98	49.7	82	45.3	103	58.9	$X^2 = 34.278$
	3–4	56	29.8	68	34.5	63	34.8	33	18.9	**$p < 0.001$**
	5 and more	63	33.5	31	15.7	36	19.9	39	22.3	
Initial response to health problems	Going to the doctor	161	85.6	158	80.2	150	82.9	150	85.7	$X^2 = 2.857$
	Trying to solve it with traditional practices	27	14.4	39	19.8	31	17.1	25	14.3	$p = 0.414$
Importance of traditional methods	Not important	14	7.4	26	13.2	9	5.0	25	14.3	$X^2 = 39.284$
	Somewhat important	103	54.8	141	71.6	134	74.0	109	62.3	**$p < 0.001$**
	Very important	71	37.8	30	15.2	38	21.0	41	23.4	

Table 1 (continued)

Descriptive characteristics of the participants		**Assyrian**		**Turkish**		**Arab**		**Kurdish**		***p***
		n (188)	**%**	**n (197)**	**%**	**n (181)**	**%**	**n (175)**	**%**	
Source of information about traditional methods	Never received it	8	4.3	36	18.3	17	9.4	40	22.9	$X^2 = 70.626$ **$p < 0.001$**
	Internet, TV	11	5.9	35	17.8	36	19.9	28	16.0	
	Grandparents	161	85.6	112	56.9	108	59.7	102	58.3	
	Neighbours	8	4.3	14	7.1	20	11.0	5	2.9	
Status of traditional practices after the baby is born	Yes	150	79.8	174	88.3	157	86.7	168	96.0	X2 = 22,126
	No	38	20.2	23	11.7	24	13.3	7	4.0	**$p = 0,001$**
Total (*n*: 741)		188	100.0	197	100.0	181	100.0	175	100.0	
		Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**F/p**
Age		40.910	11.416	35.560	10.925	33.730	9.733	34.120	11.409	17.172/0.001

Chi-Square Analysis, One-Way Variance Analysis

groups in terms of traditional practices after the baby was born (X2 = 22.126; $p < 0.001 < 0.05$). 79.8% of the Assyrian participants, 88.3% of the Turkish participants, 86.7% of the Arab participants, and 96.0% of the Kurdish participants stated that they were doing traditional practices. Traditional practice was seen at the highest rate among Kurdish participants (Table 1). Further characteristics of participants were provided in Table 1.

Tables 2 and 3 showed care practices for the umbilical cord to fall quickly and practices performed after the umbilical cord was dropped. There was a significant difference between ethnic groups in terms of performing practices after the umbilical cord was dropped (X2 = 8.334; $p = 0.040 < 0.05$). While this practice was most common among Kurdish participants (4.0%), it was almost never seen among Assyrian (1.1%), Turkish (1.0%), and Arab (0.6%) participants.

There was a significant difference between ethnic groups in terms of swaddling the baby (X2 = 20.202; $p < 0.001 < 0.05$). This practice was most common among Arab participants (96.7%), highly prevalent among Turkish (93.4%) and Kurdish (95.4%) participants, and less prevalent among Assyrian participants (85.6%) (Table 4).

Among the practices of the participants to relieve gas pain; anise drinking (the most common among Arab participants with a rate of 75.1%, fennel drinking (the most common among Kurdish participants with 22.3%, linden drinking (similar rates in all groups), and cumin drinking (similar rates in all groups) were treated with herbal tea. Statistical significance was found between ethnic groups in terms of all these applications. In addition; rubbing and rubbing breast milk on the abdomen (most common among Arab participants with 45.9%, patting on the back (more common among Kurdish participants with 4.6%, massaging (more common among Kurdish participants with 5.1%, and statistically significant differences were found between the groups (Table 5).

Ethnic groups differed significantly in terms of the status of the newborn to avoid neonatal jaundice ($X^2 = 11.547$; $p = 0.009 < 0.05$) (Table 6). 100% of Assyrians, 99.5% of Turks, 96.7% of Arabs, and 99.4% of Kurds practice to prevent jaundice in the baby.

Ethnic groups differ significantly in terms of the practice status of a baby with jaundice for the relief of jaundice ($X^2 = 7.909$; $p = 0.048 < 0.05$) (Table 7). All Assyrians (100.0%) and Kurds (100.0%), and most of Turks (98.0%) and Arabs (99.4%) practice for preventing neonatal jaundice.

There was a significant difference between the ethnic groups in terms of the status of practices for babies with canker sores ($X^2 = 13.208$; $p = 0.004 < 0.05$) (Table 8). 100% of the Assyrian participants, 94.4% of the Turkish participants, 97.8% of the Arab participants, and 94.3% of Kurdish participants applied this practice. There were practices such as applying the hair of an elderly woman or a woman with twin babies (more common among Kurdish participants), breast milk, flour, garlic, mixing and spreading (more common among Turkish participants), applying sugar (more common among Arab participants), applying baking soda (more common among Arab participants), and only breast milk (more common among Turkish participants), and significant differences were found between ethnic groups.

It was determined that there was no significant difference between ethnic groups in terms of practices to the baby with diaper rash ($X^2 = 4.932$; $p = 0.177 > 0.05$) (Table 9). 91% of Assyrians, 94.9% of Turks, 95.6% of Arabs, and 91.4% of Kurds have some practices to cure diaper rash. In the groups, practices such as applying saturated fat to diaper rash (more common in Arab participants), applying olive oil (more common in Arab participants), applying powder (more common in Arab participants), and laying dry sifted fine earth under the baby (‘*Höllük*’ in Turkish) (mostly in Assyrians) were determined, and there was a statistically significant difference between the groups for these practices.

For the baby to be beautiful; there were practices such as squeezing the nose (more common in Assyrians), pressing on the cheeks and chin (more common in Arabs), tying the baby’s head (more common in Arabs), drawing eyebrows with kohl (more common in Arabs), applying breast milk to the face (more common in Arabs), tying the forehead tightly (more common in Assyrians), and tying the waist (more common in Assyrians). Significant differences were found among ethnic groups in terms of these practices (Table 10).

