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# Can Infant Massage Increase Baby Weight Being Cared for in the Perinatology Room of Fatmawati Hospital?

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**Abstract**

Sometimes found babies who are hospitalized to experience weight loss or weight gain that are stuck. If if this problem lasts long it will affect baby's development and quality of life in the future. This study identified the effect of giving infant massage on the increase in baby weight during hospitalization. The study design was qualitative with multiple case design involving two infants and a mother who had the inclusion criteria: The baby did not have an intravenous fluid drip, the baby did not have congenital disease, had nursing problems, the risk of fluid volume deficiency, and the age of the baby was equal to or more than 6 days, and primipara. The research was conducted in March 2019, perinatology room of Fatmawati Hospital. The instruments used were in-depth interviews to explore the knowledge and skills of mothers caring for babies, flipcharts and videos to provide information on infant massage and using observation sheets to measure the mother's skills in infant massage. The results showed that there were differences in the knowledge and skills of mothers in doing baby massage, the average increase in baby weight was 30-45 grams per day. It is important that nurses provide education so that mothers can be skilled and confident while caring for their babies at home and increase the baby's weight while in the hospital.

Key Words: Baby, Weight, Education, Knowledge, Baby Massage

## Preliminary

Jakarta is a metropolitan city inhabited by various ethnic groups and cultures in Indonesia. Jakarta is also a destination for job seekers, some of whom come from outside the city and without any special skills. This condition is reflected in the entry of DKI as one of the 10 provinces with women of childbearing age in the city of Jakarta.

This problem will certainly affect future generations, namely children who are born prematurely or with low birth weight due to poor maternal nutrition. Meanwhile, this newborn will be at risk of health problems due to differences in the scope of the baby; interuterine to extrauterine.

One of the research results states that the age of 0-28 days a neonate will lose weight in the first week of life by 10 □ 15%. The baby's weight will come back again at the age of 10-14 days at 25-30 grams per day for 3 months. Weight loss for Low Birth Weight (LBW) and Very Low Birth Weight (LBW) Infants will lose weight for 7-10 days of life by 10-15%, and the weight will come back to like birth weight at 10 □14 days.

It is not uncommon for newborns to experience health problems and require them to be hospitalized. Babies who receive treatment require a long hospital stay and will be exposed to various environments and excessive stimuli such as procedures, light, sound and infections. The source of stress in the intensive care environment comes from the sensory environment and the physical environment.

Sources of sensory environmental stress are treatment room lighting, monitoring equipment, conversations of staff in the treatment room, and the sound of opening and closing incubator doors, room temperature (22-260). C), room humidity 30-60%; excessive touch; improper positioning, routine procedures such as diaper changes, pain caused by invasive procedures and plaster removal.

Such environmental conditions and nursing activities cause the baby to experience hypoxemia and periods of apnea, pain, discomfort and an increase in stress hormone levels. Als suggests that the presence of physiological changes in the body in the form of an increase in pulse rate and a decrease in oxygen saturation can be a parameter of stress experienced by infants due to this excessive stimulus of the care environment.

If the nurse does not pay attention to the needs of the babies while being treated in the hospital, it will result in weight gain. Babies who are hospitalized can cause weight loss or slow weight to gain, if this continues it will have an impact on the development and quality of life of the baby.

Efforts made by health workers to increase the weight of babies who are hospitalized are: providing nutrition through an oral gastric tube (OGT), intravenous fluid drip (IVFD), providing additional milk, providing vitamins, preventing hypothermia, facilitating mothers to breastfeed directly and weigh the baby every day.

The intervention given in this study to increase body weight was infant massage. Baby massage is the art of caring for babies with touch therapy and certain techniques so that it is useful for treatment and health starting from the feet, stomach, chest, hands, face, and back.

The benefits of baby massage are that it can provide a relaxing effect, stimulate the development of the baby's five senses, increase baby growth and development and can increase baby weight. This baby massage also has an effect on increasing the activity of the vagal nervous system and motility (movement) of the stomach which causes the absorption of nutrients to be more efficient and body weight increases.

Field states that massage stimulation is closely related to weight gain, indicating a weight gain per day is 47% higher than babies who are not stimulated. Infant massage is thought to have an effect on increasing the activity of the vagal nervous system and motility (movement) of the stomach which causes more efficient absorption of nutrients and increased body weight.

