ORIGINAL ARTICLE

Child sleep habits and maternal perception during the child's first year of life

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Abstract

Introduction: in children's health, sleep plays a significant role, especially in physical and cognitive maturation and in the abilities to deal with stress, regulate emotions and socialize.

Objective: to analyze children's sleep habits during the first year of life and factors associated with nighttime awakenings according to maternal perceptions.

Methods: a longitudinal, prospective study, with follow-up of 144 mothers and their children in the first month, third/fourth month and 12th/13th month of age, in a medium-sized city in the interior of São Paulo, Brazil. Sleep habits were analyzed using measures of central tendency and dispersion and valid association tests Chi-square and Fisher's exact, significance level α =0.05.

Results: the predominant place where children sleep is the same room and bed as the parental caregivers. Most children sleep in the lateral and dorsal decubitus position. Mean sleep time was 12:30h in the first month, 11:30h in the third/fourth month and 11:24h in the 12th month. Mean nighttime sleep time increased and daytime sleep decreased. From the first month to the 12th month of life, there were no changes in nocturnal awakenings. Perception of sleep as a problem increased from 4% to 9% among participants.

Conclusion: three moments in the first year of life show characteristics of children's sleep habits, about where children sleep, sleeping position, average sleep time and nocturnal awakenings, suggesting the importance of information obtained longitudinally. Nocturnal awakenings were associated with the occurrence of weaning and the maternal perception about child sleep as a problem.

Descriptors: Infant, sleep hygiene, child care.

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Authors summary

Why was this study done?

The quality of infant sleep is of paramount importance for a healthy growth and development process. Parental knowledge about typical and atypical aspects of infant sleep is considered a prerequisite for establishing healthy sleep patterns and sleep problems in children. Active parental involvement during the night is pointed out as an important element in the conformation of the habit, although little is known about parental perception of children's sleep problems. In this context, the present study aims to analyze sleep habits during the first year of life and factors associated with nocturnal awakenings according to maternal perceptions.

What did the researchers do and find?

A longitudinal, prospective study was carried out, with the follow-up of 144 mothers and their children in the first month, third/fourth month and 12th/13th month of age, living in a medium-sized city in the interior of São Paulo, Brazil. Sleep habits were analyzed using measures of central tendency and dispersion and Chi-square and Fisher's exact association tests, significance level α =0.05. Results show that most children sleep in the same room or bed as their mothers. Over the months, nighttime sleep increased from six to nearly nine hours, and daytime sleep decreased from six to two and a half hours. Nocturnal awakenings were associated with weaning and considering infant sleep a problem.

What do these findings mean?

Three moments in the first year of life show characteristics of children's sleep habits, about where children sleep, sleeping position, average sleep time and nocturnal awakenings, suggesting the importance of information obtained longitudinally. Nocturnal awakenings, the occurrence of weaning and the maternal consideration that infant sleep is a problem are elements to help monitor sleep deprivation and symptoms that can be accentuated with inappropriate habits.

Sleep is an important parameter for health and well-being, with repercussions on development from early childhood¹. Adequate sleep is important for neurocognitive², socio-emotional^{3,4} development, physical health⁵ and family functioning^{6,7}, emphasizing the importance of preventing sleep difficulties in the first years of life.

In children's health, sleep plays a significant role for emotional potentials, especially in the ability to deal with stress, regulate emotions and socialize⁸, and in cognitive and physical maturation⁹.

Sleep deprivation can compromise the function of specific brain areas involved with processes and skills essential to human development⁸. Although not all brain function responses after short-term sleep loss are necessarily harmful, the chronic effect of sleep restriction on brain functions remains unknown¹⁰. The National Sleep Foundation (NSF) recommends a daily sleep duration of 14-17 hours/day from birth to 3 months of age, 12-15 hours/day from 4 to 11 months, 11-14 hours/day for children aged 1 to 2 years, and 10-13 hours/day for preschoolers aged 3 to 5 years old¹¹.

Guidelines for healthy sleep are recommended in child care in the process of child growth and development, and one of the recommendations is the implementation of a consistent bedtime routine¹, to promote positive development and contribute to good family functioning. In this sense, parental knowledge about typical and atypical aspects of child sleep is considered an important prerequisite for the recognition of healthy sleep patterns and sleep problems in children¹². Studies have already shown that inadequate sleep quality in children results in sleep insufficiency¹³, the establishment of educational programs has a positive influence on the sleep habits of children and adolescents¹⁴, and that parental caregivers with greater knowledge of sleep and higher levels of income and education are more likely to adopt more consistent sleep routines¹⁵. Sleep problems in children can be avoided and managed through parenting practices that promote good "sleep hygiene", specifically regarding presleep schedules and rituals¹⁶. Active parental involvement at night is seen as an important element in shaping the habit, although little is known about parental perception of children's sleep problems^{17,18}.

