

## Original Article

# Relationship Between Women's Cultural Practices and Spirituality Levels in Prenatal, Childbirth, and Postpartum Periods

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### Abstract

**Background:** A healthy mother and thus a healthy baby is the prerequisite for a healthy family and society. Therefore, it is important to evaluate the interventions applied in the antenatal, innatal, and postnatal periods, where traditional practices are used frequently.

**Objective:** This study aimed to determine the relationship between women's cultural practices and spirituality levels in prenatal, childbirth, and postnatal periods.

**Methodology:** This descriptive study was carried out with 1100 women who resided in east, middle and west region of Turkey and had a live birth within the past year. Data were collected through the "Personal Information Form", the "Cultural Practices Questionnaire" and the "Spirituality Scale". Data analysis was performed using SPSS software and percentage distribution, t-test, and ANOVA.

**Results:** The results show that cultural practices are frequently performed in Turkey, and they are preferred more by women who have high spirituality.

**Conclusion:** Cultural practices are known to be high in number and applied frequently, during pregnancy, childbirth, and postnatal period. In this regard, it is important to plan care, education, and counseling interventions and to implement them starting from the preconception period.

**Keywords:** Woman, Culture, Cultural Practice, Spirituality, Pregnancy, Birth

## Introduction

Culture is defined as "all material and spiritual values created in the process of historical and social development, and the whole of the means used in creating and transmitting them to the next generations, showing the extent of man's dominance over his natural and social environment" (Turkish Language Association, 2020). The historical process includes many definitions of the concept of culture. Despite differences in definitions and varying importance given to it in different societies, the basic elements constituting culture are gathered under language, religion, beliefs, values, norms, customs, and traditions (Sulkowski, 2012). On the other hand, spirituality is another concept related to culture. Spirituality is the effort to understand and accept the meaning of life. In other words, spirituality is the state of surrendering and trusting to a power higher than

oneself when the individual is powerless in the face of problems perceived as insurmountable

Spirituality is a culturally sensitive and comprehensive concept that is related to human physical and mental health and involves emotions, thoughts, attitudes, and behaviors (Sirin, 2018). In this regard, culture and spirituality seem to be important factors affecting the individual's lifestyles and thus their health status specific to a society (Cakirer & Ocaktan, 2020). The health practices of societies performed with a cultural perspective are referred to as traditional health practices. Traditional or cultural practices are widely practiced all over the world, yet they are more common in developing and underdeveloped countries. Besides, these practices are frequently used by women, especially during pregnancy, childbirth, and postpartum periods (Cakirer & Calbayram et al., 2019).

Studies including pregnant women show that culture, spirituality, and religious beliefs are associated with health outcomes (Chehrizi et al., 2021; Durmus et al., 2022). A healthy mother and thus a healthy baby is the prerequisite for a healthy family and society. Therefore, it is important to evaluate the interventions applied in the antenatal, innatal, and postnatal periods, where traditional practices are used frequently. While some of these practices do not affect the health of the mother, fetus, newborn, and infant, some others are known to be sometimes beneficial or harmful (Cakirer & Calbayram et al., 2019). Harmful traditional practices applied to mothers and babies seem to be a factor contributing to the increase in mortality and morbidity, which is a barrier to Sustainable Development Goals (SDGs). Ensuring a healthy and quality life at all ages is one of the sub-goals of the SDGs, which is a universal call for action including the goals to be achieved by the United Nations member states by the end of 2030. In this regard, the purpose is to reduce and eliminate maternal, newborn, and child mortality. These goals indicate the importance of protecting women and children, who constitute more than half of the world population, from the harmful effects of some traditional practices. The most important finding emerging from all this information is that determining individuals' health needs and knowing about their traditional beliefs and practices are of great importance for increasing maternal and infant health. The literature has not been found studies that investigated practices and spirituality levels of societies in tandem. Therefore, the results of the present study are considered important in terms of filling an important gap in the literature. The purpose of this study is to determine the relationship between cultural practices and spirituality levels in prenatal, childbirth, and postnatal periods in women residing in seven geographical regions of Turkey in the prenatal, childbirth, and postnatal periods.

**Methodology Research Design:** This study used a descriptive study design. The population of the study consisted of women who gave live birth within the past year in Turkey. Since the study involved the whole country, the snowball sampling method was used to determine the sample size. Turkey is according to 2022 statistics, there were 1,035,795 live births across the country, which included 605,413 in the western regions, 137,366 in the central region, and 293,016 in the eastern regions. Each region

was considered as a stratum, and the number of samples by the regions was calculated according to the sample calculation with a known target population ( $Ntqp/d2(N-1)+t2pq$  ( $t:1.96$ ,  $d:0.05$ ,  $p:0.5$ ,  $q:0.5$ ,  $N:1.035.795$ ) (Esin, 2017). Accordingly, the sample size was determined to be a minimum of 385 people, 245 in the western regions, 52 in the central region, and 108 in the eastern regions. The study was completed with 1100 women, 500 in the western regions, 200 in the central region, and 400 in the eastern regions.

