

TRADITIONAL CHILD CARE PROCEDURES IN AN ANATOLIAN CITY

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ABSTRACT

Purpose

Traditional procedures as old as humanity are current issues in today's modern medicine. Social and cultural characteristics influencing child care behavior and some procedures could be detrimental to the baby. The aim of this study was to determine traditional child care procedures in the central Anatolian city of Kırkkale, a city established after extensive migration.

Method: Randomly chosen mothers were asked to fill in a questionnaire. The sociodemographic characteristics and traditional practices of the mothers were assessed. The results were compared by using the chi-square test. The relationships between the traditional procedures used by the mothers and the age at marriage and educational status were analyzed with logistic regression models.

Results: A total of 974 mothers aged 18-60 years were interviewed. Of these, 201 (43%) were less than 30 years old. The average age at marriage was 17 or younger for 29% of the group and the age at first pregnancy was 17 or younger in 16%. Forty-eight percent of all were using at least one traditional procedure. Swaddling was the most commonly used method (27.2%). These practices were seen at higher rates in women with education of less than eight years' duration, among those who had married at 17 years of age or younger, and among those for whom more than 10 years had passed since their last pregnancy ($p<0.05$).

Conclusion: Traditional procedures for baby care are still in use today. However, procedures that may be harmful to the baby are used less often by younger and better educated mothers. This result indicates that educating mothers is crucial and that the social fabric has changed somewhat over the years.

Key words: Child care, Traditional Procedures, Swaddling

ANADOLU'NUN BİR İLİNDE BEBEK BAKIMINDA BAŞVURULAN GELENKSEL UYGULAMALAR

ÖZ

Amaç: İnsanlık tarihi kadar eski olan geleneksel uygulamalar, günümüzde modernleşen tıp tekniklerine karşı güncelliğini korumaktadır. Toplumsal ve kültürel özellikler, bebek bakımı ile ilgili davranışları da etkilemekte ve bunların bazıları bebek için yararlı iken bazıları bebek için zararlı olabilmektedir. Bu çalışma ile Anadolu'nun orta bölgesinde yer alan ve yoğun göç olarak kurulan Kırkkale ilinde bebek bakımı ile ilgili geleneksel uygulamaların araştırılması amaçlanmıştır.

Metod: Randomizasyon yöntemi ile seçilen evlerde annelere önceden hazırlanmış anket formları doldurtularak, annelerin sosyodemografik özellikleri ve geleneksel uygulamalar açısından pratikleri araştırıldı. Karşılaştırmalarda ki kare testi kullanıldı. Lojistik regresyon modelinde geleneksel uygulamaların evlenme yaşı ve eğitim düzeyi ile etkileşimi araştırıldı.

Bulgular: Yaşları 18-60 arasında değişen toplam 974 anne ile görüşüldü. Annelerin 201 (% 43)'i 30 yaş altında idi. Yüzde yirmidokuzunun evlenme yaşı 17 veya altı iken, ilk gebeliği 17 yaş veya altında olanların oranı % 16 olarak bulundu. Tüm annelerin % 48'inin bebek bakımında en az bir geleneksel uygulamaya başvurduğu ve en sık uygulamanın kundaklama (% 27,2) olduğu görüldü. Eğitim düzeyi 8 yılın altında olanlarda, evlenme yaşı 17 yaş veya altında olanlarda ve son gebeliği üzerinden 10 yıldan uzun zaman geçmiş olanlarda bu uygulamalar daha fazla oranda idi ($p<0,05$).

Sonuç: Günümüzde halen bebek bakımı ile ilgili geleneksel uygulamaların devam ettiği görülmektedir. Ancak, bebeğe zarar verebileceği dal bulunan bu uygulamaların daha genç ve eğitilmiş anneler tarafından daha az yapılıyor olması, anne eğitiminin önemli olduğunu ve yıllar içinde toplumsal yapının az da olsa değiştiği izlenimini vermektedir.

Anahtar kelimeler: Bebek bakımı, Geleneksel uygulama, Kundaklama

INTRODUCTION

Traditional medicine is generally referred to as "home treatment" and is derived from the belief systems and practices of societies. Traditional procedures have stemmed from the relations with nature and the attitude of early humans towards nature. They have been passed down from generation to generation. Many health-related traditional procedures in our society are derived from shamanism, the oldest religion among Turks, to which some practices derived from Islamic values and rules and some experiences have been added ^{1,2}.

Even though the use of these procedures is decreasing as a result of urbanization, the influence of education, and the changing structure of the society, they are still in practice and this is due to the inability to provide modern medical services and experiences in these regions, and the inability to communicate with the community in a way that fits in with their beliefs and the traditional life of the community ^{1,2,4}. The behavior and attitudes of individuals are influenced by religious beliefs and their interaction with their natural surroundings as well as by the people they are in close contact with.

