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Bedtime Rituals and Routines of Turkish Children and Perceptions of Their Mothers

Türk Çocuklarının Uyku Alışkanlıkları, Düzenleri ve Annelerin Algıları

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Abstract

Objective: The aim of this study is to determine the mother's perceptions of sleeping problems and sleeping behaviors of their children.
Materials and Methods: This descriptive study was conducted with 294 mothers with children from birth to 2 years of age. Questionnaires on socio-demographic information, behaviors to put a child into the sleep and to determine maternal sleeping habits were applied to mothers.
Results: It was determined that 33% of the children enrolled in the study had sleep problems; 70.1% of the mothers considered this problem to be moderate, and 16.5% of the mothers considered the problem to be serious. Methods that the mothers used most frequently to put their children to sleep were rocking on legs (49.7%), feeding/breastfeeding (44.6%) and singing a lullaby/song (28.2%).
Conclusion: The results of this study show that many children have sleeping problems and the mothers use various methods to put their children to sleep. These results can be useful for increasing the awareness of pediatric health professionals when evaluating a child's sleeping behavior and sleeping habits and coping with children's sleeping problems.
Keywords: Mother, child, bedtime, rituals and routines, perception

Öz

Amaç: Bu çalışmanın amacı annelerin çocuklarındaki uyku sorunları hakkındaki algılarını ve uyutma davranışlarını belirlemektir.
Gereç ve Yöntem: Tanımlayıcı tipte olan bu çalışma 0-2 yaş arasında çocuğu olan 294 anneyle yapılmıştır. Annelere sosyo-demografik bilgiler, çocuğu uyutma davranışları ve anne uyku alışkanlıklarını belirleyen anket formları uygulanmıştır.
Bulgular: Çalışmaya alınan çocukların %33'ünün uyku problemi olduğu ve annelerin %70,1'inin bunu orta, %16,5'i ciddi derecede sorun olarak gördüğü saptanmıştır. Annelerin çocuklarını uyutmak için en sık kullandıkları yöntemler ayakta sallamak (%49,7), beslemek/emzirmek (%44,6) ve ninni/şarkı söylemektir (%28,2).
Sonuç: Çalışmanın sonuçları pek çok çocuğun uyku problemi yaşadığını ve annelerin çok çeşitli uyutma yöntemleri kullandıklarını göstermiştir. Bu sonuçlar çocuğun uyku davranışları ve alışkanlıklarını değerlendirmede ve çocuğun uyku problemleriyle baş etmesinde sağlık profesyonellerinin farkındalığını arttırmak için kullanılabilir.
Anahtar Kelimeler: Anne, çocuk, uyku zamanı, alışkanlıklar ve düzen, algı

Introduction

Sometimes children experience moderate to severe sleep problems (1). Approximately 25% of children under the age of five experience a variety of sleep problems. These problems may be acute or chronic and affect both children and their families adversely (2) Mindell et al. (3) have reported that one-fourth of infants and one-third of young children experience sleep problems. The most commonly reported sleep problems are short sleep, frequent awakenings at night, not sleeping for a long time at night, having difficulty at bed time/unwillingness to sleep and waking up at night crying (1,4,5). Parents of children with severe sleep problems worry, are anxious regarding the child's health, experience infant feeding problems and search for intensive interventional behaviors (particularly feeding) during the evening and night (1).

Infant sleep patterns and methods used by mothers to put infants to sleep vary by culture (6). The most frequently used methods include cradling in arms, rocking in arms, leaving to cry, standing near the cot without picking the infant up, reading a story, placing in parent's bed, and feeding until the child sleeps (breastfeeding or giving a bottle) (7-10). The least-used methods include putting the child to bed watching television or having the child sleep in another room (7). In all studies, few children sleep in their own beds. Approaches that are used by parents to re-settle the infant when the child wakes up at night are breastfeeding, rubbing/patting on the back, holding or rocking in arms, leaving to cry until the child

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falls asleep, playing games and watching television or videos. Causes of an infant's frequent night-wakings are related to parenting methods such as number of daytime naps, putting the child to sleep in a cradle or rocking the child to sleep, the infant's night feeding practices (breastfeeding or bottle-feeding), lack of a regular sleep routine and falling a sleep when breastfeeding (7,11).