**Data Collection:** Data were collected by the researchers using the "Personal Information Form", the "Cultural Practices Questionnaire" and the "Spirituality Scale". The data collection tools were prepared as Google Forms, and data were collected between 25 September and 25 November 2023 by sending them via WhatsApp mobile app to women who gave live birth within the past year. Data collection started by reaching one of the individuals to whom the research would be conducted, as stated in the snowball sampling method. At the end of the interview with this participant, other individuals suggested by that participant were reached, and after the interview with those individuals, other individuals recommended by them were reached (Esin, 2017).

**Data Collection Tools-Personal Information Form:** The Personal Information Form consists of a total of ten questions including women's sociodemographic characteristics such as age, education level, income level, and obstetric characteristics such as number of pregnancies and number of abortions.

**Cultural Practices Questionnaire:** The Cultural Practices Questionnaire was developed by the researchers by reviewing the literature (Cakirer & Calbayram et al., 2019). In order to evaluate the suitability of the content of the survey form, opinions were taken from three faculty members from the Department of Obstetrics and Gynecology Nursing and the final form of the survey form was given in line with the suggestions. The form includes a total of 56 questions to determine the status of cultural practices: 13 questions for the pregnancy period, 13 questions for childbirth, 10 questions for the mother, and 20 questions for the baby in the postpartum period.

**The Spirituality Scale:** The scale developed by Sirin (2018) is a five-point Likert scale that includes 27 items. The scale has seven sub-scales including spiritual coping, transcendence, spiritual experience, search for a sense of meaning, spiritual satisfaction, attachment, and

connection with nature. High scores obtained from the spirituality scale indicate a high level of spirituality. Scores to be obtained from the scale range from 90 to 132. The total Cronbach's alpha value of the scale was found 0.90. In this study, Cronbach's alpha value was found 0.88.

**Data analysis:** The data obtained from the study were analyzed using SPSS package software. While descriptive data were given as mean and standard deviation for continuous variables, they were given as numbers and percentages for categorical variables. The normality distribution of the variables was analyzed by Kolmogorov-Smirnov/Shapiro-Wilk tests; homogeneity of variances was examined by the Levene test; and  $p < 0.05$  was accepted as significant by using the t-test and ANOVA test in the analyses.

**Ethical considerations:** The permissions required to conduct the study were received from the Non-Invasive Clinical Research Ethics Committee of Sivas Cumhuriyet University (No. 2023-09/18) and the Provincial Directorate of Health. Additionally, each woman in the study was verbally informed on the context of the study and voluntary participation, and written permissions from the women were taken. The study was conducted in accordance with the ethical standards of the Helsinki declaration.

## Results

The average age of the participants was 28.64 years and 60.3% of them lived in nuclear families. Only 18.2% of participating women had a bachelor's degree, 35.7% were employed, and 64.8% had a medium economic level. While 9.3% of the women had at least one voluntary termination of pregnancy in all pregnancies, 31.5% of the pregnancies resulted in abortion.

In addition, an analysis of the women's last pregnancies showed that 46.1% had planned and wanted their pregnancies, 69.4% had regular pregnancy follow-ups, 53% had a female baby, and 47% had a male baby (Table 1). An analysis of women's cultural practices during pregnancy showed that women often determined the sex of the baby according to the mother's eating sour or sweet (83.5%) and the shape of the abdomen during pregnancy (64.4%); ate quince for the baby to become beautiful (68%); looked at beautiful people (83.5%) and avoided looking at some animals for the baby to become beautiful (53.2%); did not eating anything secretly due to the thought that it would stain the baby (64.2%); did not lift heavy things (92.9%); did not have

sexual intercourse (74.4%); and did not have a haircut to prolong the baby's life (73.7%).

An analysis of the women's cultural practices during labor showed that to facilitate labor, all of them walked (100%), 64.7% read the Qur'an, 63.8% ate dates, 92.5% had their back massaged, 84.5% took hot baths, and 58.5% climbed up and down stairs. Women's practices for the baby in the postnatal period showed that all of them named the baby by reciting the call to prayer in the baby's ear (100%) and did not leave the baby alone (100%), 66.4% did not show the baby to anyone before the baby was 40 days old, 83.4% dressed the baby in yellow clothes to prevent neonatal jaundice, 80.6% pinned yellow gold, 97.3% bathed the baby when the baby was forty days old, 63.3% sacrificed for the birth of the baby, all of them buried the umbilical cord of the baby at home, mosque or school, 70.8% kept the umbilical cord dry so that it could fall off quickly, and 69.6% put the Qur'an on the baby's pillow.

