



## The Effect of Baby Massage on Nursing Care for Healthy Babies to Improve Sleep Quality and Smooth Defecation

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### ABSTRACT

Baby massage is a form of physical touch that provides many benefits for babies, including improving sleep quality and smooth bowel movements. This study aims to determine the effect of baby massage on nursing care for healthy babies to improve sleep quality and smooth defecation in babies in Purwakarta Regency, Indonesia. This research is experimental research with a pre-test and post-test design. The research sample was 30 healthy babies aged 3-12 months who were grouped into two groups, namely the intervention group (15 babies) and the control group (15 babies). The intervention group was given baby massage for 10 minutes every day for 7 days. The control group was not given any treatment. Data on sleep quality and bowel movement were collected before and after the intervention. The results showed that there were significant differences between the intervention group and the control group in terms of sleep quality and smooth defecation. The intervention group showed greater improvements in sleep quality and smooth defecation compared to the control group. Based on the results of this research, it can be concluded that baby massage has a positive influence on improving sleep quality and smooth defecation in healthy babies.

### 1. Introduction

The quality of sleep and smooth defecation are two important things that need to be considered in a baby's growth and development. Babies who have good quality sleep will have more optimal growth and development, while babies who have smooth bowel movements will avoid digestive disorders. Baby massage is a form of physical touch that provides many benefits for babies, including improving sleep quality and smooth bowel movements. Baby massage can help babies relax, reduce stress, and increase the production of the hormone oxytocin, which plays a role in increasing bonding between mother and baby. Apart from that, baby massage can also help babies stimulate bowel movements so that defecation becomes smoother.<sup>1-4</sup>

Through massage, mothers can provide a soft and warm physical touch to babies. This physical touch can help the baby to feel comfortable and safe. Physical touch can also help babies release the hormone oxytocin. The hormone oxytocin has various benefits, including reducing stress, increasing relaxation, and increasing bonding between mother and baby. Apart from that, baby massages can also help stimulate babies' bowel movements. Baby massage can help the baby to expel gas that has accumulated in the stomach. Gas that builds up in the stomach can cause the baby to feel uncomfortable and fussy. Baby massage can also help babies to stimulate bowel movements so that bowel movements become smoother.<sup>5-9</sup> This study aims to determine the effect of baby massage on nursing care for healthy babies to



improve sleep quality and smooth defecation in babies in Purwakarta Regency, Indonesia.

## 2. Methods

This research is experimental research with a pre-test and post-test design. This design is used to determine the effect of a treatment on a variable. The research sample consisted of 30 healthy babies aged 3-12 months who were divided into two groups, namely the intervention group (15 babies) and the control group (15 babies). The intervention group was given a baby massage for 10 minutes every day for 7 days. The control group was not given any treatment. The intervention given to the intervention group was baby massage. Baby massage is carried out by the mother of each baby. The baby massage technique used is a technique developed by the Indonesian Pediatric Nurses Association (IPAI). This technique consists of several movements, namely: Head massage: Head massage can help the baby to relax and increase the production of the hormone oxytocin; Back massage: Back massage can help the baby to expel gas that has accumulated in the stomach; Foot massage: Foot massage can help stimulate bowel movements.

Data on sleep quality and bowel movement were collected before and after the intervention using a questionnaire. The sleep quality questionnaire consists of 10 items that assess the quality of the baby's sleep, while the smooth bowel movement questionnaire consists of 7 items that assess the frequency and consistency of the baby's bowel movements. Data analysis was carried out using a paired t-test. The paired t-test was used to determine the difference in the means of the two paired groups.

## 3. Results and Discussion

The results showed that there were significant differences between the intervention group and the control group in terms of sleep quality and smooth defecation. The intervention group showed greater

improvements in sleep quality and smooth defecation compared to the control group. In the intervention group, the average sleep quality increased from 6.20 to 7.60 with a p-value <0.001. In the intervention group, the average frequency of defecation increased from 2.40 to 3.20 with a p-value <0.001. In the intervention group, the average defecation consistency increased from 3.20 to 4.00 with a p-value <0.001. The results of this study show that baby massage has a positive influence on improving sleep quality and smooth defecation in healthy babies. Baby massage can help babies relax, reduce stress, and increase the production of the hormone oxytocin, which plays a role in increasing bonding between mother and baby. Apart from that, baby massage can also help babies stimulate bowel movements so that defecation becomes smoother.<sup>10,11</sup>

Baby massage is a form of physical touch that provides many benefits for babies, including improving sleep quality and smooth bowel movements. Baby massage can help babies relax, reduce stress, and increase the production of the hormone oxytocin, which plays a role in increasing bonding between mother and baby. Apart from that, baby massage can also help babies stimulate bowel movements so that defecation becomes smoother. Baby massage can help babies relax and reduce stress. Stress can disrupt sleep quality and cause fussy babies. Baby massage can help babies relax and reduce stress so babies can sleep more soundly.<sup>12,13</sup>

Baby massage can increase the production of the hormone oxytocin. The hormone oxytocin has various benefits, including reducing stress, increasing relaxation, and increasing bonding between mother and baby. An increase in the hormone oxytocin can help babies sleep more soundly and improve bowel movements. Baby massage can help stimulate bowel movements. Baby massage can help the baby to expel gas that has accumulated in the stomach. Gas that builds up in the stomach can cause the baby to feel uncomfortable and fussy. Baby massage can also help



stimulate bowel movements so that bowel movements become smoother.<sup>14,15</sup>

#### 4. Conclusion

Baby massage is an effective way to improve sleep quality and smooth defecation in babies. Baby massage can help babies relax, reduce stress, and increase the production of the hormone oxytocin. Apart from that, baby massages can also help stimulate babies' bowel movements.

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