In view of the above, the present investigation motivated the realization of this investigation to know if there are inappropriate habits of infant sleep in the first year of life, which factors may be linked to nocturnal awakenings and, considering the maternal perception, if children's nocturnal sleep is a referred problem. Thus, the objective is to analyze sleep habits during the first year of life and factors associated with nocturnal awakenings according to maternal perceptions.

METHODS

Study Type

This is a longitudinal study with the monitoring of mothers and children during the first year of life, belonging to the coverage area of units with the Family Health Strategy (ESF), residing in a medium-sized municipality in the interior of São Paulo. Paulo, Brazil.

Place and Period of Study

To carry out the study, the Western District of the aforementioned municipality was chosen, considering that the largest number of FHS units are located in this region, and due to the diversity of socioeconomic and social characteristics that suggest a representative sample of the population. The survey in 12 FHS units on the number of possible participants took place with the help of Nurses and Community Health Agents from each unit, on a continuous basis, respecting the predetermined time limit between October 1st and December 31st, 2018. A The purpose was to select the participants who were in the last trimester of pregnancy, considering the premise that the children completed the 12th / 13th month of life by the period of January 31, 2020.

State Population and Eligibility Criteria

Some inclusion criteria were defined for the participants, in order to carry out a longitudinal follow-up on the child's sleep habits, choosing three moments in the children's first year of age.

The participants were pregnant women in the last trimester of pregnancy, at usual risk, in the age group above 18 years of age, from families registered and being followed up in the FHS units, in the area covered by the Western Health District of the municipality. Exclusion criteria were participants in high-risk pregnancies, spontaneous abortion, being deprived of liberty or being hospitalized, not speaking Portuguese, and not being found after three attempts to make a home visit. As for the discontinuity criteria, mothers who moved from the area covered by the aforementioned health district were established, those who decided to interrupt the research and those who did not participate in all stages because they were not found at home or by telephone contact after three attempts.

In the predetermined period, 529 women were identified in the last trimester of pregnancy. In all, 110 did not meet the inclusion criteria, 173 were removed by the exclusion criteria and 26 refused to participate, resulting in 220 eligible pregnant women. However, 76 were excluded during the research stages due to discontinuity criteria. The final sample consisted of 144 binomials.

Data Collect

Data collection was based on interviews carried out during home visits that took place during 2019 until March 2020. It was carried out by a trained team of interviewers, using a tablet with the online application FULCRUM -Mobile Form Builder & Data Collection App[®], which allowed the creation and storage of questionnaire data via online, to be analyzed and processed by the Software for Statistics and Data Science - Stata/IC[®] version 15.1.

The interviews were carried out in three moments: in the first month of life, between three and four months and between 12 and 13 months, based on the assumption that they can illustrate the care and maternal perception of children's sleep habits, either in the initial occasion of adaptation, frames linked to difficulties, for example, duration of breastfeeding, and at the end of the first year, offering a longitudinal exploration. A sociodemographic questionnaire was applied to characterize the population studied and the Brief Questionnaire on Sleep in Childhood (BISC), in its translated and adapted version¹⁹. The BISC is used to analyze sleep problems according to age group, ranging from zero to three years of age, with elements on children's sleep quality.

Data Analysis

Data were processed by the Software for Statistics and Data Science - Stata/IC[®] version 15.1.

Descriptive analyzes of simple absolute and simple relative frequency were performed, as well as analysis of measures of central tendency and dispersion. The Chisquare and Fisher's Exact tests of association were used, adopting a significance level of α =0.05.

Ethical and Legal Aspects of Research

The present study was approved by the Research Ethics Committee, through the Protocol of Presentation Certificate for Ethical Assessment (CAAE) n^o 70838817.2.0000.5393 and use of the instrument to capture the research subject through the Free and Informed Consent Term.

RESULTS

Regarding the profile of the interviewees, 45.8% were between 18 and 25 years old, 60.4% were married or in a stable union, 50% had completed high school and 62.5% had a monthly income of less than three minimum wages. Family income was based on the minimum wage in force in 2020, in which the stipulated amount was R\$1,045.00²⁰.