As for the practices performed for the postpartum mother, 100 % reported that the mother and the baby were not left alone at home and a red ribbon or hairband was worn to prevent postpartum psychosis; the mother and the baby slept in the same room for 40 days (98.3%); liquid and sweet foods were consumed to increase breast milk, and no sexual intercourse was performed for 40 days (97.8%) (Table 2).

The mean scores that the participants obtained from the Spirituality Scale used in the study were given in Table 3. Accordingly, the mean score of the Spirituality Scale of the participants was found to be  $99.90 \pm 19.49$  and  $20.44 \pm 4.46$ ,  $7.51 \pm 2.61$ ,  $18.36 \pm 5.61$ ,  $12.67 \pm 4.28$ ,  $12.57 \pm 2.75$ ,  $15.32 \pm 3.70$  and  $13.01 \pm 1.95$  points from the spiritual coping, transcendence, spiritual experience, search for a sense of meaning, spiritual satisfaction, attachment, and connection with nature sub-scales, respectively (Table 3).

The spirituality scale and its sub-scale mean scores were found to be lower in women who resided in the western regions of Turkey, had nuclear families, and did not want their pregnancy, and higher in women who concealed their pregnancy, read the Qur'an during labor, sacrificed for the baby, and put the Qur'an on the baby's and mother's bed than those who did not (Table 4).

<b>Table 1. Distribution of the participants according to some characteristics (n=1100)</b>		
<i>Average age of the participants 28.64 (lowest: 18, highest:42)</i>		
	<b>n</b>	<b>%</b>
<b>Family type</b>		
Nuclear	663	60.3
Extended	437	39.7
<b>Education level</b>		
Illiterate	208	18.9
Primary school	131	11.9
Secondary school	72	6.5
High school	312	28.4
Associate degree	177	16.1
Undergraduate degree	200	18.2
<b>Employment status</b>		
Yes	393	35.7
No	707	64.3
<b>Economic condition</b>		
Low	356	32.4
Medium	713	64.8
High	31	2.8
<b>Terminating pregnancy willingly</b>		
Yes	102	9.3
No	998	90.7
<b>Abortus</b>		
Yes	346	31.5
No	754	68.5
<b>Wanting the pregnancy</b>		
Planned and wanted	507	46.1
Unplanned but wanted	451	41.0
Unplanned and unwanted	142	12.9
<b>Having pregnancy follow-ups regularly</b>		
Yes	763	69.4
No	337	30.6
<b>Baby's sex</b>		
Female	583	53.0
Male	517	47.0