There was a significant difference between the ethnic groups in terms of the existence of the traditional method of the ritual of period ends on Day 40 (This is a ritual that waiting at home and not taking the baby out until the first 40 days passed from the birth) ($X^2 = 113.291$; $p < 0.001 < 0.05$) (Table 11). 71.8% of the Assyrian participants, 99.0% of the Turkish participants, 96.1% of the Arab participants, and 97.1% of the Kurdish participants applied the traditional method of ritual of period ends on Day 40. This shows that the practice of this ritual is common, especially among Turkish and Arab participants. There were different practices such as not leaving the house for up to 40 days (most common in Arab participants), bathing with forty drops from a strainer with prayer water (most common in Arab participants), washing the baby’s face with 40 spoons of water (most common in Arab participants), not keeping the newborn in the same environment with another baby (most common in Arab participants), and not keeping the newborn

Table 2 Care practices for rapid fall of the umbilical cord

Care practices for rapid fall of the umbilical cord		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Making a rag and placing it on the belly	Yes	71	37.8	81	41.1	68	37.6	56	32.0	276	37.2	$X^2=3.353$ $p=0.340$
	No	117	62.2	116	58.9	113	62.4	119	68.0	465	62.8	
Tying it tightly with an umbilical cord	Yes	12	6.4	18	9.1	19	10.5	30	17.1	79	10.7	$X^2=11.817$ **$p=0.008$**
	No	176	93.6	179	90.9	162	89.5	145	82.9	662	89.3	
Applying navel powder to the umbilical cord	Yes	8	4.3	16	8.1	7	3.9	11	6.3	42	5.7	$X^2=4.143$ $p=0.246$
	No	180	95.7	181	91.9	174	96.1	164	93.7	699	94.3	
Applying salt to the umbilical cord	Yes	28	14.9	16	8.1	1	0.6	12	6.9	57	7.7	$X^2=26.948$ **$p<0.001$**
	No	160	85.1	181	91.9	180	99.4	163	93.1	684	92.3	
Putting coffee on the umbilical cord	Yes	32	17.0	22	11.2	1	0.6	17	9.7	72	9.7	$X^2=29.235$ **$p<0.001$**
	No	156	83.0	175	88.8	180	99.4	158	90.3	669	90.3	
Applying cream to the umbilical cord	Yes	19	10.1	22	11.2	6	3.3	18	10.3	65	8.8	$X^2=9.068$ **$p=0.028$**
	No	169	89.9	175	88.8	175	96.7	157	89.7	676	91.2	
Applying powder to the umbilical cord	Yes	54	28.7	23	11.7	81	44.8	51	29.1	209	28.2	$X^2=51.154$ **$p<0.001$**
	No	134	71.3	174	88.3	100	55.2	124	70.9	532	71.8	
Applying an iodine tincture to the umbilical cord	Yes	55	29.3	29	14.7	39	21.5	20	11.4	143	19.3	$X^2=22.165$ **$p<0.001$**
	No	133	70.7	168	85.3	142	78.5	155	88.6	598	80.7	
Waiting for it to drop on its own	Yes	0	0.0	1	0.5	0	0.0	7	4.0	8	1.1	$X^2=18.606$ **$p<0.001$**
	No	188	100.0	196	99.5	181	100.0	168	96.0	733	98.9	

Table 3 Care practices performed after dropping the umbilical cord

Care practices performed after dropping the umbilical cord		Assyrian		Turkish		Arab		Kurdish		Total		*P*
		n	%	n	%	n	%	n	%	n	%	
Practices performed after the umbilical cord is dropped	Yes	2	1.1	2	1.0	1	0.6	7	4.0	12	1.6	$X^2=8.334$ **$p=0.040$**
	No	186	98.9	195	99.0	180	99.4	168	96.0	729	98.4	
Burying umbilical cords in mosque yard	Yes	96	51.6	51	26.2	108	60.0	63	37.5	318	43.6	$X^2=51.217$ **$p<0.001$**
	No	90	48.4	144	73.8	72	40.0	105	62.5	411	56.4	
Burying the umbilical cord in the Schoolyard	Yes	19	10.2	36	18.5	98	54.4	36	21.4	189	25.9	$X^2=107.563$ **$p<0.001$**
	No	167	89.8	159	81.5	82	45.6	132	78.6	540	74.1	
Umbilical cords were buried in the hospital yard	Yes	5	2.7	16	8.2	13	7.2	18	10.7	52	7.1	$X^2=9.141$ **$p=0.027$**
	No	181	97.3	179	91.8	167	92.8	150	89.3	677	92.9	
Burying the umbilical cord in the garden	Yes	15	8.1	23	11.8	11	6.1	17	10.1	66	9.1	$X^2=4.125$ $p=0.248$
	No	171	91.9	172	88.2	169	93.9	151	89.9	663	90.9	
Hiding the umbilical cord at home	Yes	59	31.7	85	43.6	101	56.1	64	38.1	309	42.4	$X^2=23.932$ **$p<0.001$**
	No	127	68.3	110	56.4	79	43.9	104	61.9	420	57.6	
Throwing the umbilical cord into the water causes	Yes	27	14.5	11	5.6	2	1.1	11	6.5	51	7.0	$X^2=26.350$ **$p<0.001$**
	No	159	85.5	184	94.4	178	98.9	157	93.5	678	93.0	

in the same environment with newly married couples (most common in Arab participants). Significant differences were found between ethnic groups in terms of these practices.

