

# The Effect Of Baby Massage Using Pure Coconut Oil Content On Increasing Baby's Weight

Retno Wulan<sup>1\*</sup>, Irfana Tri Wijayanti<sup>2</sup>

<sup>1-2</sup>Bakti Utama Pati College of Health Sciences, Central Java

\*Corresponding Author: [wuland.retno24@gmail.com](mailto:wuland.retno24@gmail.com)

**Abstract.** Stimulation plays an important role in a child's growth and development stages. Children who receive the right stimulation will grow and develop faster. Efforts that can be made to optimize the baby's weight in addition to the nutrition provided by the mother and one other way require stimulus stimulation or what is commonly known as baby massage. The aim of the research was to determine the difference between baby massage using coconut oil and baby weight gain. The method in this research uses a quantitative descriptive research type with a quasi-experimental research design. The results of the study showed that the average increase in baby weight in the control group was 0.08 grams, while in the intervention group it was 0.30 grams. The data normality test shows that the data is not normally distributed, so the test used is the Wilcoxon test with a sig result of  $0.002 < 0.05$  so that there is a difference in baby massage using pure coconut oil to increase the baby's weight. The conclusion of this study is sig  $0.002 < 0.05$  so there is a difference in baby massage using pure coconut oil to increase the baby's weight.

**Key words:** Baby Massage, Weight Loss, Baby

## INTRODUCTION

Baby massage is very important for the baby's health. Especially if it is done by the parents themselves. So the role of parents is very much needed in giving massage to babies. In order to create communication between parents and babies through massage touch that contains elements of affection, sound, eye contact and movement. Massage for babies can involve close family members to bring closer emotional relationships, for example father, grandmother, grandfather. A baby's instincts can respond to touch from his mother as an expression of love, protection and attention (Roesli, 2013)

Stimulation plays an important role in a child's growth and development stages. Children who receive the right stimulation will grow and develop faster. Baby massage using coconut oil (VCO) is a useful stimulation in increasing nutritional intake and is also useful for mothers in increasing their confidence in caring for their babies. Massage affects the baby's weight because it can stimulate the release of growth hormone (growth factor) and stimulate the nerves, stimulate the release of gastrin and increase the motility of the stomach and intestines (Kartika, 2018).

VCO (Virgin Coconut Oil) contains medium chain saturated fatty acids or Medium Chain Fatty Acid (MCFA) which are easily absorbed by the skin. Regular massage with coconut oil is good for keeping baby's skin moist. This is because the texture of coconut oil is light, easily absorbed by the skin. Apart from that, this oil has a cooling effect on the body and has anti-bacterial and anti-fungal properties which can prevent skin rashes. This oil contains high levels of vitamin E which is good for nourishing your little one's skin (Meiranny A, 2021).

Research (Jempormasse, 2019) shows that baby massage has an effect on increasing the weight of full-term babies who received massage once a day for 4 weeks. It was found that the median increase in baby weight between the massage group was 1230 grams and the control group was 830 grams.

Based on research by Irva T (2014), it is known that the median weight of babies in the experimental group after being given massage therapy was 5600 and in the control group it was 4500 based on tests from the Mann-Whitney test which obtained a p value of 0.01 ( $p < 0.05$ ) so that giving massage therapy has an effect on increasing the baby's weight. Based on the Wilcoxon test in the experimental group before and after giving massage therapy, a p value of 0.000 ( $p < 0.05$ ) was obtained, which means there was an increase in body weight, the increase in body weight that occurred was 700 grams during 2 weeks of massage.

results of an initial survey conducted in Tondomulyo Village by interviewing 10 mothers who had babies aged 6 months, showed that 4 babies experienced an increase in weight with an average increase of 1.5 kg after routine massage from a midwife. Parents said that babies were given regular massages because they already knew the benefits of massage. Meanwhile, the other 6 babies never had

a massage from either a midwife or a traditional healer, and it was discovered that the average increase in body weight was 0.5 kg. The parents of these 6 babies said that their babies were not massaged because they were in good condition and healthy.

From the description above, researchers are interested in conducting research with the theme of the effectiveness of baby massage using pure coconut oil on increasing baby weight.

## METHODS

This research is a type of quantitative research with a research design using a quasi-experimental design with a Non Equivalent Group Design (Sugiyono, 2017) which aims to assess the causal relationship between the dependent variable and the independent variable over a certain period of time. A parallel design is used to compare two independent groups (group comparison), namely the control group and the intervention group.