Although there have been many studies performed on children's sleep and mothers' behaviors, the number of studies with Turkish children on the sleep behaviors of this age group is limited. In this context, data are needed on parenting sleep practices in the context of Turkish culture and it is important to examine intercultural differences when identifying behaviors of mothers in our country and other countries. Therefore, the purpose of this study is to determine perceptions of mothers regarding the sleep problems of their children and mothers' settling practices.

Materials and Methods

Design and Participants

This study is based on a descriptive questionnaire. The study was conducted with mothers of children aged birth to 2 years in the pediatric clinics of a university hospital and state hospital located in a province in Turkey. The sample size was calculated as 288 with a confidence interval of 95%, an error level of 0.05 and incidence of sleep problems at 25%, using the sample selection method with an unknown population. The number of mothers enrolled in the study was 294. Mothers of children coming to the clinic for routine appointments and illnesses such as urinary tract infections were enrolled. Inclusion criteria were as follows: Birth to 2 years of age child with no serious mental or neurological problems and the mother's willingness to participate in the study.

Data Collection

Questionnaires determining socio-demographic data, mothers' perceptions of their children's sleep problems and the mothers' behaviors related to putting the child to sleep were applied to mothers. Data were collected by the researchers in face-to-face interviews with mothers associated with the pediatric clinics of a university hospital and a state hospital. The researchers were experts in the field of child health nursing. A pilot study was conducted with 10 mothers. Data were collected in patient rooms during a quiet hour or in an empty room in the outpatient department.

Measures

Socio-demographic data form: This form comprised five questions regarding parents' ages, educational levels, economic status, number of children and mother's employment status.

Parent settling behaviors and sleep routines form: This form was created by researchers after reviewing the literature. The form comprised 21 questions regarding mothers' perceptions of their children's sleep problems, mothers' behaviors when putting the child to sleep and sleep behaviors.

Ethical considerations: Pamukkale University Non-Initiative Clinic Ethical Committee (Approval number: 60116787-020/12105.01.2015) and permission from the institutions in which the study would be conducted were obtained for the study. The purpose of the study was explained to the mothers, and their approval was obtained. It was emphasized to mothers that participation in the study was voluntary.

Statistical Analysis

Data were analyzed using the SPSS 20 statistical software in an electronic environment. Alpha for significance value was taken as 05. Data were analyzed using mean, percentile values and the chi-square test.

Results

Of mothers who participated in the study, 40.5% were between 30 and 35 years of age, 32.3% were primary school graduates, 66% were unemployed and 37.1% had two children. Of the mothers, 58.2% reported that their socio-economic status was commensurate with their income-expense levels. Of the children, 24.8% were between 5 and 9 months and 20 and 24 months of age. Socio-demographic characteristics are presented in Table 1.

Children's sleep behaviors are presented in Table 2. Of the children enrolled in the study, 33% had sleep problems, and 70.1% of the mothers considered the problem to be moderate. Of the children, 61.6% slept at a particular time every day, 25.5% slept for 1 to 2 hours during the day and 71.1% slept for 6 to 10 hours at night. 55.1% of the children fell asleep within the first 20 minutes during the day and 54.8% within 20 minutes at night. The vast majority of the children (51.7%) slept in their own beds in the same room with their parents, and 22% slept in the same bed with their parents. Parents slept in the same room or in the same bed with the child to meet the child's

Table 1. Socio-demographic characteristics (n=294)