**Table 2. Women's performing cultural practices in prenatal, childbirth, and postpartum periods (n=1100)**

Statements	Central Region				Eastern Regions				Western Regions				Total			
	Yes		No		Yes		No		Yes		No		Yes		No	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>PREGNANCY PERIOD</b>																
Concealing pregnancy (to protect from the evil eye)	200	100.0	0	0.0	100	25.0	300	75.0	205	41.0	295	59.0	505	45.9	595	54.1
Determining the baby's sex according to the mother's eating sweet or sour	200	100.0	0	0.0	400	100.0	0	0.0	319	63.8	181	36.2	919	<b>83.5</b>	181	16.5
Determining the baby's sex according to the shape of the mother's abdomen during pregnancy	62	31.0	138	69.0	400	100.0	0	0.0	246	49.2	254	50.8	708	64.4	392	35.6
Eating quince for the baby to become beautiful	138	69.0	62	31.0	326	81.5	74	18.5	284	56.8	216	43.2	748	68.0	352	32.0
Looking at beautiful people for the baby to become beautiful	200	100.0	0	0.0	400	100.0	0	0.0	318	63.6	182	36.4	918	83.5	182	16.5
Not looking at animals for the baby to become beautiful	177	88.5	23	11.5	313	78.2	87	21.8	96	19.2	404	80.8	585	53.2	515	46.8
Not going to funerals for the baby to become beautiful	85	42.5	115	57.5	304	76.0	96	24.0	61	12.2	439	87.8	450	40.9	650	59.1
Eating nothing secretly	114	57.0	86	43.0	353	88.2	47	11.2	239	47.8	261	52.2	706	64.2	394	35.8
Eating no fish	0	0.0	200	100.0	272	68.0	128	32.0	30	6.0	470	94.0	302	27.5	798	72.5
Eating no rabbit meat	200	100.0	0	0.0	273	68.2	127	31.2	405	81.0	95	19.0	678	61.6	422	38.4
Lifting no heavy things	123	61.3	77	38.5	400	100.0	0	0.0	499	99.8	1	0.2	1022	92.9	78	7.1
Having no sexual intercourse	154	77.0	46	23.0	255	63.8	145	36.2	409	81.8	91	18.2	818	74.4	282	25.6
Having no haircut	200	100.0	0	0.0	400	100.0	0	0.0	211	42.2	289	57.8	811	73.7	289	26.3
<b>LABOR</b>																
Jumping from a height to facilitate labor	0	0.0	200	100.0	400	100.0	0	0.0	30	6.0	470	94.0	430	39.1	670	60.9
Walking to facilitate labor	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Reading the Qur'an to facilitate labor	124	62.0	76	38.0	400	100.0	0	0.0	188	37.6	312	62.4	712	64.7	388	35.3
Eating dates to facilitate labor	62	31.0	138	69.0	400	100.0	0	0.0	240	48.0	260	52.0	702	63.8	398	36.2
Letting the woman's hair down to facilitate labor	115	57.5	85	42.5	257	64.2	143	35.8	0	0.0	500	100.0	372	33.8	728	66.2
Opening locked doors and windows to facilitate labor	33	16.5	167	83.5	246	61.2	154	38.8	79	15.8	421	84.2	358	32.5	852	67.5
Having their back massaged to facilitate labor	185	92.5	15	7.5	340	85.0	60	15.0	493	98.6	7	1.4	1018	92.5	82	7.5
Having a hot bath to facilitate labor	156	78.0	44	22.0	362	90.5	38	9.5	412	82.4	88	17.6	930	84.5	170	15.5

Holding and shaking the woman's hands and feet to facilitate labor	8	4.0	192	96.0	214	53.5	186	46.5	19	3.8	481	96.2	241	21.9	859	78.1
Drinking sweetened fruit juice and eating butter to facilitate labor	123	61.5	77	38.5	214	53.5	186	46.5	77	15.4	423	84.6	414	37.6	686	62.4
When contractions start, climbing up and down the stairs to facilitate labor	33	16.5	167	83.5	325	81.2	75	18.8	286	57.2	214	42.8	644	58.5	456	41.5
Applying olive oil on the genital area to facilitate labor	0	0.0	200	100.0	269	67.2	131	32.8	18	3.6	482	96.4	287	26.1	813	73.9
Trying to vomit to facilitate labor	0	0.0	200	100.0	54	13.5	346	86.5	6	1.2	494	98.8	60	5.5	1040	94.5
<b>POSTPARTUM PERIOD-BABY</b>																
Giving the baby's name by reciting the call to prayer in his/her ear	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Not leaving the baby alone	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Not showing the baby to anyone before 40 days	200	100.0	0	0.0	400	100.0	0	0.0	133	26.6	367	73.4	733	66.4	367	33.6
Not washing the baby before s/he becomes 20/40 days old	200	100.0	0	0.0	400	100.0	0	0.0	30	6.0	470	94.0	430	39.1	670	60.9
Not cutting the baby's nails before s/he becomes 20/40 days old	200	100.0	0	0.0	400	100.0	0	0.0	101	20.2	399	79.8	639	58.1	461	41.9
Dressing the baby with yellow clothes to prevent jaundice	200	100.0	0	0.0	400	100.0	0	0.0	317	63.4	183	36.6	917	83.4	183	16.6
Pinning the baby gold to prevent jaundice	200	100.0	0	0.0	400	100.0	0	0.0	306	61.2	194	38.8	887	80.6	213	19.4
Making dimples by pressing the baby's face with a finger	81	40.5	119	59.5	400	100.0	0	0.0	259	51.8	241	48.2	740	67.3	360	32.7
Applying salt on the baby so that s/he does not smell	119	59.5	81	40.5	313	78.2	87	21.8	91	18.2	409	81.8	523	47.5	577	52.5
Tingling the baby's eyes with kohl so that s/he has beautiful eyes	19	9.5	181	90.5	379	94.8	21	5.2	80	16.0	420	84.0	478	43.5	622	56.5
Wrapping the baby in hot soil to prevent gas pain	42	21.0	158	79.0	252	63.0	148	37.0	31	6.2	469	93.8	325	29.5	775	70.5
Swaddling the baby	147	73.5	53	26.5	350	87.5	50	12.5	22	4.4	478	95.6	519	47.2	581	52.8
Washing and cleansing the baby when s/he becomes 40 days old	181	90.5	19	9.5	400	100.0	0	0.0	489	97.8	11	2.2	1070	97.3	30	2.7
Sacrificing for the baby	81	40.5	119	59.5	361	90.2	39	9.8	254	50.8	246	49.2	696	63.3	404	36.7
Burying the umbilical cord in a house, mosque, or school	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Putting the Qur'an on the baby's pillow	172	86.0	28	14.0	400	100.0	0	0.0	194	38.8	306	61.2	776	69.6	334	30.4
Waiting for three calls to prayer times before breastfeeding the baby	0	0.0	200	100.0	281	70.2	119	29.8	22	4.4	478	95.6	303	27.5	797	72.5
Giving the baby sugared water or date juice when s/he is born	62	31.0	138	69.0	400	100.0	0	0.0	60	12.0	440	88.0	522	47.5	578	52.5