Regarding the profile of the babies in the study, 52.1% were male, 61.1% had a normal birth and 90.3% had a birth weight between 2500g and 3999g.

Regarding data on sleep habits, the position in which the babies usually slept in the first month of life was: 12 (8.3%) in the prone position, 78 (54.2%) on the side and 54 (37.5%) %) in the supine position. Between the third and fourth month of life, 23 babies (16%) slept in the prone position, 45 (31.2%) in the lateral position and 76 (52.8%) in the supine position. In the 12th month of life, 34 (23.6%) slept in the prone position, 69 (47.9%) in the lateral position, 39 (27.1%) in the supine position, and two (1.4%) children did not have this information answered.

Regarding the place where the children slept, in the first month 75 (52.1%) and between the third and fourth month 78 (54.2%) children slept in a crib in the room of the parental caregivers. At 12 months, 84 (58.3%) mothers reported that their children slept in the same bed with them.

Regarding the average nocturnal sleep time (7:00 pm to 7:00 am) in the first month of life, the babies in the study slept around 6:36 am, between the third and fourth months it was 8 hours and in the 12th month it was 8 hours and 48 minutes. As for daytime sleep (07:00 to 19:00), the average time in the first month of life was 5 hours and 54 minutes, between the third and fourth months, 3 hours and 30 minutes, and in the 12th month, 2 hours and 36 minutes. Table 1 presents the distribution of children's nocturnal awakenings.

Table 1: Distribution of nocturnal awakenings in children in the first month, between three and four months and in the 12th month of life, according to maternal reports. Ribeirão Preto, 2022

	Night Awakenings					
	1st month		3rd-4th month		12th month	
	F	%	F	%	F	%
No Awakening	07	4.9	38	26.4	49	34.0
One to two Awakenings	81	56.3	85	59.0	59	41.0
Three more Awakenings	56	38.2	21	14.6	35	24.3
Not Declared	1	0.7	0	0.0	1	0.7
Total	144	100.00	144	100.00	144	100.00

Source: The Author himself.

In the comparison between the first month and the 12th month of life, 18.8% of the children had an increase in nocturnal awakenings, 57.6% decreased their awakenings, 22.2% remained the same and 1.4% did not report. As for the comparison between the third/fourth month and the 12th month of life, 30.6% increased their nocturnal awakenings, 31.2% decreased, 37.5% remained with the same number of awakenings and 0.7% did not report. Figure 1 demonstrates this comparison.



Figure 1: Comparisons between nocturnal awakenings of children in the first month, between three and four months and at the 12th month of life, according to maternal reports. Ribeirão Preto, 2022 Source: Author himself.

When it was ascertained whether mothers considered their children's sleep a problem, at the time of the first month there were 13 (9%), between the third and fourth month 6 (4.2%) and at 12 months 9 (6.3%).

The results of the association between the night waking variable and the other variables (maternal opinion

about considering the child's sleep a problem, place where the child sleeps, maternal work, primiparous mothers or not, weaning and maternal age) are presented for the first month. and between the third and fourth month of life, in tables 2 and 3, respectively.

Table 2: Variables related to nocturnal awakenings in children in the first month of life. Ribeirão Preto, 2022

	Night awakenings in the 1st month of life				
Variable	None	One or two	Three or more	p value*	
	N (%)	N (%)	N (%)		
Consider sleep a problem (n=143)					
Yes	0 (0)	4 (33.3%)	8 (66.7%)	n = 0.126	
No	7 (5.3%)	77 (58.5%)	47 (35.9%)	p – 0.136	
Place where the baby sleep(n=143)					

Continuation - Table 2: Variables related to nocturnal awakenings in children in the first month of life. Ribeirão Preto, 2022