The variables in this research are the independent variable, namely baby massage using pure coconut oil and the dependent variable, namely weight gain. The number of samples in this study was 30 babies. To test the influence of the independent variable partially on the dependent variable, partial regression coefficient testing (t test) is used.

## RESULTS AND DISCUSSION

Touch and massage therapy for babies has many benefits, especially when done by the baby's parents themselves, to increase breast milk production and increase the baby's weight. Research by Lana Kristiane F. Flores in Australia proves that babies who are massaged by their parents will have a tendency to gain weight and have better emotional and social relationships. Baby massage can be done in the morning and evening. Baby massage can be done once or twice and is done when the baby is well awake (Sugiharti, 2019).

**Table 1.** Increase in baby weight

	<b>Control</b>	<b>Intervention</b>
<b>Category</b>	<b>Average BB</b>	<b>Average BB</b>
Pretest	6.65	6.75
Posttest	6.73	7.05
<b>BB increase</b>	<b>0.08</b>	<b>0.30</b>

Based on table, the results of the data normality test show the sig value.  $0.000 < 0.005$ , then it is stated that the data is not normally distributed so the test used is the Wilcoxon test.

**Table 2.** Wilcoxon Test Results  
**Test Statistics<sup>a</sup>**

	Posttest_BB Pretest_BB
Z	-3,056 <sup>b</sup>
Asymp. Sig. (2-tailed)	.002

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Table 2 shows that the sig value is  $0.002 < 0.05$ , so there is a difference between baby massage using pure coconut oil and the increase in weight of babies aged 5 - 6 months.

Touching and massaging a baby after birth can guarantee continuous body contact which can maintain a feeling of security for the baby. Baby massage that is done correctly is not only beneficial for babies who are sick or unhealthy. Even premature babies need massage because they can increase their body weight per day by 20% - 47% during 10 days of massage (Roesli, 2013).

In the growth and development of babies, many factors influence it, so efforts need to be made to maintain a normal body weight according to age, including by meeting nutritional needs both in quality and quantity, maintaining a conditional environment, namely making the living atmosphere comfortable and good sanitation, maintaining baby's health by immunization and providing stimulus. The stimulus given is tactile. The tactile stimulus that can be given is baby massage, because this massage can stimulate the vagus nerve, where this nerve will increase intestinal peristalsis so that gastric emptying

increases, so the baby will get hungry faster and will breastfeed more often with its mother. Apart from that, the vagus nerve stimulates the production of digestive enzymes so that food absorption will be better, thereby increasing the baby's weight (Yahya 2018).

This is supported by Marni's research, 2019, that there is a difference in body weight before and after massage intervention with a p value of  $0.00 < 0.05$ .

## CONCLUSION

The conclusions of this research are: The average weight gain for babies aged 5-6 months in the control group was 0.08. The average weight gain for babies aged 5-6 months in the intervention group was 0.30. There is a difference between baby massage using pure coconut oil and the increase in baby's weight.

## REFERENCES

- Haryanti, SN (2022). Differences In The Effectiveness Of Providing Tuina Massage And Baby Massage On The Weight Of Toddler In The Working Area Of Wedung 2 Demak Health Center. *Proceedings of Student Scientific Publication Week* , 55-60.
- Jempormasse, S. d. (2019). Effectiveness of Baby Massage Using Pure Coconut Oil (VCO) on the Weight of Babies 1-6 Months in Sindulang I Village, Tuminting District, Manado City.
- Kartika. (2018). Comparison of the effectiveness of using pure coconut oil and mineral oil in baby massage to increase baby weight. *Pangkal Pinang Polytechnic Health Journal Vol. 6 No. 1* .
- Meiranny A, SE (2021). Comparison of the Effectiveness of Baby Massage Using Virgin Coconut Oil and Olive Oil on the Fine Motor Development of Babies Aged 3-6 Months. *Forikes Voice Health Research Journal* .
- Munjidah, A. (2015). Effectiveness of Tui Na Massage in Overcoming Eating Difficulties in Toddlers in RW 02, Wonokromo Village, Surabaya. *UNUSA Journal* , 193-199.
- Resty Nofidaputri, d. (2020). Effectiveness Of Tui Na Massage In Increasing The Weight Of Toddlers In The Working Area Of The Lintau Buo Health Center. *Maternal Child Health Care Journal* , Volume 2. No.1.
- Roesli. (2013). *Baby Massage Guidelines*. Jakarta: Trubus Agriwidya.
- Sugiyono. (2017). *Quantitative, Qualitative and R&D Research Methods*. Bandung.