Discussion

Traditional care practices regarding umbilical cord vary across ethnic groups, with many traditional methods aiming to promote faster cord separation while

Table 4 Baby swaddling and reasons for swaddling the baby

Baby swaddling and reasons for swaddling the baby		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Status of swaddling the baby	Yes	161	85.6	184	93.4	175	96.7	167	95.4	687	92.7	$X^2=20.202$
	No	27	14.4	13	6.6	6	3.3	8	4.6	54	7.3	**$p<0.001$**
To ensure that his legs were smooth	Yes	55	34.2	54	29.3	111	63.4	69	41.3	289	42.1	$X^2=49.149$
	No	106	65.8	130	70.7	64	36.6	98	58.7	398	57.9	**$p<0.001$**
Making it harder than a razor	Yes	28	17.4	40	21.7	93	53.1	24	14.4	185	26.9	$X^2=84.459$
	No	133	82.6	144	78.3	82	46.9	143	85.6	502	73.1	**$p<0.001$**
To ensure that the child stays warm	Yes	94	58.4	39	21.2	105	60.0	40	24.0	278	40.5	$X^2=96.444$
	No	67	41.6	145	78.8	70	40.0	127	76.0	409	59.5	**$p<0.001$**
To allow the child to sleep comfortably	Yes	50	31.1	100	54.3	120	68.6	92	55.1	362	52.7	$X^2=48.525$
	No	111	68.9	84	45.7	55	31.4	75	44.9	325	47.3	**$p<0.001$**
Because the child was scared when his hands moved	Yes	0	0.0	6	3.3	1	0.6	12	7.2	19	2.8	$X^2=20.013$
	No	161	100.0	178	96.7	174	99.4	155	92.8	668	97.2	**$p<0.001$**
Other	Yes	10	6.2	3	1.6	6	3.4	4	2.4	23	3.3	$X^2=6.228$
	No	151	93.8	181	98.4	169	96.6	163	97.6	664	96.7	$p=0.101$

Table 5 Distribution of traditional practices for baby with gas pains

Traditional practices for baby with gas pains		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Drink anise	Yes	102	54.3	65	33.0	136	75.1	64	36.6	367	49.5	$X^2=82.464$
	No	86	45.7	132	67.0	45	24.9	111	63.4	374	50.5	**$p<0.001$**
Drink fennel	Yes	21	11.2	35	17.8	18	9.9	39	22.3	113	15.2	$X^2=14.031$
	No	167	88.8	162	82.2	163	90.1	136	77.7	628	84.8	**$p=0.003$**
Drink linden	Yes	26	13.8	35	17.8	21	11.6	21	12.0	103	13.9	$X^2=3.788$
	No	162	86.2	162	82.2	160	88.4	154	88.0	638	86.1	$p=0.285$
Drink cumin	Yes	17	9.0	35	17.8	29	16.0	29	16.6	110	14.8	$X^2=6.948$
	No	171	91.0	162	82.2	152	84.0	146	83.4	631	85.2	$p=0.074$
Rubbing and rubbing breast milk on the abdomen	Yes	63	33.5	49	24.9	83	45.9	57	32.6	252	34.0	$X^2=18.828$
	No	125	66.5	148	75.1	98	54.1	118	67.4	489	66.0	**$p<0.001$**
Giving medication	Yes	2	1.1	5	2.5	2	1.1	2	1.1	11	1.5	$X^2=2.041$
	No	186	98.9	192	97.5	179	98.9	173	98.9	730	98.5	$p=0.564$
Patting on the back	Yes	1	0.5	1	0.5	0	0.0	8	4.6	10	1.3	$X^2=18.114$
	No	187	99.5	196	99.5	181	100.0	167	95.4	731	98.7	**$p<0.001$**
Massage	Yes	0	0.0	6	3.0	1	0.6	9	5.1	16	2.2	$X^2=14.468$
	No	188	100.0	191	97.0	180	99.4	166	94.9	725	97.8	**$p=0.002$**
I will take the baby to the doctor	Yes	7	3.7	1	0.5	0	0.0	3	1.7	11	1.5	$X^2=10.520$
	No	181	96.3	196	99.5	181	100.0	172	98.3	730	98.5	**$p=0.015$**

minimising infection risks. The umbilical cord care practices in this study focused on those that helped fall quickly and those performed after the umbilical cord was dropped. In many cultures, the umbilical cord has been perceived as a significant component of newborn health and identity [16]. Mukunya et al., [16] stated that the umbilical cord had a symbolic position in newborn care. The umbilical cord and the way it cared for played a part in the present and future survival of the baby, as well as the survival and well-being of the household. Persons other than the mother, such as older female relatives, were influential in the care of the umbilical cord [16]. In addition, the existing literature found that the application of unsterilised substances is associated with

Table 6 Distribution of traditional practices to prevent neonatal jaundice

Traditional practices to prevent neonatal jaundice		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Practices status for the baby to prevent neonatal jaundice	Yes	188	100.0	196	99.5	175	96.7	174	99.4	733	98.9	$X^2=11.547$
	No	0	0.0	1	0.5	6	3.3	1	0.6	8	1.1	**$p=0.009$**
Keeping light on	Yes	59	31.4	75	38.3	126	72.0	64	36.8	324	44.2	$X^2=74.040$
	No	129	68.6	121	61.7	49	28.0	110	63.2	409	55.8	**$p<0.001$**
A gold engagement ring and 7 cloves of garlic are worn	Yes	52	27.7	72	36.7	137	78.3	56	32.2	317	43.2	$X^2=118.211$
	No	136	72.3	124	63.3	38	21.7	118	67.8	416	56.8	**$p<0.001$**
The child's heel is razed. and blood is drained	Yes	8	4.3	32	16.3	6	3.4	26	14.9	72	9.8	$X^2=29.165$
	No	180	95.7	164	83.7	169	96.6	148	85.1	661	90.2	**$p<0.001$**
Covering child's face with a yellow veil	Yes	50	26.6	59	30.1	9	5.1	80	46.0	198	27.0	$X^2=75.160$
	No	138	73.4	137	69.9	166	94.9	94	54.0	535	73.0	**$p<0.001$**
Giving plenty of breast milk	Yes	17	9.0	47	24.0	20	11.4	25	14.4	109	14.9	$X^2=19.564$
	No	171	91.0	149	76.0	155	88.6	149	85.6	624	85.1	**$p<0.001$**
Keep yellow away from the baby	Yes	31	16.5	53	27.0	108	61.7	33	19.0	225	30.7	$X^2=109.469$
	No	157	83.5	143	73.0	67	38.3	141	81.0	508	69.3	**$p<0.001$**
Giving plenty of water	Yes	1	0.5	2	1.0	0	0.0	1	0.6	4	0.5	$X^2=1.777$
	No	187	99.5	194	99.0	175	100.0	173	99.4	729	99.5	**$p=0.620$**
I will take the baby to the doctor	Yes	19	10.1	3	1.5	11	6.1	2	1.1	35	4.7	$X^2=22.312$
	No	169	89.9	194	98.5	170	93.9	173	98.9	706	95.3	**$p<0.001$**