	Night awakenings in the 1st month of				
Variable	None	One or two	Three or more	p value*	
	N (%)	N (%)	N (%)		
Crib in separate room	1 (5%)	9 (45%)	10 (50%)		
Crib in parent's room	5 (6.8%)	41 (55.4%)	28 (37.8%)	p = 0.521	
in the parents' bed	1 (2%)	31 (63.3%)	17 (34.7%)		
Maternal work (n=133)					
Work out	3 (3.8%)	43 (55.1%)	32 (41%)	n = 0.644	
work at home	3 (5.5%)	34 (61.8%)	18 (32.7%)	p – 0.044	
Primiparous Mother (n=143)					
Yes	4 (6.7%)	31 (51.7%)	25 (41.7%)	n = 0.477	
No	3 (3.6%)	50 (60.2%)	30 (36.1%)	p – 0.477	
Weaning (n=143)					
Yes	2 (50%)	2 (50%)	0 (0%)		
No	5 (3.6%)	79 (56.8%)	55 (39.6%)	p = 0.006	
Maternal Age (years) (n=143)					
Between 18 and 25	3 (4.6%)	39 (60%)	23 (35.4%)		
Between 26 and 35	3 (4.8%)	34 (54.8%)	25 (40.3%)	p = 0.911	
Greater than or equal to 36	1 (6.3%)	8 (50%)	7 (43.8%)		

Source: Author himself. *Fisher's exact test.

Table 3: Variables related to nocturnal awakenings in children between the 3rd and 4th month of life.Ribeirão Preto, 2022

Night awakenings between 3rd and 4th month of life						
Variable	None N (%)	One or two N (%)	Three or more N (%)	p value*		
Considers sleep a problem (n=144)						
Yes	0 (0)	2 (33.3%)	4 (66.7%)	n - 0 007*		
No	38 (27.5%)	83 (60.1%)	17 (12.3%)	p – 0,007		
Place where the child sleeps (n=143)						
Crib in separate room	7 (41.2%)	10 (58.8%)	0 (0%)			
Crib in parent's room	15 (19.2%)	51 (65.4%)	12 (15.4%)	p = 0,087*		
in the parents' bed	15 (31.3%)	24 (50%)	9 (18.8%)			
Maternal work (n=134)						
Work out	24 (31%)	26 (33%)	19 (24%)	······································		
work at home	2 (15%)	7 (54%)	2 (15%)	p = 0,734		
Primiparous Mother (n=144)						
Yes	18 (29.5%)	32 (52.5%)	11 (18%)	0.262**		
No	20 (24.1%)	53 (63.9%)	10 (12%)	p – 0,363		
Weaning (n=144)						
Yes	6 (28.6%)	10 (47.6%)	5 (23.8%)	0.2C4**		
No	32 (26%)	75 (61%)	16 (13%)	p = 0,364		
Maternal Age (years) (n=144)						
Between 18 and 25	21 (31.8%)	35 (53%)	10 (15.2%)			
Between 26 and 35	15 (24.2%)	39 (62.9%)	8 (12.9%)	p = 0,527*		
Greater than or equal to 36	2 (12.5%)	11 (68.8%)	3 (18.8%)			

Source: Author himself. *Fisher's exact test **Chi-square test.

For the 12th month of life, in addition to the variables mentioned, the reading strategy for the child and the use of electronic devices were also added, shown in table 4. In the data analysis, the variables considered the

child's sleep a problem, place where the child sleeps and nocturnal awakenings were categorized differently from how they are presented in the BISC questionnaire.

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Table 4: Variables related to nocturnal awakenings in children in th	ie 12th month of life. Ribeirão Preto, 2022
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	Night awakenings in the 12th month of life				
Variable	None	One or two	Three or more	p value*	
	N (%)	N (%)	N (%)		
Considers sleep a problem (n=141)				*	
Yes	2 (22.2%)	0 (0%)	7 (77.8%)	p < 0.001*	
No	46 (34.8%)	59 (44.7%)	27 (20.5%)		
Place where the child sleeps (n=143)					
Crib in separate room	5 (31.3%)	9 (56.3%)	2 (12.5%)	p = 0.626*	
Crib in parent's room	15 (35.7%)	18 (42.9%)	9 (21.4%)		
in the parents' bed	29 (34.1%)	32 (37.6%)	24 (28.2%)		
Maternal work (n=133)					
Work out	26 (33.8%)	31 (40.3%)	20 (26%)	p = 0.492**	
work at home	19 (33.9%)	27 (48.2%)	10 (17.9%)		
Primiparous Mother (n=143)					
Yes	22 (36.1%)	25 (41%)	14 (23%)	p = 0.903**	
No	27 (32.9%)	34 (41.5%)	21 (25.6%)		
Weaning (n=142)					
Yes	30 (53.6%)	22 (39.3%)	4 (7.1%)	p < 0.001*	
No	19 (22.1%)	36 (41.9%)	31 (36%)		
Maternal Age (years) (n=143)					
Between 18 and 25	24 (36.4%)	27 (40.9%)	15 (22.7%)	p = 0.876**	
Between 26 and 35	19 (31.1%)	27 (44.3%)	15 (24.6%)		
Greater than or equal to 36	6 (37.5%)	5 (31.3%)	5 (31.3%)		
Use of electronic devices (n=143)					
Yes	39 (34.5%)	47 (41.6%)	27 (23.9%)	p = 0.952**	
No	10 (33.3%)	12 (40%)	8 (26.7%)		
Mother performs reading (n=143)					
Yes	12 (30.8%)	17 (43.6%)	10 (25.6%)	p = 0.864**	
No	37 (35.6%)	42 (40.4%)	25 (24%)		