	Number	Percent
Mother's age		
18-23	30	10.2
24-29	97	33.0
30-35	119	40.5
36-41	41	13.9
42 and above	7	2.4
Mother's education level		
Primary school	95	32.3
Secondary school	63	21.4
High school	53	18.0
University	83	28.2
Economic status		
Income less than expenses	85	28.9
Income and expenses equivalent	171	58.2
Income higher than expenses	38	12.9
Mother's employment status		
Employed	100	34.0
Unemployed (housewife)	194	66.0
Child's age		
0 to 4 months	67	22.8
5 to 9 months	73	24.8
10 to 14 months	43	14.6
15 to 19 months	38	12.9
20 to 24 months	73	24.8
Number of children		
1	103	35.0
2	109	37.1
3	60	20.4
4 or more	22	7.5

Table 2. Child's sleep behaviors (n=294)		
Behaviours	**Number**	**Percent**
Does the child have any sleep problems?		
Yes	97	33.0
No	197	67.0
Severity according to the mother if the child has sleep problems (n=97)		
A serious problem	16	16.5
A moderate problem	68	70.1
Not a problem for me	13	13.4
Does the child sleep at a certain time every day?		
Yes	181	61.6
No	113	38.4
Child's sleep duration during the day (hours)		
0-1 hour	46	15.6
1 to 2 hours	75	25.5
2 to 3 hours	73	24.8
3 to 4 hours	34	11.6
4 hours or longer	66	22.4
Child's sleep duration during the night (hours)		
0 to 5 hours	62	21.1
6 to 10 hours	209	71.1
11 to 15 hours	23	7.8
Child's sleep onset latency during the day (minutes)		
0 to 20 minutes	162	55.1
20 to 40 minutes	77	26.2
40 to 60 minutes	30	10.2
Longer than 60 minutes	25	8.5
Child's sleep onset latency during the night (minutes)		
0 to 20 minutes	161	54.8
20 to 40 minutes	67	22.8
40 to 60 minutes	39	13.3
Longer than 60 minutes	27	9.2
Child's sleeping place		
In the child's own room and the child's own bed	61	20.7
In the child's own bed in the same room with parents	152	51.7
Taken to the child's own bed after falling asleep in another room	14	4.8
In the same bed with the mother	67	22.8
Reasons for bed-share or room-share (n=219)		
To meet the child's needs promptly	128	58.4
Sharing increases the bond between the mother and the baby	29	13.2
The child has difficulty sleeping	30	13.7
The child does not feel safe when sleeping alone	24	11.0
The child has no bed or room of his/her own	8	3.7
Mother's behaviors when putting the child to sleep*		
Rocking on legs	146	49.7
Rocking in arms	74	25.2
Driving around/walking a stroller	27	9.2
Breastfeeding/feeding	131	44.6
Rocking in swing/cradle	50	17.0
In his/her bed on his/her own	64	21.8
Lullabying/singing	83	28.2
Reading book/stories	10	3.4
Listening to music	24	8.2
Bathing/massaging	28	9.5
Favorite toy/object	16	5.4
Using a pacifier	48	16.3
Sleeping with mother/father	54	18.4
Playing games	6	2.0
Driving around/walking with a stroller	14	4.8
Swaddling	4	1.4
Giving sedative	1	0.3

Table 2. Continued

Behaviours	Number	Percent
Infant's frequency of night-waking		
Never	17	5.8
1 to 2 times per-night	119	40.5
3 to 4 times per-night	100	34.0
5 or more per-night	58	19.7
Mother's behaviors of re-settling the child when the child wakes at night (n=294)		
No night-waking	17	5.8
Feeding/breastfeeding	135	45.9
Waiting for the child to sleep on his/her own	57	19.4
Rocking/carrying in arms	24	8.2
Rocking on legs or cradling	61	20.7
Reasons for infant's night-waking according to mother*		
No night-waking	17	5.8
Because of hunger	201	68.4
Because of pain	36	12.2
Because of colic	30	10.2
Because of bed-wetting	28	9.5
Because of fear	22	7.5
Because of thirst	13	4.4
I do not know	21	7.1
Consulting a doctor regarding the child's sleep problem		
Yes	28	9.5
No	266	90.5
Doctor's intervention (n=28)		
Tranquillizer drops	5	17.9
No recommendations	18	64.2
Follow-up	5	17.9