increased risks of infections [17, 18]. Furthermore, the existing literature found that some care practices for cord care included applying butter [19], applying saliva (mate), dirty door powder from old doors, hot knife, charcoal powder, shells, burning wood, banana steam, and fish bones [20]. Studies have demonstrated that chlorhexidine can reduce the incidence of infection compared to traditional practices that involve the use of potentially harmful substances [21].

The results of this study revealed that baby swaddling was common among all ethnic groups: Arabic participants (96.7%), Kurdish participants (95.4%), Turkish participants (93.4%), and Assyrian participants (85.6%). In other studies conducted in Turkey, the percentage of baby swaddling was between 20–90%, including 28.5% [22], 33.7% [23], 38% [24], 48% [25], and 89.7% [26]. Parents choose to swaddle their babies to enhance their sleep quality, keep them warm, and limit baby's movements. In line with the existing literature, swaddled infants tend to sleep longer, which is attributed to the restriction of movement, thereby promoting more restful sleep [27]. Despite its benefits, swaddling is not without risks. Concerns arise about developmental dysplasia of the hip (DDH) in infants swaddled too restrictively, especially if their legs remained extended [28, 29]. The current literature indicates that traditional swaddling practices that restrict hip movement may contribute to an increased incidence of DDH, particularly in cultures where such practices are prevalent [30]. Swaddling continues to be a common infant care practice. Parents could be informed about risks to hip development. Healthcare providers could assist families in swaddling safely during their newborn care practices.

The results confirmed that some traditional practices were used to alleviate gas pain. Such practices included some drinks, rubbing, massaging, medication administration, and seeking care at healthcare services. In line with the results of this study, other studies found that parents use herbal remedies or teas, such as chamomile or fennel, which are believed to have carminative properties that can help expel gas [31]. These natural remedies are often preferred by parents seeking alternatives to pharmacological treatments. However, although some studies support the efficacy of certain herbal remedies in managing gas pain, it is crucial to approach this practice with caution due to potential adverse effects or allergies in infants [32]. Similarly, 30% of the infants were provided traditional drinks, such as gripe water, anise seed drink, and tea [33]. Traditional practices for alleviating gas pain in newborns, such as abdominal massage and the use of herbal remedies, reflect a blend of cultural beliefs and practical approaches. While these methods may offer comfort and relief, parents should remain informed about evidence-based practices and consult healthcare professionals when necessary.

Table 7 Distribution of traditional practices for alleviating neonatal jaundice

Traditional practices for alleviating neonatal jaundice		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
The status of practising for alleviating neonatal jaundice	Yes	188	100.0	193	98.0	180	99.4	175	100.0	736	99.3	$X^2 = 7.909$
	No	0	0.0	4	2.0	1	0.6	0	0.0	5	0.7	**$p = 0.048$**
Cutting two eyebrows using a razor	Yes	15	8.0	16	8.3	19	10.6	14	8.0	64	8.7	$X^2 = 1.053$
	No	173	92.0	177	91.7	161	89.4	161	92.0	672	91.3	$p = 0.789$
The baby is left under the sun	Yes	51	27.1	65	33.7	127	70.6	53	30.3	296	40.2	$X^2 = 92.916$
	No	137	72.9	128	66.3	53	29.4	122	69.7	440	59.8	**$p < 0.001$**
Shining light on the surface of the crib	Yes	25	13.3	53	27.5	109	60.6	29	16.6	216	29.3	$X^2 = 122.011$
	No	163	86.7	140	72.5	71	39.4	146	83.4	520	70.7	**$p < 0.001$**
Removal of yellow-coloured items from the room	Yes	15	8.0	39	20.2	109	60.6	34	19.4	197	26.8	$X^2 = 147.737$
	No	173	92.0	154	79.8	71	39.4	141	80.6	539	73.2	**$p < 0.001$**
Tying a yellow cloth	Yes	40	21.3	43	22.3	19	10.6	48	27.4	150	20.4	$X^2 = 16.587$
	No	148	78.7	150	77.7	161	89.4	127	72.6	586	79.6	**$p < 0.001$**
Frequently breastfeeding	Yes	0	0.0	15	7.8	5	2.8	23	13.1	43	5.8	$X^2 = 32.999$
	No	188	100.0	178	92.2	175	97.2	152	86.9	693	94.2	**$p < 0.001$**
Yellow outfit and yellow light	Yes	25	13.3	1	0.5	0	0.0	1	0.6	27	3.7	$X^2 = 66.354$
	No	163	86.7	192	99.5	180	100.0	174	99.4	709	96.3	**$p < 0.001$**
Covering the face with a yellow cloth	Yes	1	0.5	0	0.0	0	0.0	1	0.6	2	0.3	$X^2 = 2.066$
	No	187	99.5	193	100.0	180	100.0	174	99.4	734	99.7	$p = 0.559$
I will take the baby to the doctor	Yes	28	14.9	45	23.3	28	15.6	27	15.4	128	17.4	$X^2 = 6.423$
	No	160	85.1	148	76.7	152	84.4	148	84.6	608	82.6	$p = 0.093$
Razor under the tongue	Yes	16	8.5	0	0.0	1	0.6	1	0.6	18	2.4	$X^2 = 39.095$
	No	172	91.5	193	100.0	179	99.4	174	99.4	718	97.6	**$p < 0.001$**
Putting 7 garlic cloves on the bedside and not keeping it warm	Yes	0	0.0	1	0.5	0	0.0	2	1.1	3	0.4	$X^2 = 3.895$
	No	188	100.0	192	99.5	180	100.0	173	98.9	733	99.6	$p = 0.273$
Putting amber on the baby's pillow	Yes	0	0.0	1	0.5	0	0.0	1	0.6	2	0.3	$X^2 = 2.015$
	No	188	100.0	192	99.5	180	100.0	174	99.4	734	99.7	$p = 0.569$
Wearing gold and garlic when there is jaundice and keeping it in light	Yes	3	1.6	2	1.0	2	1.1	1	0.6	8	1.1	$X^2 = 0.891$
	No	185	98.4	191	99.0	178	98.9	174	99.4	728	98.9	$p = 0.828$