Fonte: Próprio autor. *Teste exato de Fisher **Teste qui-quadrado

DISCUSSION

In the present research, the characteristics of children's sleep habits, mentioned by mothers, were identified in three moments of the first year of life. These moments are part of the child health follow-up calendar (first month, fourth month and twelfth month) and portrayed relevant events of the children participating in the study, suggesting that they are occasions for a synthesis of sleep pattern information obtained longitudinally.

Regarding the place where children sleep, the habit of sleeping in the same room and in the same bed as the parental caregivers stands out, results also found in other studies^{21,22}. The fact of sleeping together can interfere with the continuity of sleep and the consolidation of the habit²², as well as in the marital and family functioning and in the increase in the number of nocturnal awakenings²¹. Bed sharing was considered indicative of the chronicity of nocturnal awakening²³. Such characteristics are important to be part of the guidelines for parental caregivers, establishing a dialogue to talk about the routine, changes and family behaviors related to children's night sleep in the first year of life.

Regarding the position in which the children sleep, lateral and dorsal decubitus were more present, similar to what was found in another study, particularly regarding the dorsal position as predominant²⁴. Mothers' intentions regarding the sleeping position of babies have already been studied, indicating a greater probability of women choosing an unsafe position, that is, lateral or ventral^{25,26} and of infants exposed to habits that have been associated with sudden infant deaths²⁴. These aspects show the relevance of exploring the care practices adopted and also the knowledge and beliefs accumulated, seeking to identify vulnerabilities linked to children's sleep habits, to promote changes and minimize damage through safe educational interventions.

In the present study, in relation to the children's total daily sleep, there was very little variation between the three moments investigated, with an average duration of around 12 hours. In terms of the recommended guidelines, it was identified that the daily duration of sleep in the first and third/fourth months was below the recommended, which is around 14-17 hours/day from birth to 3 months of age, and approached the age group from 4 to 11 months, which is around 12-15 hours/day¹¹.

Over the course of the first year of life, nighttime sleep increased, from about six hours to almost nine hours, and daytime sleep decreased, from about six hours to two and a half hours of daytime naps. Changes between daytime and nighttime sleep hours were also found in other investigations^{27,28}. It is noted that, over the months, children consolidate their nighttime sleep, with a reduction in the duration of daytime sleep, showing the transitions of infant sleep.

In terms of factors associated with nocturnal awakenings, in the present investigation, in the first month there was an association with the occurrence of weaning; in the third/fourth month with "considering the child's sleep a problem"; and in the 12th/13th month with weaning and "considering the child's sleep a problem". The other variables, related to the place where the child sleeps, use of electronic devices, mother reads to the child, maternal work, primiparous mothers and maternal age showed no association with the variable of interest. With regard to weaning, a study found that a shorter period of breastfeeding was related to the poor quality of infant sleep²⁹. Another study points out that breastfeeding is linked to concomitant nocturnal awakenings, but not to subsequent nocturnal awakenings²³. It is worth reflecting on situations in which there has already been weaning and when the child wakes up and those in which the mother is breastfeeding and the time she spends with the child during the night may be longer, interfering with her perception of the number of awakenings. nocturnal. Thus, details related to situations involving nocturnal awakenings are important, bringing more clarification that contributes to sleep quality, particularly the nighttime sleep of the child and parental caregivers.

Maternal considerations regarding infant sleep being a problem in relation to nocturnal awakenings were pointed out in other studies, indicating that gaps in parental knowledge generate maintenance of sleep difficulties in young children^{14,30}. Nighttime awakenings in children can lead to unsatisfactory sleep, with a critical impact on the child's and caregivers' daytime functioning and mood. to avoid insomnia³¹. Therefore, the knowledge of parental caregivers needs to be increased, avoiding attitudes that generate adversity regarding child sleep and, consequently, in the process of growth and development.

