

Effects of Baby Massage on Weight Gain in Babies

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ABSTRACT

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Massage is stimulation of the skin and tissues below it with various levels of hand pressure to reduce pain, make reflexes and improve circulation and have biochemical and psychological effects on the body. Stimulant massage for a term baby can improve the relationship between baby and mother and can increase body weight in baby. But unfortunately there are still many myths in the community, especially in the care of babies who are still believed that babies should not be massaged often, their bodies are still weak or other reasons that have never been verified. Though touching the baby at the beginning of his birth can have a positive influence on the growth of the baby. This study aims to the effect of baby massage on the increase of baby weight in the work area at pekanbaru payung sekaki primary health center in 2019. This study used a Quasi Experiment design with Cross Sectional research design. Samples taken as many as 20 babies, 10 babies carried out baby massage and 10 other babies were not carried out baby massage. Sampling technique for consecutive sampling. The data collection tool uses checklist sheets, baby massage SOP, and baby scales. Data analysis was used univariate and bivariate, with statistical tests namely non-parental and Mann Whitney tests with the help of SPSS. The results showed that the p-value < 0.05. This means that 0,000<0,05, means that there is the effect of baby massage on the increase in baby massage weight in the work area at Payung Sekaki Pekanbaru Health Center in 2019. It is expected that the Payung Sekaki Pekanbaru health center Primary can conduct counseling or do baby massage to the local community.

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1. Introduction

Massage is commonly called the stimulus touch. Massage is the art of health care and medicine that is practiced since centuries ago other. Infant massage can stimulate digestive hormones include insulin and Gaselin, so that absorption of the food to be better. This can cause the baby to quickly feel hungry so that more frequent feeding and weight gain can occur (Vivian, 2010),

Body weight is the result of an increase / decrease in all the networks that exist in the body, including the bones, muscles, fat, body fluids and others. At this time the weight is used as an indicator of the best to know the state of nutrition and child development as sensitive to changes in body weight despite little (Soetjningsih, 2013),

The increase in the weight of children in the first year of life when the children get good nutrition is from birth to 6 months of weight gain per week 140-200 grams. Baby weight to 2-fold birth weight by the end of the first 6 months. Meanwhile, at the age of 6-12 months of weight gain per week ranged from 85-400 grams. The weight will increase by 3 times body weight at the end of the first year of birth (Hidayat, 2008),

Infant massage is beneficial to increase the inner relationship of parents and their babies, develop communication, understanding the infant cues and increase trust dirimenurut (Trilaksono, 2013). In infants not only effect is relaxed, but also a way of giving stimulants to the whole development of the senses of babies, promotes weight loss and stimulate growth, according to (Prasetyono, 2013),

Based on data obtained from Pekanbaru City Health Office of 20 health centers, found the number of babies that most of January - December 2017 was in the health center Sekaki Payung is 2,314 babies.

Based on the initial survey has been done in the health center Sekaki Pekanbaru Payung obtained result of months of January-August 2017 there were 70 babies and 70 infants that there are 48 babies breastfed by Asi Exclusive and never done before baby massage.

From this background, the hypothesis can pull no effect of infant massage on infant weight gain, so that researchers interested in conducting research that aims to determine the "Influence of Infant Massage To Increase Weight Infants in Puskesmas Payung Sekaki Pekanbaru in 2019"

2. Research Methods

This type of research used in this study, namely Quantitative INIA dalah with Quasi Experiment study conducted treatment, measuring the impact of the experimental units but did not use random assignment to create a comparison in order to conclude the changes caused by the treatment. In this research wanted to determine the effect of Infant Massage To Increase Weight Infants In Puskesmas Payung Sekaki Pekanbaru Year 2018. By looking at the effect of different weight in infants who do and not do baby massage.

3. Results and Discussion

3.1. Univariate Analysis Results

Table 1
Frequency Distribution of Infant Massage Puskesmas Payung In Pekanbaru Sekaki 2019

| No. | Baby massage | Frequency | Percentage (%) |
|-----|--------------|-----------|----------------|
| 1. | Yes | 10 | 50 |
| 2. | No | 10 | 50 |
| | Total | 20 | 100 |

Based on Table 1 above there were 10 infants (50%) who do massage infants and 10 infants (50%) who do not do baby massage.