The results of research by Katili states that, entitled The Effect of Infant Massage Stimulation on Baby Weight Gain, found a significant relationship with the results of weight gain in infant massage by 458 grams which has an increase in baby weight 47% per day.

One of the research results states that The Effect of Massage Therapy on Weight Gain in Premature Babies in Perinatology RSUP. DR. M. Djamil Padang showed that there was a significant increase in the effect of massage therapy in increasing the weight of premature babies. A case study conducted by Kalsum. Increasing Baby Weight through Infant Massage showed that there was an effect of massage on babies on weight gain.

One of the research results states that The Effect of Massage Therapy on

Increasing Baby Weight in the Perinatology Room of the Arifin Achmad Hospital, Riau Province, it was found that the provision of massage therapy had an effect on increasing the baby's weight, with increased body weight. happened which is equal to 700 grams for 2 weeks of massage.

Based on the description above, the authors are interested in knowing the description of infant massage to increase baby weight. Based on the description above, this study aims to see the effect of giving baby massage on baby weight while the baby is hospitalized.

## Method

This research is a qualitative research using a case study design with multiple case design. The subjects involved in this study were 2 infants who were hospitalized and their mothers, with the inclusion criteria: Infants did not have intravenous fluid drips, did not have congenital disease, had nursing problems, were at risk of fluid volume deficiency, and the age of the infants was equal to or more than 6 days.

The instruments used were flipcharts and videos containing the definition of baby massage, the benefits of baby massage, things to do before baby massage, the recommended time for baby massage and baby massage steps adapted from dr. Utami Roesli. The next instrument is the observation sheet to measure the mother's skills in doing baby massage.

Researchers also conducted in-depth interviews to explore the feelings of mothers when their babies were treated in hospital and how to care for newborns. Information giving using flipcharts and videos was carried out for 60 minutes. The intervention for each patient was carried out for 7 days.

## Result

### Case 1 (NCB, SMK)

The first subject, By.Ny.S was born at 37 weeks' gestation, male gender, born spontaneously, P1A0. Birth weight 3200 grams, body length 45 cm, head circumference 33 cm, chest circumference 32 cm, arm circumference 10 cm, apperance pulse grimance activity respiration (APGAR) first minute score is 9 and the fifth minute score is 10, babies cry momentarily after. Current condition By.Ny.S with body length 46 cm, head circumference 33 cm, bust 32 cm, arm circumference 10 cm. The baby's current weight is 3150 grams, 6 days chronological age, the baby is placed in the baby's box.

Babies get 8x75 cc of oral formula milk (01.00, 04.00, 07.00, 10.00, 13.00, 16.00, 19.00, and 22.00 WIB) no oral gastric tube (OGT) installed, no intravenous fluid drip (IVFD) installed, no device installed help the breath, and the suction reflex is strong, the swallow reflex is strong. Baby's temperature 36.7 ° C, HR: 150 x / minute, RR: 50 x / minute. The baby looks fussy, after being given breast milk the baby immediately falls asleep.

On the first day, the researcher conducted an assessment on the client with the initials By Ny.S covering the general condition of the subject, the condition of the subject. Researchers explain the intent, objectives, benefits of mothers and babies in the study to the mother, after the mother agrees, the researcher provides the mother with an informed consent sheet.

Furthermore, the researchers provided education to the baby's parents including the understanding, benefits, goals and ways of doing baby massage and also oral stimuli. Then do redemonstrations using phantoms to measure the level of knowledge and skills of the baby's parents.

Before massage, the baby is weighed 3150 grams and the baby is massaged 30 minutes before the schedule to drink milk, as long as the baby

massage is done by the parents of the baby, the baby's mother is able to practice according to standard operating procedures. After the massage, the baby is given 75cc formula milk through the baby bottle, the baby's strong suction reflex is to spend the milk.

On the second to the sixth day, researchers assisted mothers in doing baby massage, and always weighed their body before the massage. Infant massage was given using virgin coconut oil for 15 minutes, then oral stimulus for 10 minutes was carried out by the parents of the baby who was accompanied by the researcher, during the baby massage the parents looked nervous and tense while massaging the baby but the mother of the baby after being given motivation by the baby's parents was not nervous and again confident in massaging the baby, after the massage the baby was given 75cc formula through the baby bottle, the baby's strong suction reflex.

