



Assessment of Exposure to Technological Equipment and Sleep Status of Infants and Toddlers

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Abstract

It has been reported that in the early childhood period, the sleeping time decreased with the increase of the habit of keeping the television, computer, tablet or phone in the bedroom. Sleeping time of 6-12 months infants who were exposed to television in the evening hours were significantly reduced when compared to those who were not exposed. Children who use social media or sleep with technological devices in the bedroom have been found to be at increased risk for sleep disturbances. From this point of view, the 0-2 age range has a great prospect for child development. The need for open air and sleep during this period are some of the basic physiological requirements of children. The period of healthy sleep that is accepted for the development of children in this period is 13-15 hours. Meeting these requirements in the first two years is crucial for the child to feel safe and at peace.

The aim of our study was to determine the effects of 0-2 age group on children's exposure to technological devices and their sleep states. The survey was conducted between November 10, 2017 and February 28, 2018, with the views of 40 parents who were 0-2 years old. Online questionnaire software (Google Documents) was utilised to design the online survey and to collect data. This was consistent with the methodology of previous research. The online survey firstly asked basic demographic questions such as age, gender and occupation. In the questionnaire prepared by the researchers, the parents were asked about their children's habits of using the device and their sleep status. 58% of the children participating in the study were male. It was found that the use time of the technological device during the day was 148.4 ± 123.8 minutes. During the day, it was found that the duration of television viewing was $47,6 \pm 44,7$ minutes, that of phone was $34,5 \pm 52,1$ minutes and that of tablet was $19,5 \pm 51,3$ minutes. 42.5% of the parents who participated in the study reported that their children had a technological device (television, mobile phone, etc.) in the bedroom. It was reported that the duration of device use was 9.2 ± 12.1 and the duration of sleeping dive was 22.9 ± 14.1 minutes before children were allowed to sleep. It was determined that the daily sleeping period was 9.5 ± 2.7 hours. According to 58% of parents, technological use of children is decreasing their sleeping times and 42.8% of children reported sleeping problems such as sleeping, late sleeping, late waking and nightmares. Forty-five percent of parents reported that they allowed their children to eat at home, or use technological



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devices to stay calm at home or abroad. They also reported that 27.5% of parents never let their children out, while 22.5% said it was less than 30 minutes. It was observed that 0-2 age group children were exposed to technological devices within 2.5 hours during the day. Nearly half of the families participating in the study reported that their children had at least one technological device in the bedroom. As a result, we think that sleep duration is longer and children sleep less than children in the same age group. It was also observed that half of the parents who participated in the study were encouraging their children to use technological devices and that their children were taking them out for less than half an hour or never. Today, children are growing up in the experience of using highly personalized technology; Therefore, parents should make efforts to ensure that children can apply and benefit from principles such as quality sleep and positive social interaction for healthy growth and development of children by making plans according to their age, health status, character and level of development. However, parents should be aware of their duties and responsibilities in order to balance the time of technology and other activities with the technology.

Key words: technology, sleeping time, television, baby, device, bedroom



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