The study states of 20 babies there were 10 infants (50%) who do baby massage and 10 (50%) infants who do not do baby massage.

Messageor touch the baby massage therapy is the oldest and most popular known to man. Infant massage is the art of medical care and treatment that has been practiced since centuries ago(Andrews, 2015).In fact, it is estimated this science has been known since the early humans were created to earth, perhaps because the massage is closely related to human pregnancy and parturition. The first massage experience that people experience is that at the time of birth, ie at a time through the birth canal mother(Cahyaningrum, 2014),

Table 2.
The frequency distribution of weight gain after baby do baby massage health centers in the region of a foot Payung pekanbaru 2019.

| The increase in BB | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Ride | 20 | 100% |
| Not up | 0 | 0 |
| Total | 20 | 100% |

Based on the above table 2 there were 20 infants (100%) who experienced weight gain and no baby does not gain weight.

The study states of 20 infants who were respondents there were 20 infants (100%) who experienced weight gain and no baby does not gain weight.

Baby weight is strongly influenced by heredity, nutrition, environment, gender, social status (Chomaria, 2015), Weight one anthropometric indicators to measure growth in infants or children.

Adequate and balanced nutrition can improve the baby's weight, otherwise poor nutrition can lose weight babies. After the baby is born, must be pursued exclusively breastfeeding, namely breastfeeding for 6 months. After 6 months the children were given extra food or supplementary food. A phenomenon that occurs in the community are still many infants or children who have not been optimal weight gain reach your ideal weight according to the age of children(Irva, 2014),

Weight loss is the most important anthropometric measure that should be measured at every opportunity in all age groups. Weight loss is the result of an increase / decrease in all the networks that exist in the body. At this time the weight is used as the best indicator to determine the

nutritional status and development of the child because the child's weight is sensitive to changes although slightly (Soetjiningsih, 2013),

According to the assumptions of researchers, there are many parents who do not perform infant massage to their babies because there are still many myths heard in the community that may not be often massaged babies because the baby's body is still weak. This is because the parents also lack knowledge about infant massage.

a. Bivariate Analysis Results

Table 3
Effect of Infant Massage To Increase Weight Infants In Puskesmas Payung Sekaki 2019.
Increase in Weight Loss

| Massage Baby | Ride | % | morbidity ride | % | Jlh | % | P value | α |
|--------------|------|-----|----------------|---|-----|-----|---------|----------|
| Yes | 10 | 50 | 0 | 0 | 10 | 100 | 0,000 | 0.05 |
| No | 10 | 50 | 0 | 0 | 10 | 100 | | |
| Total | 20 | 100 | 0 | 0 | 20 | 100 | | |

Based on Table 3 above are baby massage effect on infant weight gain in Puskesmas Payung Sekaki 2019 where the p value $< \alpha$ yaitu $0.000 < 0.05$, it can be concluded that H_a H_0 accepted and rejected. The rejection of H_0 implies that there is a significant difference to the weight gain did not do baby massage and baby massage.

From the results of the independent t test using the computerized system shows the results of the P-value = 0.000 and a degree of error of 0.05 then H_0 is rejected and H_a received means that there is a relationship of infant massage to weight gain in infants in Puskesmas Payung Sekaki Pekanbaru in 2019.

Theoretical Roesli (2010) with infant massage will increase the activity of the vagus nerve that stimulates the digestive hormones include insulin and gaselin. Insulin plays a role in metabolism. Increased Insulin and Gastrin stimulate the digestive function so that the absorption of the nutrients also be good. This good absorption will cause the baby to quickly feel hungry because the baby will often suckle.

