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# THE RELATIONSHIP OF BABY MASSAGE WITH BABY SLEEP QUALITY AT TPMB BIDAN IKA OKTAVIA IN 2023

By

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## ABSTRACT

*Baby massage is an expression of love between parents and children through skin contact. A gentle massage will relax the muscles so the baby can sleep soundly. The quality of a baby's sleep is important to support the baby's growth and development. However, unfortunately in the first year, babies often experience sleep disorders, which has a negative impact on the baby's development. Baby massage intervention is well known and widely applied, but the procedures still vary. The aim of this research is to determine the relationship between baby massage and sleep quality in babies. The type of research used is analytical observation and cross-sectional methods. The sample used was 40 babies aged 2-12 months. The sampling method uses the total sample. The results of the study showed that 20 babies who received baby massage and had good sleep quality were 20 (100%). There is a relationship between baby massage and the sleep quality of babies aged 2-12 months, with a p value of 0.000. This research hopes that parents will pay more attention to the quality of their baby's sleep through routine baby massage, namely once every month. Through massage, the baby will feel comfortable, thus making him sleep longer and not be fussy*

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## 1. INTRODUCTION

Babies are children under one year of age who have just entered the peak period of life which is characterized by rapid growth. The baby's body produces growth hormone while sleeping, so it needs a lot of sleep for optimal growth and development (Ellyzabeth, 2020) and is also a way to relieve tension and feelings of restlessness in babies. A gentle massage will help relax the muscles so that the baby calms down and sleeps soundly. Gentle touch to babies is a beautiful means of bonding between babies and their parents (Nurseha, 2022).

Sleep disorders are also related to educational skills and attention deficit disorder. Sleep disorders in children can be characterized by a lack or excessive increase in sleep time according to age, abnormal sleep patterns, abnormal sleep behavior, or the occurrence of pathophysiological events during sleep.

According to the results of research conducted in 5 cities, namely Jakarta, Bandung, Medan, Palembang and Batam with a total of 385 respondents, data was obtained that 51.3% of babies experienced sleep disorders, 42% had less than 9 hours of sleep at night, woke up at night more than three times and woke up for a long time at night for more than an hour (Martini, 2014). Motor and sensory impacts on growth and development such as increasing body length and weight, teeth, bone structure, the ability to learn to lift the head when lying on the stomach, the ability to sit and the ability to laugh and scream and turn when called or hear sounds. Sleep is a form of adaptation for babies to their environment. However, the problem is that babies find it very difficult to sleep at night and if it is not treated seriously there can be behavioral disorders, growth and development and brain disorders (Edita R, 2023).

In cases of sleep disorders in Indonesia, several studies show that as many as 44.2% of children under 3 years old experience sleep disorders (Nugraheni., 2018). According to Titin S, et al. 2022, cases of sleep disorders in children aged 0-12 months were 49%. There are many interventions that can be done for babies who experience it sleep disorders and low body weight, one of which is baby massage. This intervention is a non-pharmacological macrological management that is often used to manage the growth and development of babies (Hartanti et al., 2019). Baby massage provides touch to the baby or child's body which is useful for stimulating the baby's growth and development and as a way of expressing a parent's love for their child. Touch and massage therapy for babies has many benefits for sleep quality. Baby massage studies have been widely practiced, however the methods and measurements vary (Nasution, 2021; Sapta Wati and Ekasari, 2022).

**2. RESEARCH METHODS**

This research is an analytical research, with a cross sectional research design with a posttest only with control design. The population in this study was 40 mothers who had children under five (aged 2-12 months) who lived at TPMB Bidan Sarah. The research sample was babies 2-12 months. The sampling technique used was total sampling with Posttest Only Group Design. The hypothesis test used was the Chi square test with a significance level of 95% ( $\alpha=0.05$ ). This type of research used analytical observation with a cross sectional method.

**Table 1. Relationship between baby massage and baby sleep quality**

		Sleep quality				Total	%	P
		Good	%	Enough	%			
Baby Massage	Massage	20	100	0	0	20	100	0,000
	No Massage	10	50	10	50	20	100	

Based on Table 1, it is known that of the 20 babies, 20 babies had baby massage and had good sleep quality (100%), 0 babies had baby massage and poor sleep quality (0%). Meanwhile, 10 babies (50.0%) did not have baby massage and had good sleep quality, 10 babies (50%) had poor sleep quality. The results of the correlation test with chi square resulted in a p value of  $0.001 < 0.05$ , meaning that there is a relationship between baby massage and the sleep quality of babies 6-12 months.