*More than one option is marked

needs promptly (58.4%) and because the child had difficulty falling asleep (13.7%). Methods that the mothers used most frequently to put their children to sleep were rocking on legs (49.7%), feeding/breastfeeding (44.6%) and singing a lullaby/ song (28.2%). Of the children, 40.5% woke up 1 to 2 timesper-night, and 34.0% woke 3 to 4 times per-night. Of the mothers, 45.9% used the practice of feeding/breastfeeding and 20.7% used the practice of rocking on legs or cradling to put the child to sleep again when the child awoke at night. Of the mothers, 68.4% thought that the child woke up at night because of hunger, 12.2% thought that the child woke up at night because of pain and 7.1% did not know why the child woke up at night. Of the mothers, 9.5% had consulted a doctor regarding the child's sleep problem, and 64.2% of those who consulted a doctor did not receive any recommendations from the doctor.

Children's sleep behaviors by age are presented in Table 3. Whereas the practices of breastfeeding/feeding, giving a bath/ massage, and using a pacifier decreased with age, sleeping in the child's bed by him/herself, sleeping with a favorite toy/ object and bed-sharing increased with age. Other interventions (e.g., rocking, singing lullaby/song, reading book/ telling a story) did not exhibit any age-related tendencies.

Of the mothers, 35% had a sleep problem, 62.2% stated that the child's sleep routine affected the mother's sleep and 39.8% stated that they felt exhausted when the child did not sleep. The sleep quality of 43.3% of the mothers was moderate; 60.5% slept for 6 to 10 hours a night and 72.4% did not sleep during the day (Table 4). Of the mothers of children with sleep problems, 64.9% had sleep problems, and 54.6% of the mothers with sleep problems reported their sleep quality to be moderate (Table 5).

Discussion

Parental Perception of the Child's Sleep

In this study, we investigated methods used by mothers to put their children to sleep and mothers' sleep practices. It was determined that 33% of the children enrolled in the study had sleep problems; 70.1% of the mothers considered the problem to be moderate, and 16.5% considered the problem to be serious. Other studies have reported sleep problems between 23% and 35% (9,12,13). A study with 0-3 years old children, conducted in our country, reported sleep problems at 18.8% (14). The majority of the mothers who participated in another study reported that they considered their babies to have sleep problems and that the problem was serious (15). In another study, 17.33% of mothers from predominantly Asian countries reported severe sleep problems, and 34.57% reported minor sleep problems. Parents from predominantly Caucasian countries reported 2.15% of sleep problems as severe and 24.15% as minor (16).

Child's Sleep Patterns

The majority of the mothers who participated in this study reported that their children had a specific sleep time every day.

The majority of the children fell asleep within 20 minutes of going to bed both during the day and at night. Daşdemir's (14) study reported that 34% of their children fell a sleep within 16-30 minutes, 31.4% fell asleep within 5-10 minutes and total sleep duration was between 7 and 22 hours. The night sleep of children with sleep problems and their total sleep duration within 24 hours were short, and these children were often placed on a bed to sleep. Children with sleep problems stay awake for longer than 20 minutes at night are breastfed and become grumpy during sleep time (12). Young children in Japan had fewer nocturnal wakings and shorter daytime naps than other Asian countries. Total sleep time and daytime sleep decreased with age (17).

