

Sleep of The Newborn: Survey Among Mothers

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Abstract

The sleep is experienced as a moment of well-being. It is also felt as an extremely positive element for health. For to evaluate the knowledge of mothers about the sleep of newborns (sleep duration, number of naps, sleep functions ...); to determine the characteristics of this population and to know the possible difficulties they encounter regarding the sleep of their child. We conducted an interview with 80 women who had given birth in the maternity ward of the mother-child hospital, Mohammed VI University Hospital, Marrakech; using a questionnaire previously conducted. Of the 80 women who gave birth, 35 (43.7%) were primiparous. The average duration of sleep in the newborn was recognized by 30% of the women questioned. For the sleeping position, 54 mothers (67.5%) answered by the lateral position. 58.7% of the women knew that it is preferable to respect the sleep of the child. All the women questioned had expressed their need for information about their children's sleep. Following the analysis of our study, we found that the mothers had insufficient information about the child's sleep. Hence the need for education of the mothers during the follow-up of the pregnancy or during their stay at the maternity hospital.

Keywords: Sleep, newborn, survey.

Introduction

Sleep is a vital function. In humans, sleep accounts for more than half of the first year of life and about one-third of adult life. In animals, a total suppression of sleep is fatal. The universal and vital nature of this function, as well as the preservation in mammals of the organization of sleep (slow wave sleep and paradoxical sleep) alternating with wakefulness, implies that sleep is an integral part of life [1,2]. It is an important need for the development of the newborn. The objective of this work is to evaluate mothers' knowledge of newborn sleep; to determine the characteristics of this population and to know the possible difficulties they encounter with regard to their child's sleep.

Methods

We conducted a survey of 80 women who had given birth in the maternity ward of the mother-child hospital, Mohammed VI University Hospital Center, Marrakech ; using a questionnaire that had been conducted previously. We specified the epidemiological characteristics of the interviewed population : age, family situation, level of

study, number of parity. Questions related to the knowledge and practical attitudes of mothers regarding the sleep of their newborns: How long, on average, does a newborn sleep? At what age does a baby start sleeping through the night ? Does sleep make a baby grow? What is the best position to put a child to sleep? If a newborn of normal weight sleeps when it's time to feed or bottle-feed. Do you think it's best to wake him or her up to eat? Condition for better quality of sleep? When you return home, where will your newborn sleep? Do you have any information about your child's sleep? Would you like to receive information about your child's sleep? When would be the best time to talk about your newborn's sleep?

Results

The participation rate in our survey was 100% (All women surveyed completed the questionnaire). The average age of the mothers questioned was 24 years (18- 42 years), thirty-five women or 43.75% were primiparous, the majority of the mothers or 40% had a primary school education (Figure1).