Keeping the umbilical cord dry so that it falls off quickly	81	40.5	119	59.5	314	78.5	86	21.5	384	76.8	116	23.2	779	70.8	321	29.2
Not showing the baby to a menstruating woman until the baby becomes 40 days old	78	39.0	122	61.0	352	88.0	48	12.0	135	27.0	365	73.0	489	44.5	611	54.5
<b>POSTPARTUM PERIOD-MOTHER</b>																
Not leaving the mother and the baby alone at home	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Covering the woman with the man's clothes	63	31.5	137	68.5	400	100.0	0	0.0	38	7.6	462	92.4	501	45.5	599	54.5
Putting a knife under the pillow	63	31.5	137	68.5	343	85.8	57	14.2	38	7.6	462	92.4	444	40.4	656	59.6
Wearing a red ribbon or hairband	200	100.0	0	0.0	400	100.0	0	0.0	500	100.0	0	0.0	1100	100.0	0	0.0
Putting the Qur'an on the woman's bed	157	78.5	43	21.5	400	100.0	0	0.0	38	7.6	462	92.4	595	54.1	505	45.9
Mother and baby sleeping in the same room for 40 days	189	94.5	11	5.5	400	100.0	0	0.0	492	98.4	8	1.6	1081	98.3	19	1.7
Preventing postpartum women and children under 40 days old from meeting each other	31	15.5	169	84.5	344	86.0	56	14.0	90	18.0	410	82.0	465	42.3	635	57.7
Consuming liquid and sweet foods to increase breast milk	184	92.0	16	8.0	400	100.0	0	0.0	492	98.4	8	1.6	1076	97.8	24	2.2
Mother wiping her face with her sweat if she has the mask of pregnancy	159	79.5	41	20.5	400	100.0	0	0.0	59	11.8	441	88.2	618	56.2	482	43.8
Avoiding sexual intercourse for 40 days	184	92.0	16	8.0	400	100.0	0	0.0	492	98.4	8	1.6	1076	97.8	24	2.2

**Table 3. The participants' spirituality scale score distributions (n=1100)**

Scale	Number of Items	Mean± SD	Min-Max.
<b>Spirituality scale</b>	<b>27</b>	<b>99.90±19.49</b>	<b>27-135</b>
Spiritual coping	5	20.44 ±4.46	5-25
Transcendence	2	7.51±2.61	2-10
Spiritual experience	5	18.36±5.61	5-25
Search for a sense of meaning	4	12.67±4.28	4-24
Spiritual satisfaction	4	12.57±2.75	4-24
Attachment	4	15.32±3.70	4-24
Connection with nature	3	13.01±1.95	3-15