The vast majority of the children in this study slept in their own beds in the same room with their parents, and 22% slept in

Table 3. Percentages of children's sleep behaviors by age

Child's sleep behaviors**	Child's age					χ^2
	0 to 4 months n (%)	5 to 9 months n (%)	10 to 14 months n (%)	15 to 19 months n (%)	20 to 24 months n (%)	
Rocking on legs	33 (22.6)	36 (24.7)	21 (14.4)	20 (13.7)	36 (24.7)	0.157
Rocking in arms	20 (27.0)	20 (27.0)	12 (16.2)	9 (12.2)	13 (17.6)	3.288
Driving around/walking with a stroller	6 (22.2)	5 (18.5)	8 (29.6)	4 (14.8)	4 (14.8)	6.340
Breastfeeding/feeding	46 (35.1)	36 (27.5)	24 (18.3)	11 (8.4)	14 (10.7)	41.408*
Rocking in a swing/cradle	15 (30.0)	16 (32.0)	6 (12.0)	3 (6.0)	10 (20.0)	5.707
In his/her bed on his/her own	6 (9.4)	13 (20.3)	10 (15.6)	15 (23.4)	20 (31.2)	15.540*
Lullabying/singing	18 (21.7)	21 (25.3)	11 (13.3)	16 (19.3)	17 (20.5)	4.712
Reading book/telling stories	1 (10.0)	0 (0)	1 (10.0)	3 (30.0)	5 (50.0)	8.441
Listening to music	7 (29.2)	8 (33.3)	5 (20.8)	2 (8.3)	2 (8.3)	5.207
Bathing/massaging	7 (25.0)	7 (25.0)	0 (0)	8 (28.6)	6 (21.4)	10.599*
Favorite toy/object	0 (0)	3 (18.8)	1 (6.2)	3 (18.8)	9 (56.2)	12.091*
Using a pacifier	15 (31.2)	8 (16.7)	7 (14.6)	12 (25.0)	6 (12.5)	13.325*
Sleeping with mother/father	7 (13.0)	9 (16.7)	7 (13.0)	12 (22.2)	19 (35.2)	11.984*
Playing games	1 (16.7)	2 (33.3)	1 (16.7)	1 (16.7)	1 (16.7)	0.527
Swaddling	1 (25.0)	1 (25.0)	1 (25.0)	0 (0)	1 (25.0)	0.831
Giving sedative	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)	3.038

*p<0.05, **More than one option is marked

Table 4. Mother's sleep practices (n=294)

Practices	Number	Percent
Mother's sleep problems		
Yes	103	35.0
No	191	65.0
Does the child's sleep routine affect the mother's sleep?		
Yes	183	62.2
No	111	37.8
How the mother feels herself when the child does not sleep		
Not a problem	102	34.7
Exhausted	117	39.8
Anxious/stressful	75	25.5
Mother's sleep quality		
Good	108	36.7
Moderate	136	46.3
Poor	50	17.0
Mother's sleep duration during the night (h)		
0 to 5 hours	114	38.8
6 to 10 hours	178	60.5
11 to 15 hours	2	0.7
Mother's sleep duration during the day (h)		
No sleep	213	72.4
0 to 1 ho	40	13.6
1 to 2 hours	25	8.5
2 to 3 hours	16	5.5

the same bed with their parents. Reasons for room-sharing or bed-sharing are to be able to meet the child's needs promptly and because the child has difficulty falling asleep. In large cross-cultural studies, the majority of the mothers reported that they slept together with their babies (7,18). Teng et al. (13) reported bed-sharing at 7.2%. It was reported that the proportion of children sleeping in their own rooms was low in Asian countries/regions (17). According to Daşdemir (14), 32.5% of children participating in the study slept in their own beds, and 18.8% of those children were sleeping with their parents (14). In another study in our country, 26% of mothers were bed-sharing (19). Ball (20) observed that mothers' practice of sleeping with their babies increased gradually. The reasons for this include the baby's being anxious or sick, fear of sudden death, wishing to spend more time with the baby, the mother's being unwell because of childbirth, the facilitative role of bed-sharing in breastfeeding, calming a fussy infant, sleeping better and lack of any other place for the baby to sleep (20,21). Of parents who participated in Kohyama et al. (17) study, >97.5% reported being present at bedtime while their child was falling asleep. Of the mothers who participated in the another study, 60% shared the same bed with their babies up to 1 year of age. Of these mothers, 25% reported that their babies fell asleep in dangerous positions (on a chair or couch) (22). A child's routinely sharing the same room/bed with their parents' decreases with age. Children sharing the same bed with their mothers also share their beds with their spouses/ partners or other children (23). Countermine and Teti (24) reported that the adaptation of parents who share the same room with their babies is also inadequate. This inadequacy also leads to insufficient parental sleep, depression and criticism by the spouse regarding where the baby sleeps at night.