Table 8 Distribution of traditional practices to baby with canker sores

Traditional practices to baby with canker sores		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Status of practicing to a baby with canker sores	Yes	188	100.0	186	94.4	177	97.8	165	94.3	716	96.6	$X^2=13.208$
	No	0	0.0	11	5.6	4	2.2	10	5.7	25	3.4	**$p=0.004$**
Applying hair from an elderly woman or a woman with twins	Yes	5	2.7	9	4.8	3	1.7	12	7.3	29	4.1	$X^2=8.169$
	No	183	97.3	177	95.2	174	98.3	153	92.7	687	95.9	**$p=0.043$**
Placing soda in the baby's mouth	Yes	5	2.7	0	0.0	2	1.1	1	0.6	8	1.1	$X^2=6.540$
	No	183	97.3	186	100.0	175	98.9	164	99.4	708	98.9	$p=0.088$
Mixing breast milk, flour, garlic, and spreading	Yes	30	16.0	46	24.7	20	11.3	36	21.8	132	18.4	$X^2=12.920$
	No	158	84.0	140	75.3	157	88.7	129	78.2	584	81.6	**$p=0.005$**
Applying sugar	Yes	84	44.7	53	28.5	126	71.2	53	32.1	316	44.1	$X^2=80.668$
	No	104	55.3	133	71.5	51	28.8	112	67.9	400	55.9	**$p<0.001$**
Applying baking soda	Yes	67	35.6	83	44.6	105	59.3	72	43.6	327	45.7	$X^2=21.277$
	No	121	64.4	103	55.4	72	40.7	93	56.4	389	54.3	**$p<0.001$**
Spreading starch	Yes	26	13.8	15	8.1	13	7.3	23	13.9	77	10.8	$X^2=7.143$
	No	162	86.2	171	91.9	164	92.7	142	86.1	639	89.2	$p=0.067$
Cleaning the inside of the mouth with a clean cloth	Yes	3	1.6	7	3.8	2	1.1	2	1.2	14	2.0	$X^2=4.403$
	No	185	98.4	179	96.2	175	98.9	163	98.8	702	98.0	$p=0.221$
Going to the doctor	Yes	11	5.9	9	4.8	5	2.8	10	6.1	35	4.9	$X^2=2.484$
	No	177	94.1	177	95.2	172	97.2	155	93.9	681	95.1	$p=0.478$
Breast milk alone	Yes	6	3.2	10	5.4	1	0.6	1	0.6	18	2.5	$X^2=11.764$
	No	182	96.8	176	94.6	176	99.4	164	99.4	698	97.5	**$p=0.008$**
Using special medication	Yes	0	0.0	0	0.0	0	0.0	1	0.6	1	0.1	$X^2=3.344$
	No	188	100.0	186	100.0	177	100.0	164	99.4	715	99.9	$p=0.342$

Table 9 Distribution of traditional practices to the baby with diaper rash

Traditional practices to the baby with diaper rash		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Status of practicing to the baby with diaper rash	Yes	171	91.0	187	94.9	173	95.6	160	91.4	691	93.3	$X^2=4.932$
	No	17	9.0	10	5.1	8	4.4	15	8.6	50	6.7	$p=0.177$
Applying saturated fat	Yes	21	12.3	34	18.2	94	54.3	40	25.0	189	27.4	$X^2=91.297$
	No	150	87.7	153	81.8	79	45.7	120	75.0	502	72.6	**$p<0.001$**
Applying olive oil	Yes	75	43.9	70	37.4	124	71.7	60	37.5	329	47.6	$X^2=55.457$
	No	96	56.1	117	62.6	49	28.3	100	62.5	362	52.4	**$p<0.001$**
Applying powder	Yes	83	48.5	85	45.5	128	74.0	75	46.9	371	53.7	$X^2=38.584$
	No	88	51.5	102	54.5	45	26.0	85	53.1	320	46.3	**$p<0.001$**
Laying dry sifted fine earth under the baby ("*Höllük"* in Turkish)	Yes	23	13.5	18	9.6	7	4.0	14	8.8	62	9.0	$X^2=9.446$
	No	148	86.5	169	90.4	166	96.0	146	91.2	629	91.0	**$p=0.024$**
Using diaper rash cream	Yes	15	8.8	47	25.1	30	17.3	27	16.9	119	17.2	$X^2=16.791$
	No	156	91.2	140	74.9	143	82.7	133	83.1	572	82.8	**$p<0.001$**
Going to the doctor	Yes	0	0.0	0	0.0	1	0.6	5	3.1	6	0.9	$X^2=12.771$
	No	171	100.0	187	100.0	172	99.4	155	96.9	685	99.1	**$p=0.005$**
I use creams I make myself	Yes	10	5.8	1	0.5	2	1.2	3	1.9	16	2.3	$X^2=13.221$
	No	161	94.2	186	99.5	171	98.8	157	98.1	675	97.7	**$p=0.004$**