**Table 4. Relationship of some sociodemographic and cultural practices with the spirituality Scale (n=1100)**

Variables	Spirituality Scale	Spiritual Coping	Transcendence	Spiritual Experience	Search for a sense of meaning	Spiritual satisfaction	Attachment	Connection with nature
<b>Regions where the participants lived</b>								
Central regions	120.08±7.39	23.05±1.36	9.49±0.87	23.40±1.71	16.78±1.56	15.17±1.45	18.97±1.42	13.21±0.91
Eastern regions	110.11±7.32	23.92±1.42	9.30±0.95	21.83±2.27	3.69±0.18	10.10±1.17	17.51±1.47	14.62±0.51
Western regions	83.67±16.16	20.44±4.46	5.28±2.21	18.36±5.61	4.31±0.19	13.50±2.51	12.10±2.86	11.65±1.98
<sup>a</sup> Test/p	59.58 / < <b>0.001</b>	80.83 / < <b>0.001</b>	37.79 / < <b>0.001</b>	79.19 / < <b>0.001</b>	77.70 / < <b>0.001</b>	60.45 / < <b>0.001</b>	96.26 / < <b>0.001</b>	48.84 / < <b>0.001</b>
<b>Family type</b>								
Nuclear family	93.10±21.75	18.27±4.39	6.38±2.70	16.13±5.98	12.41±4.60	10.50±1.86	13.89±3.99	12.05±1.91
Extended family	110.23±7.83	23.74±1.73	9.22±1.09	21.75±2.44	13.05±3.71	13.93±2.37	17.48±1.64	14.47±0.74
<sup>b</sup> Test/p	15.79 / < <b>0.001</b>	24.83 / < <b>0.001</b>	20.83 / < <b>0.001</b>	18.61 / < <b>0.001</b>	2.40 < <b>0.001</b>	25.47 / < <b>0.001</b>	17.79 / < <b>0.001</b>	25.11 / < <b>0.001</b>
<b>Wanting the pregnancy</b>								
Planned and wanted	110.54±10.98	20.15±4.56	7.18±2.57	18.58±5.85	13.92±4.40	14.03±2.92	15.52±3.96	12.91±1.91
Unplanned but wanted	102.22±22.18	22.83±2.66	8.85±1.56	21.45±3.36	14.14±4.10	11.62±1.80	17.46±2.16	14.47±0.84
Unplanned and unwanted	94.86±18.17	19.37±3.27	7.01±2.68	17.30±5.56	11.14±3.68	10.07±1.63	14.53±3.56	11.67±2.05
<sup>a</sup> Test/p	44.51 / < <b>0.001</b>	24.28 / < <b>0.001</b>	23.80 / < <b>0.001</b>	32.58 / < <b>0.001</b>	67.12 / < <b>0.001</b>	34.17 / < <b>0.001</b>	38.15 / < <b>0.001</b>	51.21 / < <b>0.001</b>
<b>Concealing the pregnancy</b>								
Yes	104.68±19.42	24.49±4.29	7.72±2.60	19.20±5.59	14.17±4.03	14.17±2.73	15.97±3.75	12.93±1.69
No	95.85±18.62	20.40±4.60	7.33±2.60	17.65±5.53	11.39±4.07	11.21±1.92	14.76±3.58	13.08±2.15
<sup>b</sup> Test/p	7.68 / < <b>0.001</b>	0.34 / < <b>0.001</b>	2.50 / <b>0.012</b>	4.59 / < <b>0.001</b>	11.29 < <b>0.001</b>	21.04 / < <b>0.001</b>	5.46 / < <b>0.001</b>	-1.32 / < <b>0.001</b>
<b>Reading the Qur'an during labor</b>								
Yes	103.66±17.59	21.72±3.94	8.14±2.39	19.60±5.15	14.79±4.01	14.26±2.62	16.19±3.34	13.54±1.65
No	93.02±20.89	18.11±4.43	6.35±2.61	16.09±5.71	12.43±4.72	11.65±2.36	13.71±3.80	12.04±2.10
<sup>b</sup> Test/p	8.95 / < <b>0.001</b>	13.86 / < <b>0.001</b>	11.51 / < <b>0.001</b>	10.38 / < <b>0.001</b>	1.33 / < <b>0.001</b>	16.86 / < <b>0.001</b>	11.20 / < <b>0.001</b>	13.01 / < <b>0.001</b>



<b>Sacrificing after the baby is born</b>								
Yes	100.75±18.58	21.15±4.48	7.90±2.48	18.99±5.34	13.59±4.40	14.13±2.70	15.67±3.51	13.22±2.09
No	98.45±20.90	19.22±4.15	6.84±2.69	17.28±5.91	12.13±4.11	11.66±2.35	14.70±3.91	12.65±1.62
<b><sup>b</sup>Test/p</b>	<b>1.89 / &lt; 0.001</b>	<b>7.07/ &lt; 0.001</b>	<b>6.61 / &lt; 0.001</b>	<b>4.92/ &lt; 0.001</b>	<b>5.55/ &lt; 0.001</b>	<b>15.85/ &lt; 0.001</b>	<b>4.14 / &lt; 0.001</b>	<b>4.75 / &lt; 0.001</b>
<b>Putting the Qur'an on the baby's pillow</b>								
Yes	104.73±17.13	21.76±3.76	8.21±2.32	19.81±5.05	13.11±4.01	14.02±2.64	16.33±3.32	13.54± 1.57
No	88.81±20.08	17.41±4.48	5.91±2.53	15.03±5.43	11.66±4.69	11.94±2.56	13.00±3.50	11.79±2.59
<b><sup>b</sup>Test/p</b>	<b>13.40 / &lt; 0.001</b>	<b>16.60/ &lt; 0.001</b>	<b>14.67 / &lt; 0.001</b>	<b>14.10 / &lt; 0.001</b>	<b>5.22 / &lt; 0.001</b>	<b>12.27 / &lt; 0.001</b>	<b>15.03/ &lt; 0.001</b>	<b>14.99 / &lt; 0.001</b>
<b>Putting the Qur'an on the mother's pillow</b>								
Yes	111.96±9.48	23.25±2.34	9.11±1.43	21.83±2.96	14.09±3.65	13.40±2.32	17.63±2.03	14.15±0.94
No	85.70±18.67	17.13±4.08	5.62±2.43	14.27±5.24	10.99±4.36	11.86±2.89	12.58±3.36	11.677±1.99
<b><sup>b</sup>Test/p</b>	<b>28.61 / &lt; 0.001</b>	<b>31.02/ &lt; 0.001</b>	<b>29.56 / &lt; 0.001</b>	<b>29.99 / &lt; 0.001</b>	<b>12.80 / &lt; 0.001</b>	<b>9.61 / &lt; 0.001</b>	<b>30.63 / &lt; 0.001</b>	<b>26.94/ &lt; 0.001</b>
<b>a=One-way analysis of variance – ANOVA; b=Independent sample t-test. *The table includes statistically significant variables.</b>								