Mothers in this study reported that they settled the baby by rocking the child on the mother's legs. In a study conducted in Turkey, parents stated that they use to bottle, feed and rocking methods for baby slept (25). This practice is not mentioned in the literature. The method of rocking the baby to sleep on the mother's legs may be a practice specific to Turkish culture or may be included among the practices reported by mothers; the term ''rocking'' in the literature has a comprehensive meaning. For this reason, training regarding safety measures may be particularly useful in this situation because of the risk of rocking the baby too fast on the mother's legs or causing the baby to fall when the mother is rocking him/her.

The children in this study has frequent awakinings as expected (15,26). According to this study 40.5% of children 1-2 times, and 34.0 of children 3-4 times wake up overnight. Teng et al. (13) reported that children woke up 1.08 times per night, and the children's total sleep time was 13.24 hours (13). Ali et al. (15) observed that infants woke up at least two times per night and fell back to sleep because of their mothers' physically active settling practices. According to result of this study, mother's behaviors of re-settling the child when the child wakes at night are most in 0-4 months feeding/breastfeeding, in 20-24 months waiting for the child to sleep on his/her own, in 5-9 months rocking/carrying in arms and in 20-24 months rocking on legs or cradling. Approaches that are used by parents to re-settle an infant when he/she wakes up at night are breastfeeding, rubbing/patting on the back, holding or rocking in arms, leaving the child to cry until the child falls asleep, playing games and watching television or videos (7,11).

Of the mothers, 68.4% thought that the child woke at night because of hunger, 12.2% thought that the child woke at night because of pain and 7.1% did not know why the child woke at night. Of the mothers, 9.5% had consulted a doctor regarding the child's sleep problem, and 64.2% of those mothers who consulted a doctor received no recommendations from the doctor. Causes of the infant's waking frequently at night are related to the number of daytime naps, being put to sleep in a cradle or being rocked to sleep, the infant's night breastfeeding practices (breastfeeding or bottle-feeding), lack of a regular sleep routine and practices the parents use to put the infant to sleep, such as breastfeeding (7,9,11). Having regular sleep routines enhances the quality of a child's night sleep (9). Thus, it is important that mothers determine causes of the child's night-wakings and that the mother be supported in creating a regular sleep routine for the child. Mothers sometimes consult a doctor because of their failure to cope with the child's sleep problems. That the majority of the mothers in our study who consulted a doctor were not been given any recommendations by their doctors indicates the need for informative studies to increase awareness of healthcare personnel regarding the subject matter of this study and evaluate their practices.

According to our study, although breastfeeding/feeding, giving a bath/massage, and using a pacifier decreased with age, a child's sleeping in its bed by himself/herself, sleeping with a favorite toy/object and bed-sharing increased with age. This result is consistent with sleep practices adopted by mothers in other studies (7-10,14). According to the study performed by Sadeh et al. (9) total sleep time and practices of putting the child to sleep such as feeding/breastfeeding, rocking and holding in arms decrease with age. The rate at which the child's sleeps in his/her room on his/her own increases with age. Allowing the child to fall asleep crying, waiting a few minutes for the child to calm down and practices such as settling the child by talking to the child in

Table 5. Comparison of the child's sleep problems with the mother's sleep problems (n=294)