Massaging the baby will stimulate the vagus nerve, the nerve where it will increase the intestinal peristalsis thus increasing gastric emptying thereby stimulate the baby's appetite to eat more heartily in sufficient quantities. In addition vagus can also stimulate the production of digestive enzymes so that the maximum absorption of food. On the other hand massage also can accelerate blood circulation and improve the metabolism of cells, from the series of the baby's weight will increase (Hady, 2014),

Mother is an old man closest to the baby, where mother to baby massage is a gentle sweep of the fabric fastener affection. The mother's skin is the skin of the earliest recognizable to baby. Touch and massage are given the mother is a form of communication that can build closeness mothers with babies by combining eye contact, smile, facial expressions. If stimulation is often given, then the affectionate relationship of mother and baby on a reciprocal basis will be stronger (Irva, 2014),

Research conducted by Lee HD (2009) massaging performed by a mother to her baby (baby just months) after 15 days of the birth, proves that there is an increase in infant weight gain that many touches, especially from the mother. The test results Statistics show that there are differences of weight gain between before and after intervention in the intervention group in infant massage 4 times a week (p value α ie $0.0001 < 0.05$).

Hady.A (2013), in the sub-district Puskesmas Wewiku Weoe Belu District, East Nusa Tenggara results obtained between weight gain massaging baby do baby massage for 4 weeks showed a significant difference in stimulating the body weight in babies.

Based on the assumptions of researchers all babies gain weight, but the weight gain infant exists that exceeds the standard, and there are less than the standard, baby do baby massage and not do infant massage will experience the difference in weight gain that is at least 180 g and a maximum 380 gr. Babies who are massaged but did not experience weight gain badandikarenakan does not want the baby to suckle or difficult to forced feeding for a few days before a massage baby fever. And babies who are not massaged but experience weight gain due to active baby to suckle his mother and get enough sleep.

4. Conclusion

Based on existing research concluded Infant Massage Effect Against Increase in Weight In Infants In Puskesmas Payung Sekaki Pekanbaru 2019 "conducted by the action of massage and weight measurements in infants.