Our aim was to identify the traditional procedures regarding child care in Kırkkale, a province with a family structure similar to that found in many parts of Anatolia, and to evaluate the relationship between these procedures and variables such as maternal age, age at marriage and birth, educational status, and time passed since the last birth.

MATERIALS AND METHODS

This was a cross-sectional study conducted in Kırkkale province, Turkey. Kırkkale is an industrial area in Central Anatolia and most of its population is made up of people who have migrated from other regions of Turkey. The province has adequate healthcare facilities. Most of the population has social security coverage for health and more than 90% of births take place in hospitals.

We determined the sample size of the districts and samples representing the total population within 95% reliability limits as 10% of the population according to the latest census. The population of Kırkkale was 383,508 in the latest census. The minimum sample size was calculated as 865 households.

We obtained the street addresses from the district directory and determined the houses to visit using random tables. Lists of the neighborhoods in the center of the city were obtained from the regional state office. Ten neighborhoods were selected.

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ted randomly, then 10 streets from each neighborhood were selected again randomly, and lastly 10 houses from each street were selected randomly.

We used previous similar studies to develop the questionnaire and made a note of the traditional procedures stated by the mothers during a preliminary study carried out previously. We visited the chosen homes and a researcher completed the previously prepared questionnaires through face-to-face interviews with mothers. We chose houses adjacent to homes where no one lived or to childless homes.

After filling out the forms, we made necessary suggestions to the mothers based on their needs. The questionnaires were evaluated to assess the socio-demographic characteristics of the mothers and the traditional procedures they practiced.

Three assistant professors and one research assistant from Kırıkkale University Pediatrics Department interviewed the mothers. We were able to visit ten homes per day on average. Completing a questionnaire took approximately 30 minutes and the study was completed in 4 months. After the questionnaires had been completed, they were checked and coded and the data were analyzed on a computer.

Participants were included after obtaining approval from the local ethics committee and receiving permission from the relevant institutions and organizations.

SPSS 10.0 was used for the statistical analysis of the obtained data and the comparisons were made using the chi-square test with significance defined as $p < 0.05$.

We conducted multivariate analyses by using conditional logistic regression. We reduced the model by using backward elimination and we eliminated potential risk markers by using likelihood ratio tests.

RESULTS

In total 994 mothers with 0- to 18-year-old children were visited. Twenty mothers refused to be interviewed; therefore the study was completed with 974 mothers.

The age of the mothers was between 18 and 60, with a mean age of 32.2 ± 6.9 years. The age at marriage was 13 to 38 years and 29.3% of the mothers were married at 17 or younger. The age of the first birth varied between 14 and 30 years and 16% had given birth at 17 or younger (Table 1). The number of children was 1 to 8, with a mean of 2.2 ± 1 .

Table 1: Demographic characteristics of the mothers who participated in the study

	Number	%
Educational status		
Illiterate	22	2.2
Less than 8 years of schooling	640	65.7
More than 8 years of schooling	312	32.1
Consanguineous marriage		
Yes	170	17.5
No	804	82.5
Mother's employment status		
Housewife	865	88.8
Working outdoors	109	11.2
Age at marriage		
<17 years	286	29.3
>18 years	688	70.7
Age at first birth		
< 17 years	156	16
>18 years	818	84
Total	974	

The mean age of the last child was 6.1 ± 3.9 years (1.5 months to 20 years). The percentage of mothers who used at least one or more traditional method while taking care of their children was 47.9%, and swaddling was the most commonly used method, with 27.2% (Table 2).

Table 2: Traditional practices used by the mothers during child care.

Traditional practices used	Number of mothers using the practices	%
Swaddling	265	27.2
Tying on a yellow piece of cloth	140	14.4
Tying on an amulet	76	7.8
Applying eye make-up	56	5.7
Waiting for three calls to prayer before the first breastfeeding after birth	27	2.8
Wrapping in salt	7	0.7
Attaching money to the umbilicus	4	0.4
Attaching gold for jaundice	4	0.4
Expressing milk from the breasts of girls right after birth	3	0.3
Wrapping in soil	2	0.2
Putting a drop of mother's milk into the ear of the baby	2	0.2
Asking for help from religious preachers	2	0.2
Spitting in the mouth	1	0.1
*Total	467	47.9

* Some mothers used more than one method.

As shown in Table 2, some of the traditional methods that could potentially cause harm were waiting for three calls of prayer before breastfeeding the baby for the first time after birth, wrapping the baby in salt, expressing milk from the breast of the baby in case of a girl, and wrapping the baby in soil.

The proportion of mothers using traditional methods was significantly higher among those with less than eight years of schooling and who were married at 17 or younger ($p: 0.00$, $p: 0.00$ respectively). When we assigned the mothers into two groups based on the time that had passed since their last birth, mothers who had last given birth 10 years ago or earlier had a significantly higher rate of using traditional methods compared to those who had given birth within the last ten years ($p<0.05$) (Table 3).