It is of great importance for parental caregivers to recognize when children's sleep habits have atypical patterns in relation to what is expected for their age, and it is necessary to identify vulnerabilities that prevent the establishment of healthy sleep and also that children are not properly referred when they present symptoms or sleep problems¹². Thus, the co-responsibility of health professionals with families is essential to minimize damage and increase protective factors.

In relation to the BISQ instrument, it was possible to analyze aspects of children's sleep in home visits, raising elements about children's sleep quality. A study with the BISQ instrument, conducted in a pediatric outpatient clinic with Nepalese children aged 6 to 36 months, pointed out that the occurrence of sleep problems is frequent in childhood, most children slept together with parental caregivers, food as a ritual at bedtime, few caregivers mentioned sleep as a problem for children who had it²⁷. In terms of parental concerns designated as children's sleep problems, difficulty falling asleep, frequent nocturnal awakening and early waking up were found²⁷. Parental knowledge about setting limits related to children's sleep is seen as very important, and difficulties in defining them were identified in situations in which children sleep poorly³⁰. These aspects bring details that can help in monitoring sleep deprivation and symptoms that tend to worsen with inappropriate habits.

The limitation of the present investigation was to obtain results centered on the mother figure, limited to the children's first year of life. The participation of several parental caregivers, at different times of early childhood, the repercussions of vulnerable periods such as the COVID-19 pandemic and the study of qualitative aspects of children's sleep problems will be interesting in future research.

The three moments during the first year of life bring relevant characteristics of children's sleep habits, regarding where children sleep, sleeping position, average sleep time and frequency of nocturnal awakenings. It was noteworthy that nocturnal awakenings were associated with the occurrence of weaning and the fact that mothers considered the child's sleep a problem. The results of the present investigation bring elements to health practices, in the work of professionals with parental caregivers in the process of child growth and development, with emphasis on increasing health consultations, home visits, educational groups, among other strategies, to effectively identify gaps in parenting practices that can create vulnerable circumstances, indicate details for the conformation of safer habits and qualify children's sleep.

During the first year of life, factors associated with children's sleep habits were where children sleep, sleeping position, average sleep time and nocturnal awakenings. Nocturnal awakenings were associated with the occurrence of weaning and the maternal perception of considering the child's sleep a problem.

Authors' Contributions

Henrique NCP, Hilário JSM performed planning, data collection and writing of the manuscript. Louzada FM, Scorzafave LGDS, Santos DD performed the statistical



analysis and discussed the results. Mello DF carried out the investigation planning, discussion of results and writing of the manuscript. All authors approved the final version of the article.

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Resumo

Introdução: na Introdução: Na saúde infantil, o sono desempenha um papel significativo, especialmente na maturação física e cognitiva e nas capacidades de lidar com estresse, regular emoções e socializar.

Objetivo: analisar hábitos do sono infantil ao longo do primeiro ano de vida e fatores associados aos despertares noturnos segundo percepções maternas.

Método: estudo longitudinal, prospectivo, com acompanhamento de 144 mães e crianças no primeiro mês, terceiro/quarto mês e $12^{\circ}/13^{\circ}$ mês de idade, de um município de médio porte do interior paulista, Brasil. Hábitos de sono foram analisados com medidas de tendência central e dispersão e testes de associação válido Qui-quadrado e Exato de Fisher, nível de significância α =0,05.

Resultados: o local predominante onde as crianças dormem é o mesmo quarto e mesma cama dos cuidadores parentais. A maior parte das crianças dorme em decúbito lateral e dorsal. Tempo médio de sono foi 12,5h no primeiro mês, 11,5h no terceiro/quarto mês e 11,5h no 12º/13º mês. Tempo médio do sono noturno aumentou e sono diurno diminuiu. Do primeiro mês para o 12° mês de vida, não houve mudanças nos despertares noturnos. Percepção do sono como problema aumentou de 4% para 9% entre as participantes.

Conclusão: três momentos no primeiro ano de vida trazem características dos hábitos do sono infantil, sobre local onde as crianças dormem, posição de dormir, tempo médio de sono e despertares noturnos, sugerindo a importância de informações obtidas longitudinalmente. Despertares noturnos mostraramse associados à ocorrência do desmame e à percepção materna de considerar o sono da criança um problema.

Palavras-chave: criança, sono, mães.

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