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

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Original Research

The Influence Of Massage On Sleep Quality In Children's Pre-School



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| Article Info | Abstract |
|---|--|
| Article history: Received: 4 July 2020 Accepted: 24 November 2020 | <p><i>Introduction:</i> Sleep disturbance is one of the problems that is often encountered in preschool children. About 44,2% of preschoolers experience sleep disorders. Sleep disorders can affect children's behavior and emotions, cause drowsiness during the day, reduce children's attention at school, get tired easily, reduce physical activity, reduce memory, children become fussy and temper tantrums. The purpose of this study is to analyze the effect of giving massage to sleep quality in preschool children in a Kindergarten in Lawang Hospital.</p> <p><i>Methods:</i> The design in this study is the Pre-Experiment (Pre and Post-test design). The Affordable population is all preschool age children in a Kindergarten in Lawang who have 45 sleep disorders, the sample in this study amounted to 35 children. The sampling technique used was Simple Random Sampling. Analysis of paired data (pre and post-test) on sleep quality variables used the Wilcoxon test. If the statistical test results obtained $p < 0.05$, then H_1 is accepted, it means the research hypothesis is accepted.</p> <p><i>Results:</i> The results showed the quality of sleep before giving massage mostly poor, the quality of sleep after giving massage is mostly good, there is an effect of giving massage to the quality of sleep in preschool children in a Kindergarten in Lawang.</p> <p><i>Conclusion:</i> The study concludes that there is an effect of giving massage to the quality of timber in preschool children in a Kindergarten in Lawang.</p> |
| Keywords: children's pre-school, massage, sleep quality | |

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INTRODUCTION

Sleep disturbance is a problem that is often encountered in preschool children. In Indonesia 44, 2% of preschool children experience sleep disorders [1]. Sleep disorders can affect children's behavior and emotions, cause daytime sleepiness, reduce children's attention at school, tire easily, reduce physical activity, reduce memory, become fussy, and have temper tantrums. Children aged 5 years old sometimes experience nightmares, are afraid at night, and have difficulty sleeping on some nights [2].

The quality of a child's sleep is very influential in a child's growth. Children who sleep experience repair of brain cells and growth hormone production, therefore, the quality of children's sleep needs to be maintained. The quality of a child's sleep can be seen from how they sleep, sleep comfort, and sleep patterns. A child who sleeps enough without waking up frequently is fitter and less fussy the next day. If this disorder is not handled properly it can interfere with the growth and development of children. This is because about 75% of GH (growth hormone) is released when a child is sleeping, which is three times more GH than when he wakes up. High levels of GH are closely related to the physical condition of children because this hormone has the task of stimulating bone and tissue growth, and regulating the body's metabolism, including the child's brain [3].

WHO data (2017) shows the prevalence of sleep disorders in children is around 35-40%. In Beijing, China, the prevalence of sleep disorders in children aged 2-6 years is 23.5%. Based on a survey in Indonesia, about 51.3%

of 80 preschool children are proven to have sleep disorders [4]. At least 25% of children aged 1-8 years have trouble sleeping while children aged 8-9 years about 10-20% have trouble sleeping [5].

The importance of sleep for children's development, then their sleep needs must be really met so that it does not negatively affect their development. One effort that can be done to help improve the quality of sleep for infants and toddlers is with [6]. Toddlers who are massaged will be able to sleep soundly when they wake up the concentration will be full. Massage is better done by parents, especially in the first five years of age. Massage can be done twice a day, which is important in a comfortable atmosphere [6]. The purpose of this study was to analyze the provision of massage to sleep quality in preschool children in Kindergarten in Lawang.

METHODS

The design in this study was a pre-experimental research design. This type of research is a one-group pre-post test design. The Affordable population is all preschool age children in Kindergarten in Lawang, Malang, East Java, who have sleep disorders. The total population of this study was 45 children. The sample of this research is a portion of preschool age children who experience sleep disturbance in Kindergarten in Lawang, Malang East Java as many as 35 children with the sampling technique is Simple Random Sampling. The independent variable in this study is massage and the dependent variable in this study is sleep quality. Analysis of the data used is the Wilcoxon test if the statistical

test results obtained $p < 0.05$ then H1 is accepted meaning the research hypothesis is accepted [7].

RESULTS

Table 1 shows the majority of respondents' gender is female (N = 54.3%). The majority of respondents were 5 years old (N = 54.3%). Table 1 also shows the education of the respondents' parents was senior high school (N = 60%).

Table 2 shows the quality of sleep before giving the massage was poor (N = 68.6%) and the quality of sleep after giving the massage was good (N = 80%). Based on the Wilcoxon statistical test results obtained p -value = 0,000 and smaller than alpha 0.05, then the alternative hypothesis is accepted meaning that there is an effect of giving massage to the sleep quality of preschool age children.