Table 3. Relations between using traditional child care practices and age at marriage, mother's educational level and duration since last birth, and living in the same house with elders.

Traditional practices	Used n=467		Not used n=507		p
	n	%	n	%	
Age at marriage					
< 17 years (n=283)	161	56.9	122	43.1	0.000
>18 years (n=689)	305	44.3	384	55.7	
Time since last birth					
0-10 years (n=823)	375	54.4	448	54.4	0.000
11-20 years (n=148)	90	60.8	58	39.2	
Elders living in same home					
Yes (n=133)	81	17.3	52	10.3	0.001
No (n=841)	386	82.7	455	89.7	

Traditional practices	OR	95% Confidence	p
Age at marriage			
< 17 years (n=283)	R	0.521-0.943	0.019
>18 years (n=689)	0.70		
Educational status			
Illiterate (n=22)	R	0.224-1.420	0.224
Less than 8 years of schooling (n=640)	0.563	0.145-0.964	
More than 8 years of schooling (n=312)	0.374		

The effects variables on traditional procedures were analyzed using multivariate logistic regression analyses. When multivariate analyses were performed using those three variables in backward logistic regression analysis, the statistical significance of age at marriage and educational status continued to be statistically significant.

DISCUSSION

There are very few studies on the traditional procedures used during child care and very little is known of the effects of social and cultural variables on child care. This study aimed to determine the traditional methods used in child care in our community, which represents a small portion of Turkey. The study found that almost half of the mothers used or were still using at least one traditional procedure. Swaddling was the most commonly used procedure in our study. Swaddling was reported to have some advantages such as keeping the baby's body straight, decreasing crying, and enabling longer sleep and it is used especially in Turkey, Russia, and China^{5,6}. However, many harmful effects such as hyperthermia could lead to an increase in respiratory system infections, dislocation of the hip, and sudden infant death syndrome⁷⁻⁹. A study from the Netherlands has reported admission of twin babies to hospital due to hypovolemic shock and respiratory distress who were swaddled following the suggestion of their grandmother as they were crying too much, which resulted in the death of one of the children¹⁰. A 1983 study from Turkey reported that 95.6% of mothers in rural areas and 90.8% of mothers in urban areas were swaddling their children¹¹. Two other recent studies from different parts of our country showed similar rates of swaddling (72.9% and 79%)^{3,12}. Swaddling was the most common traditional method used in our study; however, the proportion of mothers using this practice was lower than in other studies (27.2%). This is probably because most of the births took place in the district hospitals and training on baby care at delivery may have prevented the use of this procedure.

Waiting for at least three calls for prayer to breastfeed after birth used to be a common approach but it is used less often today as it may lead to delayed secretion of maternal milk and cause hypoglycemia in the baby^{2,13}. In a study carried out in Pakistan, it was found that 30.9% of mothers delayed first feeding¹⁴. Three studies from Turkey give much higher proportions than what we found in our study (23.4%, 69%, and 78%)^{3, 15, 16}. This difference could be due to the fact that most of the births in our study took place in the central hospital. The hospital was baby-friendly and the importance of breastfeeding was stressed and the mothers were encouraged to breastfeed right after birth.

There is no scientific explanation for using gold or a yellow piece of cloth to prevent and treat newborn jaundice². Two different studies from Turkey have reported that 35% and 41.8% of mothers were using these methods^{3,12}. Although these methods do not harm the baby, delayed admission to hospital for hyperbilirubinemia could have detrimental effects on the baby's health as a result of bilirubin toxicity.

Some newborn babies may have breast enlargement or milk coming from their breasts because of the hormones transferred from mother to child. This is a physiological event and it spontaneously disappears. However, some misguided mothers may express the milk. The older members of the family play an important role in the use of these methods. This behavior is seen more commonly when there are grandmothers in the house and it may lead to breast abscess formation². Only 0.3% of the mothers in our study mentioned that they had used this method.

Although the use of traditional methods varies from region to region depending on the local culture, it may be reflected intensively in social life in some regions⁴. Child care is closely related to the beliefs, traditions, and behavior of the community and traditional methods are therefore used widely in child care. These beliefs and methods can be logical or illogical, and may even have harmful consequences.

The soil put under the baby is called "holluk". Holluk is a special kind of soil that is red and sand-like and is burned for a while and does not become muddy when wet. It is a method that is used when it is difficult to wash diapers and when disposable diapers cannot be used. Holluk lets the urine filter through and therefore keeps the baby dry. It could be useful in very cold climates. However, it can lead to fatal infections due to microorganisms living in the soil especially tetanus if it is not burned before use². Fortunately only 0.2% of the mothers were using this method in our study.