Table 10 Distribution of traditional practices for the beauty of the baby

Traditional practices for the beauty of the baby		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Squeezing the nose	Yes	103	54.8	73	37.1	61	33.7	83	47.4	320	43.2	$X^2=21.250$
	No	85	45.2	124	62.9	120	66.3	92	52.6	421	56.8	***p*<0.001**
Pressing on the cheeks and chin	Yes	60	31.9	65	33.0	115	63.5	60	34.3	300	40.5	$X^2=53.023$
	No	128	68.1	132	67.0	66	36.5	115	65.7	441	59.5	***p*<0.001**
Tying the baby's head	Yes	39	20.7	32	16.2	72	39.8	36	20.6	179	24.2	$X^2=33.266$
	No	149	79.3	165	83.8	109	60.2	139	79.4	562	75.8	***p*<0.001**
Tying the ears with a cloth	Yes	25	13.3	31	15.7	22	12.2	28	16.0	106	14.3	$X^2=1.578$
	No	163	86.7	166	84.3	159	87.8	147	84.0	635	85.7	$p=0.665$
Drawing eyebrows with kohl	Yes	24	12.8	29	14.7	76	42.0	23	13.1	152	20.5	$X^2=68.002$
	No	164	87.2	168	85.3	105	58.0	152	86.9	589	79.5	***p*<0.001**
Applying breast milk to the face	Yes	33	17.6	36	18.3	85	47.0	49	28.0	203	27.4	$X^2=52.265$
	No	155	82.4	161	81.7	96	53.0	126	72.0	538	72.6	***p*<0.001**
Tying the forehead tightly	Yes	35	18.6	15	7.6	4	2.2	12	6.9	66	8.9	$X^2=33.164$
	No	153	81.4	182	92.4	177	97.8	163	93.1	675	91.1	***p*<0.001**
Tying the waist	Yes	22	11.7	3	1.5	2	1.1	5	2.9	32	4.3	$X^2=33.959$
	No	166	88.3	194	98.5	179	98.9	170	97.1	709	95.7	***p*<0.001**
Haircut	Yes	0	0.0	0	0.0	0	0.0	1	0.6	1	0.1	$X^2=3.239$
	No	188	100.0	197	100.0	181	100.0	174	99.4	740	99.9	$p=0.356$

Table 11 Traditional method practices status and distribution of ritual of period ends on Day 40 (commonly referred to as 'doing the month')

Traditional methods related to the ritual of period ends on Day 40		Assyrian		Turkish		Arab		Kurdish		Total		*p*
		n	%	n	%	n	%	n	%	n	%	
Traditional methods related to the ritual of period ends on Day 40	Yes	135	71.8	195	99.0	174	96.1	170	97.1	674	91.0	$X^2=113.291$
	No	53	28.2	2	1.0	7	3.9	5	2.9	67	9.0	***p*<0.001**
Not leaving home for up to 40 days	Yes	79	58.5	71	36.4	136	78.2	111	65.3	397	58.9	$X^2=70.288$
	No	56	41.5	124	63.6	38	21.8	59	34.7	277	41.1	***p*<0.001**
Bathing the baby with 40 drops of water from a strainer with holy water	Yes	8	5.9	72	36.9	135	77.6	59	34.7	274	40.7	$X^2=169.474$
	No	127	94.1	123	63.1	39	22.4	111	65.3	400	59.3	***p*<0.001**
Washing a baby's face with 40 spoons of water	Yes	14	10.4	52	26.7	120	69.0	26	15.3	212	31.5	$X^2=164.055$
	No	121	89.6	143	73.3	54	31.0	144	84.7	462	68.5	***p*<0.001**
Not keeping a newborn in the same environment with another baby	Yes	23	17.0	56	28.7	121	69.5	27	15.9	227	33.7	$X^2=143.174$
	No	112	83.0	139	71.3	53	30.5	143	84.1	447	66.3	***p*<0.001**
Not staying in the same environment as newlywed couples	Yes	35	25.9	44	22.6	127	73.0	25	14.7	231	34.3	$X^2=160.714$
	No	100	74.1	151	77.4	47	27.0	145	85.3	443	65.7	***p*<0.001**

This study found that parents applied some traditional practices in order to prevent and alleviate neonatal jaundice. Some of these practices included cutting between two eyebrows with a razor, leaving the baby under the sun, shining a light on the surface of your crib, removing yellow-coloured things from the room, tying a yellow cloth, breastfeeding frequently, yellow outfit, yellow light, covering the face with a yellow cloth, and using a razor under the tongue, putting 7 garlic cloves on the bedside, not keeping it warm, and putting them to sleep in a lighted environment. In contrast to the results of this study, Le, Partridge [34] found that a vast majority of participants avoided exposure to sunlight ($n=864$, 88%), and some parents believed that sunlight is harmful ($n=320$, 33%). In line with the results of this study, previous studies have shown

that early initiation of breastfeeding helps prevent and alleviate neonatal jaundice [35]. Research has indicated that early breastfeeding can significantly reduce the incidence of severe neonatal jaundice. Traditional practices for preventing and alleviating neonatal jaundice are prevalent and culturally significant. Education and awareness among caregivers can enhance the management of neonatal jaundice. Improving caregivers' understanding of jaundice and its implications could lead to better health-seeking behaviours and timely interventions, ultimately reducing neonatal mortality associated with jaundice.

The results of this study showed practices to baby with canker sores included applying the hair of an elderly woman or a woman with twin babies, putting soda in the baby's mouth, mixing breast milk, flour, garlic, and spreading, applying sugar, applying baking soda, spreading starch, cleaning the inside of the mouth with a clean cloth, and breast milk. In line with the results of this study, 33.2% of participant reported any practice which can be used for babies with canker sores [15]. Such traditional practices included applying soda water, sugar, or breast milk on the mouth of the baby (30.3%, 17.1% and 16.0%; respectively) [15].