	Mother's sleep problems				Mother's sleep quality					
Child's sleep problems	**Yes**		**No**		**Good**		**Moderate**		**Poor**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Yes	63	64.9	34	35.1	13	13.4	53	54.6	31	32.0
No	40	20.3	157	79.7	95	48.2	83	42.1	19	9.6
	p=0.000				p=0.000					

*p<0.001

the child's bed decrease as the child grows. Of the children who participated in this study, 24% began to sleep in their own rooms at 2 months and 70% after the age of one. The authors observed that children's sleep behaviors were affected by the behaviors and settling practices of parents. Infants who require parental involvement and soothing at bedtime cannot develop the behaviors of falling asleep and settling on their own; therefore, parental interventions continue during night waking (27). The results of this study examine behaviors specific to Turkish culture. Mothers in our culture may prefer bed-sharing or room-sharing because it is easy to breastfeed the baby, the mothers are afraid that something could happen to the baby, the mothers can hear when the baby cries, the child does not have his/her own room or there may be heating problems in the house. Some of the mothers in our study preferred bed-sharing because the mothers think that the child feels safer when the child sleeps with mother and sharing increases the bond between mother and child. Although bed-sharing may increase the attachment between the mother and child, the child may have difficulties developing the routine of sleeping on his/her own. Mothers who prefer bed-sharing should receive training regarding safe sleep practices because the practice of bed-sharing increases the incidence of sudden infant death.

Mothers' Sleep Patterns

Of the mothers of children with sleep problems, 64.9% have sleep problems themselves, and 54.6% of these mothers report their sleep quality to be moderate. Sadeh et al. (9) emphasized that parents' behaviors are affected by the child's sleep patterns. In a cross-cultural study, 55% of parents reported poor sleep. Studies have shown that a child's nightwaking was most strongly associated with poor maternal sleep. A child's sleep pattern affects mothers' daytime functioning (28). Stremler et al. (29) determined that the sleep duration of mothers who were given information and an informational booklet regarding sleep and sleep strategies and whose sleep-related problems were resolved through regular phone communications slept 57 minutes longer than the members of the control group. Their babies awoke less often at night, began to sleep longer, and their sleep duration was 46 minutes longer compared with the control group. The authors recommend behavioral-educational intervention to promote maternal and infant sleep designed specifically for the first few months after birth (29).

Children's sleep problems may adversely affect mothers' psychological well-being and functioning. Generating adequate sleep hygiene behaviors of children may improve both child and family well-being (16,30). Therefore, identifying mothers at risk and finding solutions by evaluating the child's sleep problems will positively affect both the mother's and the family's well-being. This study can be useful in terms of increasing the awareness of pediatric health care professionals in evaluating the child's sleep condition and sleep routines, creating training and support programs for mothers and coping with the child's sleep problems. The limitation of this study was its being conducted in two hospitals in a province in Turkey. For this reason, the results cannot be generalized to all mothers in Turkey.

Conclusion

This study's significance lies in its identification of mothers' correct or incorrect practices for settling their children, birth to 2 years of age, to sleep. Our study determined that Turkish mothers adopt a variety of methods to settle their children to sleep. Infants' sleep problems also affect the mother's health and well-being. Future studies should further explore why mothers use these practices and how these practices affect mothers' and children's sleep duration and patterns. Findings from our study emphasize the need to educate parents and provide parents with information regarding children's sleep and sleep problems. These findings also provide pediatric health care personnel with reference data for assessing parents' practices related to infants' and toddlers' sleep behaviors. Studies that investigate cross-cultural differences are also recommended.

Ethics

Ethics Committee Approval: This study was approved by the Pamukkale University Non-Initiative Clinic Ethical Committee (approval number: 60116787-020/12105.01.2015).
Informed Consent: It was emphasized to mothers that participation in the study was voluntary.
Peer-review: Internally peer-reviewed.

Authorship Contributions

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