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Reference

- Adams, M. E. (1983). "Baby massage"—The magic of the loving touch. *International Journal of Nursing Studies*, 20(2), 131. doi:10.1016/0020-7489(83)90008-1
- Adamson, S. (1996). Teaching baby massage to new parents. *Complementary Therapies in Nursing and Midwifery*, 2(6), 151–159. doi:10.1016/s1353-6117(96)80049-7
- Adewole, A. A., Ugiagbe, O. A., Onile, T. G., Joseph, G. A., Kassim, O. D., Medupin, P. F., & Adeniran, A. S. (2017). Snake bite in third trimester of pregnancy with systemic envenomation and delivery of a live baby in a low resource setting: A case report. *Case Reports in Women's Health*, 16, 14–17. doi:10.1016/j.crwh.2017.10.001
- Álvarez, M. J., Fernández, D., Gómez-Salgado, J., Rodríguez-González, D., Rosón, M., & Lapeña, S. (2017). The effects of massage therapy in hospitalized preterm neonates: A systematic review. *International Journal of Nursing Studies*, 69, 119–136. doi:10.1016/j.ijnurstu.2017.02.009
- Bigdeli Shamloo, M. B., Nasiri, M., Maneiy, M., Dorchin, M., Mojab, F., Bahrami, H., ... Kiarsi, M. (2019). Effects of topical sesame (*Sesamum indicum*) oil on the pain severity of chemotherapy-induced phlebitis in patients with colorectal cancer: A randomized controlled trial. *Complementary Therapies in Clinical Practice*, 35, 78–85. doi:10.1016/j.ctcp.2019.01.016
- Cahyaningrum, S. (2014). Hubungan pijat bayi terhadap kualitas tidur bayi umur 0-3 bulan. Sukoharjo: Akademi Kebidanan Mamba'ul 'Ulum Surakarta.
- Chen, S.-C., Ho, Y.-S., Kwai-Ping Suen, L., Yu, J., Tang, W., Jiang, J.-F., ... Yeung, W.-F. (2020). Traditional Chinese medicine (TCM) massage for the treatment of congenital muscular torticollis (CMT) in infants and children: A systematic review and meta-analysis. *Complementary Therapies in Clinical Practice*, 39, 101112. doi:10.1016/j.ctcp.2020.101112
- Chomaria, N. (2015). Berat Badan Pada Bayi. Jakarta: Universitas Andalas.
- Dalili, H., Sheikhi, S., Shariat, M., & Haghazarian, E. (2016). Effects of baby massage on neonatal jaundice in healthy Iranian infants: A pilot study. *Infant Behavior and Development*, 42, 22–26. doi:10.1016/j.infbeh.2015.10.009
- Field, T., Schanberg, S. M., Scafidi, F., Bauer, C.R., Vega-lahr, N., Garcia, R., et al. (2015). Tactile/Kinesthetic Stimulation Effects on Preterm Neonater. <http://www.pediatrics.org>
- Fogarty, S., McInerney, C., Stuart, C., & Hay, P. (2018). The side effects and mother or child related physical harm from massage during pregnancy and the postpartum period: an observational study. *Complementary Therapies in Medicine*. doi:10.1016/j.ctim.2018.11.002
- Fujita, M., Endoh, Y., Saimon, N., & Yamaguchi, S. (2006). Effect of massaging babies on mothers: Pilot study on the changes in mood states and salivary cortisol level. *Complementary Therapies in Clinical Practice*, 12(3), 181–185. doi:10.1016/j.ctcp.2006.01.003
- Fujita, M., Endoh, Y., Saimon, N., & Yamaguchi, S. (2006). Effect of massaging babies on mothers: Pilot study on the changes in mood states and salivary cortisol level. *Complementary Therapies in Clinical Practice*, 12(3), 181–185. doi:10.1016/j.ctcp.2006.01.003
- Gürol, A., & Polat, S. (2012). The Effects of Baby Massage on Attachment between Mother and their Infants. *Asian Nursing Research*, 6(1), 35–41. doi:10.1016/j.anr.2012.02.006
- Hady. (2014). Pengaruh Pijat Bayi Terhadap Berat Badan Bayi Usia 0-12 Bulan. Jurnal Pustaka UNPAD.
- Hidayat. (2008). Riset Keperawatan dan Teknik Penulisan Ilmiah, Edisi 2. Jakarta: Penerbit Salemba Medika.
- Hobbs, S., & Davies, P. D. (1998). Critical review of how nurses research massage therapy: are they using the best methods? *Complementary Therapies in Nursing and Midwifery*, 4(2), 35–40. doi:10.1016/s1353-6117(98)80023-1
- Hunt, V., Randle, J., & Freshwater, D. (2004). Paediatric nurses' attitudes to massage and aromatherapy massage. *Complementary Therapies in Nursing and Midwifery*, 10(3), 194–201. doi:10.1016/j.ctnm.2004.03.001
- Irva, D. (2014). pengaruh terapi pijat terhadap peningkatan berat badan bayi. Penelitian ini menggunakan metode Quasy Ekspeiment dengan pre test dan post test control group design, 1(2).
- Korkmaz, G., & Esenay, F. I. (2019). Effects of Massage Therapy on Indirect Hyperbilirubinemia in Newborns Who Receive Phototherapy. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. doi:10.1016/j.jogn.2019.11.004
- Mackereth, P. A. (2003). A minority report: teaching fathers baby massage. *Complementary Therapies in Nursing and Midwifery*, 9(3), 147–154. doi:10.1016/s1353-6117(03)00037-4
- Mackereth, P. A. (2003). A minority report: teaching fathers baby massage. *Complementary Therapies in Nursing and Midwifery*, 9(3), 147–154. doi:10.1016/s1353-6117(03)00037-4
- Prasetyono. (2013). Pengaruh Pijat Bayi Terhadap Peningkatan Berat Badan Bayi Usia 0-3 Bulan. Adln.lib.unair.ac.id/.
- Rafii, F., Ameri, F., Haghani, H., & Ghobadi, A. (2019). The effect of aromatherapy massage with lavender and chamomile oil on anxiety and sleep quality of patients with burns. *Burns*. doi:10.1016/j.burns.2019.02.017
- Soetjningsih. (2013). Tumbuh Kembang Anak. Jakarta: Penerbit EGC.
- Stapleton, H. (1997). *Complementary Therapies in Nursing and Midwifery*, 3(1), 28. doi:10.1016/s1353-6117(97)80031-5
- Trilaksono. (2013). Stimulasi Pada Bayi Dan Ibu. Jakarta: Penerbit EGC.
- Vivian. (2010). Asuhan Neonatus Bayi dan Anak Balita. Jakarta: Penerbit Salemba Medika.