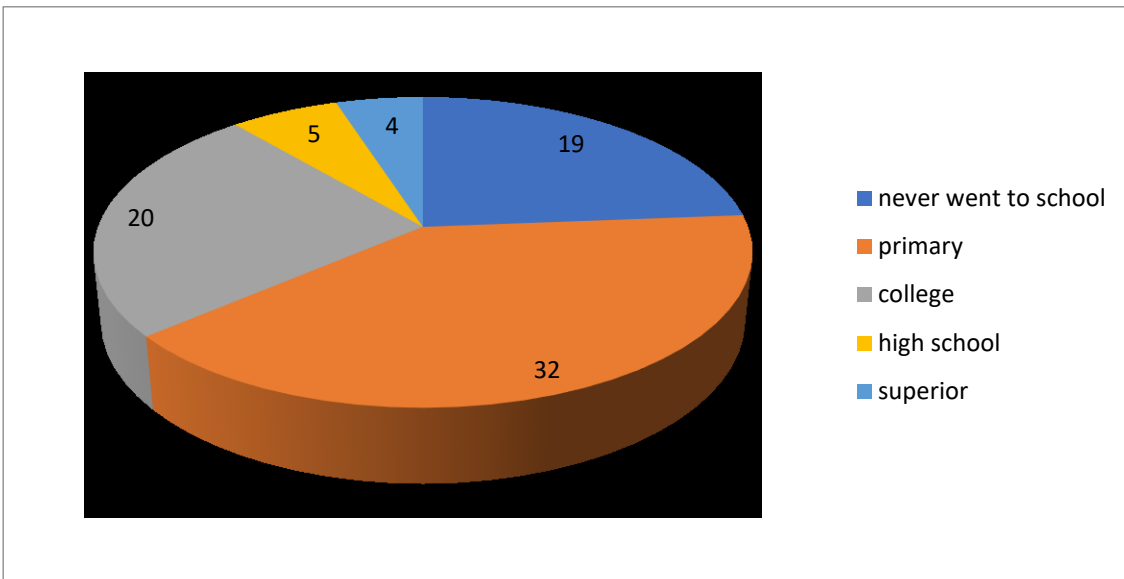


Figure 1 : Distribution by level of education of mothers.

The average duration of sleep in the newborn (16-20 h) was recognized by only 30% of the women questioned. For the sleeping position : 54 mothers had responded with the lateral position while 23.75% had responded with the

expected response (back position). The majority of mothers did not know at what age a newborn can sleep through the night (Figure 2).

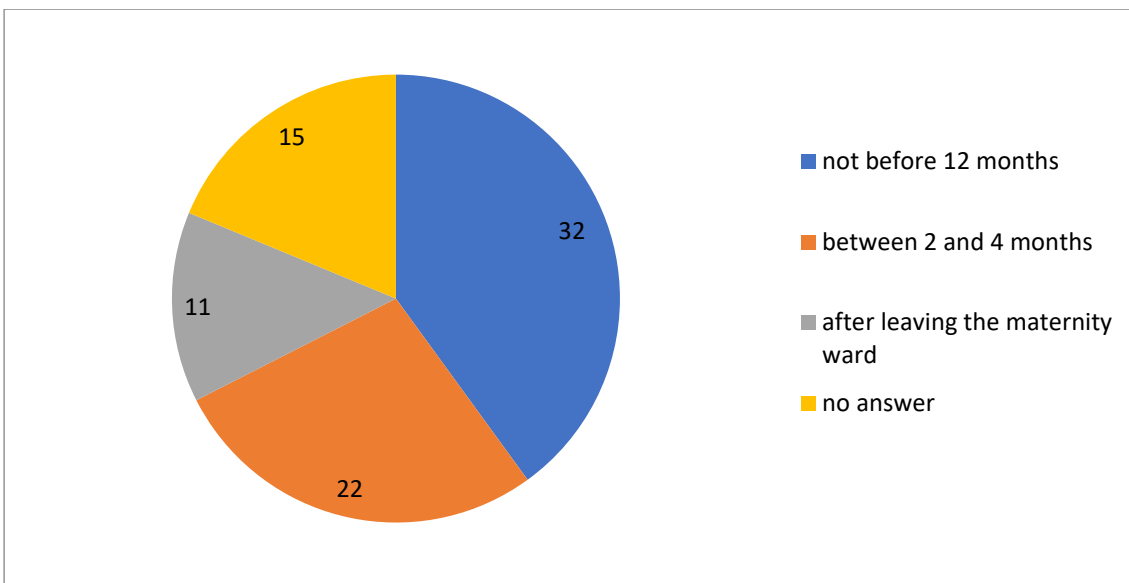


Figure 2: At what age can a child sleep through the night?

More than half of the women (61.25%) knew that it is preferable to respect the child's sleep and only 40% were aware of the importance of a sleep ritual. 65% of mothers don't know the right conditions for sleeping an infant. Almost all of the women interviewed (95%) intended to practice shared sleep in the same bed. The majority of mothers (77.5%) were aware that sleep contributes to child development. All the women interviewed had expressed their need for information about the child's sleep.