Table 1

The distribution of the study participant

| Distribution | Frequency (N) | Percentage |
|---------------------------|---------------|------------|
| Sex | 16 | |
| Male | 19 | |
| Female | | |
| Total | 35 | 100% |
| Age (years) | | |
| 5 | 19 | |
| 6 | 16 | |
| Total | 35 | 100% |
| Parental education | | |
| Junior high school | 12 | |
| Senior high school | 21 | |
| Bachelor | 2 | |
| Total | 35 | 100% |

Table 2

Effect of giving massage to sleep quality after giving massage in a Kindergarten in Lawang February 2020

| Variable | Pre-test | Frequency | Post-test | Frequency | <i>p value</i> |
|---------------|----------|-----------|-----------|-----------|----------------|
| Sleep quality | Good | 11 | Good | 28 | 0,000 |
| | Poor | 24 | Poor | 7 | |

DISCUSSION

Sleep quality before giving massage to preschool children in a Kindergarten in Lawang

Based on table 2 most respondents experienced poor sleep quality 24 (68.6%).

Age 5 years old affects the quality of sleep poorly because preschoolers spend more time playing with friends their age so that children choose to play rather than sleep. The length of playtime makes the child sleepless in the afternoon.

This is in accordance with the theory of Benaroch, toddlers aged 3-5 years, and children aged 6 years need 10-12 hours of sleep per day. When they nap they are getting less and less and generally at the age of 5 children no longer take naps [8].

The poor criterion lies in the component of sleep quality about "how was the quality of your sleep during the past month and how was the quality of your sleep during the past week" had a score of 74 out of 35 respondents 5 respondents answered very well, 14 respondents answered well, 7 respondents answered less and 9 respondents answered very less.

Very poor sleep quality criteria indicates that the poor sleep quality of respondents during the past month, this has resulted in the tendency of not maintaining good sleep quality [9]. Respondents experiencing this poor sleep quality experienced disruption in sleep that can not be overcome so that it affects the quantity and quality of sleep. This is by following under the theory of fundamental of nursing [10]. Sleep disturbance is a condition where an individual experience or is at risk of experiencing a change in the quantity and quality of his resting pattern which causes discomfort or interferes with the desired lifestyle [6].

Sleep quality after giving massage to preschoolers in a Kindergarten in Lawang

In table 2 the majority of respondents who had good sleep quality were 28 respondents (80.0%).

Good sleep quality after giving this massage shows that the information provided can be accepted by most respondents so that

the response received is shown by respondents in the form of good sleep quality [11]. Besides giving a massage that has been done by the mother to the respondent can provide benefits and positive information for parents and preschool children, because the massage can have a positive effect on the growth and development of children, and parents can pay special attention and strengthen closeness with children [12].

This is also reinforced by the theory that a massage is a form of touch therapy that serves as one of the important treatment techniques, even according to modern research baby massage routinely will help the physical and emotional development of the baby while maintaining health [13].

The effect of giving massage on sleep quality in preschool children in a Kindergarten in Lawang

Based on the results of the Wilcoxon statistical test, the significance value is obtained = 0.000 is and this is smaller than the alpha value of 0.05, so the alternative hypothesis is accepted, which means that there is an effect of giving massage on the sleep quality of preschool children in a Kindergarten in Lawang.

According to researchers, the results of this study indicate that there is an effect of giving massage to sleep quality. This can be seen from the significant changes between the quality of sleep before giving massage and the quality of sleep after giving a massage where most of the poor sleep quality before giving a massage to be most of the good quality of sleep after giving a massage is influenced by

the information obtained but also the level factor mother's education.

The intervention of giving massage is felt to be very important to be known by the respondent's parents so that it can have a positive effect on children's health as well as health information in the community environment, especially in the family [14]. By getting information about giving mother and child massage can benefit from massage to improve sleep quality for the better [15]. A massage is a form of touch therapy that serves as one of the important treatment techniques, even according to modern research, regular baby massage will help the baby's physical and emotional growth while maintaining health [16]. Massage can stimulate the release of endorphin hormones which can reduce pain so that the baby becomes calm and reduces the frequency of crying, so massage also increases the quality and quantity of baby's sleep [17].

CONCLUSION

The quality of sleep before giving massage to pre-school age children in a Kindergarten in Lawang is mostly bad. The quality of sleep after giving massage to pre-school age children in a Kindergarten in Lawang is mostly good. There is an effect of giving massage on sleep quality in pre-school children in a Kindergarten in Lawang.

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