This study revealed some traditional practices regarding alleviating diaper rash. Such practices included applying saturated fat, olive oil, powder, and dry earth ('*Höllük*' in Turkish. It means laying dry, sifted fine earth under the baby). In line with the results of this study, Mulyani et al., [36] found that the application of olive oil improved the healing of diaper rashes in infants, suggesting that its moisturising properties may help to soothe irritated skin.

This study revealed some traditional practices that aim to make babies beautiful. Such practices included squeezing the nose, pressing on the cheeks and chin, tying the baby's head, drawing eyebrows and eyes with kohl, applying breast milk to the face, tightening the forehead, and tying the waist. Concurring with these results, another study conducted in Turkey found that traditional practices regarding baby to be beautiful included covering the head of the baby with a cloth (58.1%), tying the forehead of the baby tightly (56.8%), and squeezing the nose of the baby (42.7%) [37].

This study identified some traditional practices following childbirth. This is a ritual of period ends on Day 40, and commonly referred to as 'doing the month'. Such practices included that not leaving home for up to 40 days, bathing the baby with forty drops from a strainer with prayerful water, washing baby's face with 40 spoons of water, not keeping the newborn in the same environment with another baby, and not staying in the same environment with newlywed couples. Similarly, the ritual of period ends on Day 40 was more common (97.8%) in another study conducted in Turkey [26].

Strengths and limitations

One of the strengths of this study was to collect data from a large number of participants ($n=741$) from four different ethnic groups. This allowed us to investigate the different care practices across four different ethnic groups. In contrast, this study was limited to Mardin, a city located in eastern Turkey. The results of this study may not be generalisable to the western Turkey and other contexts due to differences in cultural, religious and societal factors.

Implications for practice and recommendations

In contrast to some other studies conducted in Turkey [23], women commonly used traditional care practices for newborn care rather than seeking assistance from healthcare providers. Therefore, this study recommends that parents should be educated regarding the possible harms of traditional care practices and encourage them to seek assistance from healthcare providers. In addition, this study found that harmful traditional care practices were more common among the Arab population. Transcultural healthcare services could help reduce harmful traditional care practices.

Conclusion

This study highlights the significance of traditional care practices in newborn care across four ethnic groups. There are many differences between ethnic groups with respect to traditional care practices in the postpartum period. Understanding such differences is crucial for developing culturally sensitive interventions that support maternal well-being and enhance health outcomes for both mothers and infants. This approach could help identify potential opportunities for integrating traditional care practices into modern healthcare approaches. Future interventions should focus on educating parents about the risks of traditional practices and the advantages of following recommended guidelines to address the gap between cultural practices and current healthcare practices. This study could inform appropriate stakeholders, healthcare staff, researchers, and policymakers.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12889-025-22176-7.

Supplementary Material 1.

Acknowledgements
The authors would like to thank Zahide DARWISH, Busra TEKGUL, Erbil TURAN, Zumrut OZGUN for their contribution during data collection. The authors would also like to thank parents for their participation in this study.

Clinical trial number
Not applicable.

Authors' contributions
V.B.D.: Conceptualization, Resources, Data curation, Software, Visualization, Methodology, Project administration, Formal analysis, Writing – original draft, Writing – review & editing. A.B.: Conceptualization, Resources, Data curation, Software, Visualization, Methodology, Project administration, Formal analysis, Writing – original draft, Writing – review & editing.

Funding
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability
The datasets used and/or analysed during the current study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate
Ethical approval was obtained from the Mardin Artuklu University Non-Interventional Research Ethics Committee (Date: 05.12.2023, REF: 2023/12–35). Informed consent forms were obtained from all participants. The legal guardian or an appropriate representative of participants, who cannot provide consent, provided informed consent on their behalf. The research was carried out in accordance with the principles of the Declaration of Helsinki.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

Author details
[1]Faculty of Health Sciences, Mardin Artuklu University, Kampus Yerleskesi, Artuklu/Mardin 47000, Turkey.