We found lower rates for the use of traditional methods compared with previous studies from various regions in Turkey. Another important result of our study was that mothers with less than 8 years of schooling and younger than 18 years of age when they first gave birth were more likely to use these methods. This indicates that increasing the education level of girls, who are the mothers of the future, will decrease the use of such harmful procedures. It should also be noted that the age at marriage and first pregnancy is important for child care applications. In addition, our study included data to support our notion, which is that mothers who get married and have children at a young age may be more influenced by the elders living at home. Mothers with low educational status may be influenced even more. This has been supported by previous studies^{12,15}. In our study, a significant relationship was determined between the presence of an elder family member and using a traditional procedure.

When we evaluated the relation between the use of traditional methods and the time that had passed since the last childbirth we found that those who had given birth in the last 10 years used traditional methods less often than those who had given birth more than 10 years ago. The fact that mothers in recent years use these methods less commonly indicates that the mothers' educational level is increasing steadily and perhaps the healthcare institutions and media are making it easier for mothers to access correct information about child care.

In conclusion, the traditional beliefs of a community can significantly influence the behavior of its members. With advances in science, protection and treatment methods have

been developed and a scientific approach has taken the place of traditional applications. It is very important for these scientific advances to be communicated to the community. Supporting procedures that can benefit the babies and stopping those that can be harmful are important. National policies for baby care need to be developed and the families should be trained regularly with programs developed according to their social structure. The very first thing to do is to determine the traditional beliefs that may have a negative impact and direct education attempts accordingly. We also feel that training women and encouraging them to marry at a later age will decrease the use of harmful procedures in baby care as mothers play a very important role in training their children within the family structure.

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REFERENCES

1. Türkoğlu O. Tıbbi tedavinin sosyo-kültürel safhaları. Kültür ve Sağlık-Hastalık Sistemi. Milli Eğitim Bakanlığı Yayınları, Milli Eğitim Basımevi, İstanbul;1991:45-66.
2. Beyazova U. Çocuk Sağlığı ve Geleneksel Yaklaşımlar. Çocukluk-Ergenlik Çağı Hekimliği Arşivi 1996;16(8):406-415.
3. Biltekin Ö, Boran Ö D, Denkli M D, Yalçınkaya S. Naldöken Sağlık Ocağı Bölgesinde 0-11 aylık bebeği olan annelerin doğum öncesi dönem ve bebek bakımında geleneksel uygulamaları. STED 2004;13(5):166-167.
4. Abel S, Park J, Tipene-Leach D, Finau S, Lennan M. Infant care practices in New Zealand: a cross-cultural qualitative study. Social Science & Medicine 2001;53:1135-1148.
5. Çağlayan S, Yaprak I, Seçkin E, Kansoy S, Aydinlioğlu H. A different approach to sleep problems of infancy: swaddling above the waist. Turk J Pediatr 1991;33:117-120.
6. Beal S, Porter C. Sudden infant death syndrome related to climate. Acta Paediatr Scand 1991;80:278-287
7. Short MA. A comparison of temperature in VLBW infants swaddled versus unwaddled in a double-walled incubator in skin control mode. Neonatal Netw 1998;17:25-31.
8. Yurdakök K, Yavuz T, Taylor CE. Swaddling and acute respiratory infections. Am J Public Health 1990;80:873-875.
9. Wilson CE. Cree infant care practices and sudden infant death syndrome. Can J Public Health 2000;91:133-136
10. van Gestel JP, L'Hoir MP, ten Berge M, Jansen NJ, Plotz FB. Risks of Ancient Practices in Modern Times. Pediatrics 2002;110:78-80.
11. 1983 Turkish Population and Health Survey, Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara,1987.
12. Özyazıcıoğlu N. Erzurum il merkezinde 12 aylık çocuğu olan annelerin çocuk büyümeye ilişkin yaptıkları geleneksel uygulamalar. Yüksek Lisans Tezi, Erzurum, 2000.
13. Büyükgökbiz B, Çevik N, Oran O. Factors related to the duration of breast-feeding in Ankara, with special reference to sociocultural aspects. Food and Nutrition Bulletin 1993;14: 289-293.
14. Fikree FF, Ali TS, Durocher JM, Rahbar MH. Newborn care practices in low socioeconomic settlements of Karachi, Pakistan. Social Science & Medicine 2005;60:911-921.
15. Özden T. Gebelik, doğum ve lohusalığa ilişkin geleneksel inanç ve uygulamalar. Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Hemşirelik bilim uzmanlığı tezi, Ankara, 1987.
16. Hizel S, Ceyhan G, Tanzer F, Sanli C. Traditional beliefs as forgotten influencing factors on breast-feeding performance in Turkey. Saudi Med J 2006;27:511-8.