**3. DISCUSSION**

Sleep disorders are one of the most difficult problems for parents of babies during the first months of life. Research on infant massage can improve circadian sleep rhythms and night cycles in full-term babies (Field, 2017). Baby massage can reduce baby crying (Serrano, 2010). Research by Tang and Aras (2018) states that infancy requires special attention, this period is the golden period for children's growth and development. One factor that can influence a baby's growth and development is sleep and rest. Quality sleep is very important for the baby's growth because when the baby is asleep, three times more growth hormone is secreted, around 75% compared to when the baby is awake. Therefore, the quality of the baby's sleep needs to be considered by looking at the baby's comfort and sleep patterns. The right way to meet your baby's sleep needs is with baby massage. Babies who receive massage will be able to fall asleep soundly, while when they wake up their concentration will be fuller (Agung & Nahariani, 2016). The gentle touch of baby massage helps reduce tension in the baby's muscles so that a feeling of comfort and relaxation arises. Longer sleep duration is triggered by the release of oxytocin and endorphins. A calm state makes brain waves slow down, which allows the baby to rest and fall asleep. Changes in brain waves occur due to a decrease in alpha waves and an increase in beta and theta waves, where these brain waves are very influential in the sleep process (Tang & Aras, 2018).

Babies who have been massaged will experience an improvement in sleep quality to be better. Good quality sleep for a baby will make the baby sleep longer and wake up less often, as long as the baby is asleep without being fussy, the frequency of crying will be reduced and when the baby wakes up the baby will look more cheerful. Baby massage can also be done at all ages of babies, the older they get, the more frequency of massage movements are performed (Mukhlisiana Ahmad, 2023). Researchers assume that baby massage seems to be a practical solution to solving the problem of sleep disorders in babies and that the percentage of sleep quality is good compared to babies who did not receive baby massage. Babies who received massage fell asleep more soundly or not

It's easy to wake up at night, when you wake up the next day your concentration will be fuller and you won't be fussy because baby massage affects the quality of your baby's sleep. Based on research conducted by Pratiwi (2021) which examined baby massage on the quality of baby sleep, the results showed that there was a difference in sleep quality before and after baby massage was carried out. The test results in the research obtained a p-value of 0.000 ( $\alpha<0.05$ ) which means that there is an influence of baby massage on the sleep quality of babies aged 1-6 months in 2021. This research is strengthened by Zaen & Arianti's (2019) research on the effect of baby massage



regarding the quality of baby's sleep, that baby massage can improve the quality of sleep in babies, where many babies have poor sleep quality, so fewer babies have sleep problems.

According to Jihan 2023, it is stated that baby massage can affect the quality of a baby's sleep where there are factors that influence it, namely rest, environment, physical, exercise, nutrition and disease. Sleep needs must be met properly so that it does not have a negative impact on growth. Sleep quality is determined by sleep patterns, meaning that if the baby is awake for more than an hour at night, the child is experiencing sleep disorders. As babies grow, they need high-quality sleep, because sleep is very important for the development of a baby's brain until it matures. The process of brain maturation occurs when children sleep in the REM stage (*rapid eye motion*). Brain maturation requires babies to learn various things. Babies who don't sleep enough will weaken their immune system so that babies get sick easily. Growth hormones can also be disturbed so that growing children need to get lots of sleep so as not to disrupt the brain maturation process. In Jihan's 2023 research, samples were carried out using techniques *proporsive sampling* totaling 30 babies consisting of 15 in the intervention group and 15 in the control group. Data analysis used the Wilcoxon test to determine the average differences within groups and the Mann Withney test to determine comparisons between groups. The results showed that there was a difference in the average intensity of sleep quality in babies aged 3-12 months before and after being given baby massage intervention with The results of the Wilcoxon test p value were 0.001 ( $p < 0.05$ ), meaning that there was an effect of providing baby massage intervention on sleep quality in babies aged 3-12 months in clinics in the Bogor city area in 2022.

#### 4. CONCLUSION

There is a relationship between baby massage and the sleep quality of babies aged 2-12 months.

#### 5. SUGGESTION

It is hoped that parents will pay more attention to the quality of their baby's sleep through routine baby massage, namely once every month. Through massage, the baby will feel comfortable, thus making him sleep longer and not be fussy.

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