## **Discussion**

This study, which investigated the relationship between cultural practices and spirituality levels in prenatal, childbirth, and postnatal periods in Turkey, found that cultural practices were frequently performed in all regions. Cultural practices performed in prenatal, childbirth, and postnatal periods are directly related to maternal and infant health, and they are important factors that have direct effects on family and community health.

Some frequently performed cultural practices during pregnancy such as eating quince for the baby to become beautiful, looking at beautiful people, not looking at some animals, not attending funerals, and not eating anything secretly seem to be harmless practices. Similar to the findings in the present study, other studies conducted in Turkey have found that the baby's sex is determined by the way women eat (Cakirer Calbayram et al., 2019; Cangol et al., 2018). This study found that women avoided sexual intercourse during pregnancy. It is reported that sexual intercourse should be restricted when there is a pregnancy-related risk factor (Topatan & Koc, 2020).

Studies report that regardless of their socioeconomic and cultural context, women may experience difficulties in sexual desire as well as sexual dissatisfaction and dyspareunia during pregnancy. Especially with the progression of pregnancy, there is a decrease in sexual desire, frequency of sexual intercourse, and sexual satisfaction (Dolapoglu et al., 2023; Alizade et al., 2021; Soares et al., 2020).

In line with the above mentioned information, it is important to determine other reasons for women's abstinence from sexual intercourse during pregnancy without attributing it only to cultural factors.

An analysis of cultural practices during birth shows that women generally performed practices to facilitate birth. Useful practices included walking, climbing up and down stairs, having their back massaged, and getting into hot water. Walking and climbing up and down stairs are among the evidence-based practices that affect expanding the birth canal and shortening the duration of labor

(Denizhan Kirkan & Akdolun Balkaya, 2021).

Back massage and hot water implementation during labor are among the non-pharmacological methods that increase women's birth satisfaction by reducing birth pain (Sade & Ozkan, 2023). Other practices to facilitate labor included jumping from a height, trying to vomit, and consuming solid foods. However, among these practices, jumping from a height may harm the mother and fetus.

Similarly, trying to vomit and consuming solid foods are practices that increase the risk of aspiration and cause maternal and infant morbidity and mortality. Evidence-based studies report that during labor women should take only liquid foods that do not contain particles in them (Basgol & Kizilkaya Beji, 2015). In line with this information, it is important to provide women with information and counseling on how to manage labor.

One of the practices performed for the baby in the postnatal period included not showing the baby to other people before 40 days passed. Such practice is important and useful in terms of protecting the baby from infections (Cakirer Calbayram et al., 2019).

A common practice in the postnatal period in Turkish culture includes washing and cleansing the mother and the baby on the 40th day after birth. After this practice, the newborn can join the society (Demirel Bozkurt et al., 2014). In other studies conducted in Turkey, it was determined that shearing was frequently done, similar to our study (Gursoy et al. 2020; Akcay et al., 2019).

Another finding obtained in our study is that babies do not develop jaundice and 80% of women practice practices such as wearing yellow clothes and yellow gold. It has been determined that these practices are applied 60-70% in other studies (Ozdemir, 2020).

It is thought that the reason for the low rates in other studies is regional and education level. In the study, it was determined that almost half of the women applied salt to prevent the baby from smelling, and this was mostly in the eastern regions. It has also been determined that the practice of wrapping the

baby in hot soil to prevent gas pain is frequently applied in the eastern regions, although it is rare throughout the country. Studies have found that 50%-81% of mothers salt their babies (Onen & Masyon, 2017; Akcay et al., 2019). These two applications can negatively affect the sensitive skin of babies and cause deterioration in skin integrity (Gursoy et al., 2020). In the study, it was determined that approximately half of the babies were swaddled and this practice was prevalent in the eastern regions with a rate of 87.5%.