Discussion

Sleep in infants is paramount. Indeed, during the first months of the baby's life, we must be attentive to the baby's feeding, crying and sleeping to promote good physical and

psychological health. It is important to know that the simple fact of sleeping makes it possible to the baby to regulate the rhythms of its body, to regulate its temperature, to adjust the hormonal secretion of growth, to stimulate the immune defenses, to eliminate toxins, to regulate the mood as well as the glycemia, to maintain the vigilance and many other activities which we do not necessarily think of. This explains the magnitude of sleep in a baby's life. Indeed, when the baby sleeps, it allows the maturation of the brain as well as the brain construction. [3,4]. Sleep duration, sleep patterns and cycles are unique to each person. All this changes throughout life [5]. A full-term newborn baby needs an average of 16 to 20 hours of sleep per day, divided into sleep cycles. These cycles are about 60 minutes long

and consist of a period of restless sleep (equivalent to REM sleep) during which awakenings are very easy, generally very short, but the untimely intervention of overly anxious parents can promote complete wakefulness. This period of restless sleep is followed by a period of calm sleep (equivalent to deep slow wave sleep) that is much more stable. The sleep-wake cycle of the newborn is dependent on an ultradian rhythm of about 4 hours, which differs from that of the adult, which is based on a circadian rhythm [6,7]. Multiple brief awakenings may interrupt the sleep phases. This organization, which does not distinguish between day and night, persists at least two to three weeks after birth. In a newborn baby, quiet sleep time accounts for about 40% of the sleep cycle, and restless sleep accounts for 60% of the cycle. Newborns always fall asleep in restless sleep, which is very different from adults who fall asleep in quiet sleep [6, 10, 11]. The first modification concerns the rhythmicity of the sleep-wake cycle, which will change from the ultradian rhythm of 4 hours in newborns to a circadian rhythm, starting at 3 months. The structure of nocturnal sleep changes very rapidly and resembles, from the age of 9 months, that of the adult. Sleep will quickly become deep in the first part of the night, often very stable during the first 3-4 hours. In the second half of the night, between midnight and 5 a.m, brief, spontaneous, physiological arousals occur at each change of cycle. Between the ages of 1 and 6, the number of arousals will decrease from 4 to 1 with the lengthening of the sleep cycle, the increase in the time of deep slow wave sleep and the stability of paradoxical sleep [6, 14, 15]. Thus the main stages of maturation of the sleep organization take place very early in life. Between 12 and 18 months, sleep has acquired the characteristics of adult sleep. From the age of 6 months, an infant is able to sleep for periods of 7 hours in a row. However, awakenings are frequent and will remain so until the age of 5 years in a completely normal way [6, 11, 17]. The overall decrease in sleep time is gradual during childhood, from 16 to 20 hours in the newborn to about 8 hours in adulthood. Thus, at the age of one year, the overall sleep duration is already only 14 hours, divided between a long night and one or two naps during the day. At the age of two, a child needs about 13 hours of sleep per day with the persistence of a nap which generally disappears around the age of five. From the age of 6, we observe a progressive decrease in sleep time to reach an average of 8 hours towards the end of adolescence, when it is not uncommon to observe a significant but transient increase in daytime sleepiness, more related to the hormonal changes linked to this age than to the decrease in sleep time [6, 10, 15]. It's best to lay a baby on his or her back, which is a stable position. The ventral position, a factor favouring the occurrence of cot death, should therefore be avoided. Lying in a lateral position is not recommended because of the instability of the position [9, 12, 13]. Parental fears about the dorsal position are mainly related to regurgitation. Remember that in the dorsal position, the esophagus being located under the trachea, regurgitation of gastric fluid will tend to follow gravity and return to the esophagus. The environment and parental intervention seem to be the most important elements in the establishment of biological rhythm. To help the child sleep through the night, parents can accentuate day and night signals. It is therefore preferable to stimulate the child less

at night, to use a dim light to take care of him, to speak in a low voice, and to favour moments of exchange and play during the day [18]. Like breastfeeding, shared sleep can be considered a natural biological behaviour, which requires learning and for which the first days or weeks are often referred to as a "sensitive" period.

Conclusion

Following the analysis of our survey, we found that the mothers had insufficient information on the sleep of the child. Hence the need to educate mothers during the follow-up of the pregnancy or during their stay at the maternity ward.

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