Received: 31 August 2024 Accepted: 3 March 2025
Published online: 02 May 2025

References

1. Ozturk M, et al. Isparta İli'nde halkın geleneksel tedavi tercihi. Turkiye Klinikleri Journal of Medical Ethics-Law and History. 2005;13(3):179–86.
2. Sevindik FN, et al. Elazığ il merkezinde yaşayan evli kadınların istemli düşük yapmak amacıyla uyguladıkları ve bildikleri geleneksel yöntemler. TSK Koruyucu Hekimlik Bülteni. 2007;6(5):321–4.
3. George M, et al. Postpartum and Newborn Care - A Qualitative Study. Indian J Community Health. 2018;30(2):163–5.
4. Koçak G. Traditional Practices on Neonatal and Puerperal Care in Türkiye. Anatolian Journal of Health Research. 2024;5(1):49–56.
5. Góes, F.G.B., et al. Postnatal Care of Newborns in the Family Context: An Integrative Review. Revista Brasileira De Enfermagem, 2020. 73(suppl 4).
6. Syed U, et al. Care-Seeking Practices in South Asia: Using Formative Research to Design Program Interventions to Save Newborn Lives. J Perinatol. 2008;28(S2):S9–13.
7. Kaş G, Karadede H. Traditional Methods Applied to Newborn in Turkey; An Evaluatıon in Terms of Causes and Consequences. Sağlık Akademisi Kastamonu. 2023;8(3):580–9.
8. Abdullah ASM, et al. Perceptions and practices on newborn care and managing complications at rural communities in Bangladesh: a qualitative study. BMC Pediatr. 2021;21(1):168.
9. Khan GN, Memon ZA, Bhutta ZA. A Cross Sectional Study of Newborn Care Practices in Gilgit. Pakistan Journal of Neonatal-Perinatal Medicine. 2013;6(1):69–76.
10. Musa, S., *Traditional and Cultural Newborn Care Practices in the Dakace and Tsibiri Communities of Nigeria: An Ethnographic Study.* Annals of Clinical and Biomedical Research, 2023. 4(1).
11. Alan S, et al. Traditional health practices in mountain, plain and seaside regions of Adana in Turkey. Indian Journal of Traditional Knowledge. 2012;11(4):593–601.
12. Bölükbaş N, et al. 0–12 aylık bebeği olan annelerin çocuk bakımında başvurdukları geleneksel uygulamalar. Uluslararası İnsan Bilimleri Dergisi. 2009;6(1):164–76.
13. Çalışkan Z, Bayat M. Annelerin bebek bakımı uygulamaları ve etkileyen faktörler: Bir Kapadokya örneği. Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi. 2011;14(2):23–30.
14. Özyazıcıoğlu N, Polat S. 12 Aylık Çocuğu Olan Annelerin Çocuk Bakımınaa İlişkin Başvurdukları Geleneksel Uygulamalar. Atatürk Üniviversitesi Hemşirelik Yüksekokulu Dergisi. 2005;8(1):63–71.
15. Değer VB, Deveci E. Traditional methods and related factors about postnatal baby care known and/or applied by married women living in Kiziltepe sub-province of Mardin province. Journal of Human Sciences. 2016;13(3):5865–83.
16. Mukunya D, et al. "The cord is the child": meanings and practices related to umbilical cord care in Central Uganda. BMC Pediatr. 2020;20(1):105.
17. Dessie, A.M., et al. Multilevel Analysis of Individual and Community Level Factors Associated With the Application of Cow Dung and Oil on the Umbilical Cord Stump in Ethiopia. Frontiers in Pediatrics, 2022. 10.
18. Goel AK, et al. Role of Cultural Practices in Neonatal Sepsis. International Journal of Medical Science and Public Health. 2015;4(5):680.
19. Callaghan-Koru JA, et al. Newborn care practices at home and in health facilities in 4 regions of Ethiopia. BMC Pediatr. 2013;13(1):198.
20. Dhingra U, et al. Delivery, immediate newborn and cord care practices in Pemba Tanzania: a qualitative study of community, hospital staff and community level care providers for knowledge, attitudes, belief systems and practices. BMC Pregnancy Childbirth. 2014;14(1):173.
21. López-Medina, M.D., et al., Dry Care Versus Chlorhexidine Cord Care for Prevention of Omphalitis. Systematic Review With Meta-Analysis. Revista Latino-Americana De Enfermagem, 2019. 27.
22. Akçay, G., et al., *Muğla ilinde annelerin bebek bakımında uyguladıkları geleneksel yöntemler.* Ortadogu Medical Journal/Ortadogu Tip Dergisi, 2019. 11(3).
23. Çınar İ, et al. A study of mother's traditional infant care methods for infants less than a year old age. TAF Preventive Med Bull. 2015;14:378–86.
24. Celasin NŞ, Akın HYS, Akın B. Bebek Bakımına İlişkin Geleneksel Uygulamalar: Doğu ve Batı'da Farklı Mıdır? Gevher Nesibe Journal of Medical and Health Sciences. 2022;7(17):39–49.
25. Arabacı Z, et al. Bebeklerde uygulanan geleneksel yöntemler. Çocuk ve Medeniyet. 2016;1(1):61–86.
26. Karabulutlu Ö. Kars ilinde doğum sonu dönemde yenidoğan bakımına yönelik yapılan geleneksel uygulamaların belirlenmesi. Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi. 2014;7(4):295–302.
27. Ohgi S, et al. Randomised Controlled Trial of Swaddling Versus Massage in the Management of Excessive Crying in Infants With Cerebral Injuries. Arch Dis Child. 2004;89(3):212–6.
28. Studer K, et al. Increase in Late Diagnosed Developmental Dysplasia of the Hip in South Australia: Risk Factors, Proposed Solutions. Med J Aust. 2016;204(6):240–240.
29. Alkouz, F.H., et al. Evaluation of the Community's Awareness of Developmental Dysplasia of the Hip: A Cross-Sectional Study in Jordan. Cureus, 2023.
30. Okka B, Durduran Y, Kodaz ND. Traditional Practices of Konya Women During Pregnancy, Birth, the Postpartumperiod, and Newborn Care. Turkish Journal of Medical Sciences. 2016;46:501–11.
31. Alghamdi TS. Maternal Factors Influencing Exclusive Breastfeeding Practices in the First Six Months of Infant Life in the Sudair and Al Zulfi Areas of Saudi Arabia. International Journal of Research in Pharmaceutical Sciences. 2020;11(4):6784–92.
32. Mobasheri A, et al. Evidence-Based Opinions From Multidisciplinary Experts on Use of Naturopathic Herbal Remedies in Pain Management. J Pain Res. 2024;17:599–608.

33. Radwan H. Patterns and determinants of breastfeeding and complementary feeding practices of Emirati Mothers in the United Arab Emirates. BMC Public Health. 2013;13:1–11.
34. Le LT, et al. Care practices and traditional beliefs related to neonatal jaundice in northern Vietnam: a population-based, cross-sectional descriptive study. BMC Pediatr. 2014;14(1):264.
35. Mugadza G, et al. Early Breastfeeding Initiation and Incidence of Severe Neonatal Jaundice in Chipinge District Zimbabwe. International Journal of Contemporary Pediatrics. 2017;4(6):1922.
36. Mulyani M, et al. Giving Olive Oil Affects the Healing of Napper Rashes in Babies. JKM (Jurnal Kebidanan Malahayati). 2023;9(2):226–33.
37. Egri G, Golbasi Z. 15–49 yaş grubu evli kadınların doğum sonu dönemde bebek bakımına yönelik geleneksel uygulamaları [Traditional practices related to baby care in postnatal period of married women being 15–49 years old]. TAF Prev Med Bull. 2007;6(5):313–20.

Publisher's Note