In other studies conducted in different provinces of Turkey, arson was determined to be between 28-53% (Akcay et al., 2019). It is known that swaddling, which is done to ensure that the newborn baby's body is smooth, is an important risk factor for developmental hip dysplasia (Ozdemir, 2020). Some of the traditional practices applied to babies appear to be threatening baby health. For this reason, postpartum mother and baby follow-up should be carried out at frequent intervals, cultural practices should be evaluated, and training and consultancy should be provided on this subject.

Cultural practices for the mother in the postpartum period seem to be based on preventing incubus. In Turkish culture, incubus is fear-based (Demren, 2018; Cakirer Calbayram et al., 2019). Women who develop incubus have symptoms such as having a nightmare, inability to speak, crying, loss of appetite, high fever, hallucination, and delirium (Demren, 2018). For this reason, as the results of this study indicate, the newly delivered mother and the newborn are not allowed to go out for 40 days and are not left alone at home; they wear red ribbons or hairbands; and various measures are taken by placing Qur'an on the pillow or bed of the baby and the mother. However, since the postnatal period is a period open to puerperal infections, women may experience fever, dehydration, infection, maternal sadness, and postpartum depression (Sivri & Karatas, 2015). The evaluation of these symptoms as incubus causes women to be treated with various religious rituals, which delays receiving medical care. This is an important factor contributing to the increase in maternal

mortality in the postpartum period. Almost all the women in this study were found to avoid sexual intercourse for six weeks in the postpartum period. Starting sexual intercourse in the postpartum period depends on the spouses' psychological readiness and the women's physical recovery (Drozdowskyj et al., 2020; Selimoglu & Beydag, 2020). The literature indicates the initiation of postpartum sexual intercourse as the period when uterine involution is completed, tissue regeneration is achieved, lochia ends and the woman returns to her old physiology, which corresponds to six weeks after childbirth (Guler & Erbil, 2022). This cultural practice is in line with the literature, which is a remarkable finding.

Spirituality scale total and sub-scale mean scores were found to be higher in women who concealed their pregnancy to end the pregnancy with a healthy mother and baby and to protect from the evil eye; who read the Qur'an to facilitate delivery; who put the Qur'an on the bed or pillow to protect the mother and baby in the postpartum period, and who sacrificed for the healthy birth of the baby. Individuals with a high level of spirituality are reported to adapt to the difficulties they face better (Abdollahpour & Khosravi, 2018; Bilgic & Citak Bilgin, 2021; Durmus et al., 2022; Piccinini et al., 2021). In these periods of women's lives containing biopsychosocial changes such as pregnancy and childbirth, women use spiritual and religious coping methods for the difficulties they face (Jabbari et al., 2020). Although the literature involves no similar studies, pregnant women with high spirituality were found to have less depression (Chehrazhi et al., 2021; Durmus et al., 2022; Piccinini et al., 2021) and anxiety (Chehrazhi et al., 2021; Piccinini et al., 2021) symptoms and better quality of life (Abdollahpour & Khosravi, 2018; Chehrazhi et al., 2021; Piccinini et al., 2021) and psychological well-being (Bilgic & Citak Bilgin, 2021). The results of the present study indicate that high spirituality is important in terms of causing harmless cultural practices.

**Limitations:** This study has two important limitations. Firstly, since participation in the study was voluntary, the number of women was not equal in all regions where the study was conducted, which is a limitation.

Secondly, since the data were collected online, women who did not have internet access could not be reached. Therefore, the results cannot be generalized to the whole country.

**Conclusion:** Pregnancy, birth, and transition to parenthood are normal physiological processes accompanied by social and emotional conflicts for women and their families. Spiritual and religious coping is one of the methods used for the difficulties encountered in these processes. Religion and spirituality are also reasons for practices specific to the geographical regions. Various cultural practices are frequently performed in all societies. Turkey is a country with a rich diversity in terms of cultural practices. Cultural practices are known to be high in number and applied frequently, especially during pregnancy, childbirth, and postnatal period. Some cultural practices evidently have harmful effects on maternal and infant health. For this reason, health professionals are expected to determine the religious, spiritual and cultural practices specific to their region. Evaluating the cultural and traditional structure of each society could ensure that practices that may constitute a risk factor for health are identified and replaced with positive practices. In this regard, it is important to plan care, education, and counseling interventions and to implement them starting from the preconception period.

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