Formula milk given to babies for 5 days is not supplemented. The body weight on the second to sixth day respectively is 3180, 3210, 3240, 3270, 3300 grams. The average increase in the baby's body weight was 30 grams / day. Thus the main diagnosis of fluid volume deficiency does not occur with the criteria of balanced intake output, the client is not dehydrated, mucous membranes are moist, elastic skin turgor, significant weight gain occurs, nutritional intake increases gradually, there is no vomiting.

**Case 2 (Pro Dehydration)**

The second subject, By.Ny.V was born at 39 weeks' gestation, male gender, born spontaneously, P1A0. birth weight 2900 grams, body length 49.5 cm, head circumference 34 cm, chest circumference 32 cm, arm circumference 10 cm, apperance pulse grimance activity respiration (APGAR) score for the first 9 minutes and the fifth minute 10, shortly after birth the baby cries .

Current condition By.Ny.S with body length 49.5 cm, head circumference 34 cm, chest circumference 32 cm, arm circumference 10 cm. The baby's current weight is 3050 grams, the chronological age is 7 days, the baby is placed in a baby box. given formula milk by mouth as much as 8x70 cc (01.00, 04.00, 07.00, 10.00, 13.00, 16.00, 19.00, and 22.00 WIB). no intravenous fluid drip (IVFD), weak suction reflex, weak swallowing reflex. The baby has an oral gastric tube (OGT), the baby does not get breast milk, the baby's temperature is 36.7 ° C, pulse: 146 x / minute, RR: 43 x / minute. The baby looks fussy, the baby cries a lot, the baby rarely consumes milk, the baby has not been stimulated orally.

The research activity carried out on the first day was the assessment of the client with the initials By.Ny.V covering the general condition of the subject, the condition of the subject. Furthermore, the researcher explained the intent, purpose, and benefits obtained by the mother and the baby in the study to the mother, after the mother agreed, the researcher gave the mother an informed consent sheet. Researchers provide education to baby parents including the meaning, benefits, goals and ways of doing baby massage as well as oral stimuli.

Then, a redemonstration was carried out using phantoms to measure the level of knowledge and skills of the baby's parents, given examples of massaging using phantoms and after that the baby's mother practiced returning to the phantom before massaging the baby.

Before massage the baby is weighed 3050 grams and the baby is massaged before drinking milk, in giving baby massage carried out by the baby's parents and the baby's parents are able to practice according to standard operating procedures, then the mother provides oral stimuli to increase the baby's suction reflex, after After the massage, the baby is trained to use an oral milk bottle but the baby does not finish the milk, the milk runs out 20cc from 70cc then the baby is given milk through an ogt tube

On the second to the sixth day, researchers assisted mothers in doing baby massage, and always weighed their body before the massage. Infant massage was given using virgin coconut oil for 15 minutes, then oral stimulus for 10 minutes was carried out by the parents of the baby who was accompanied by the researcher, during the baby massage the parents looked nervous and tense while massaging the baby but the mother of the baby after being given motivation by the baby's parents was not nervous and again confident in massaging the baby, after massage the baby was given the practice of drinking oral milk that had previously been stimulated by mouth during the massage, the baby was able to consume 35cc of 70cc milk by mouth. The ability to drink milk by mouth on the third day is 50 cc, the fourth day is 60 cc, the sixth day is 75 cc, while the rest is through an ogt tube, there is no increase in the amount of formula milk given for 5 days.

Body weight on the second to sixth day is 3080, 3125, 3175, 3220 and 3275 grams. The average increase in the baby's body weight was 45 grams / day.

Thus, the main diagnosis of fluid volume deficiency does not occur with the criteria of balanced intake output, the client is not dehydrated, mucous membranes are moist, elastic skin turgor, significant weight gain occurs, there is no vomiting and the ogt tube has been removed.

Table 1 Baby Weight Gain for 5 days in the Perinatology Room of Fatmawati Hospital (n=2)

| Subject (chronological age) | BB day-1 (gr) | BB day-2 (gr) | BB day-3 (gr) | BB day-4 (gr) | BB day-5 (gr) | BB day-6 (gr) |
|---|---|---|---|---|---|---|
| By.Mrs.S, (6 day) | 3150 | 3180 | 3210 | 3240 | 3270 | 3300 |
| By.Mrs.V (7 day) | 3050 | 3080 | 3125 | 3175 | 3220 | 3275 |

**Discussion**

The characteristics of babies in this case study were that the two subjects had similarities, namely spontaneous birth, the two subjects were placed in a baby box, room temperature was 26 ° C, male gender and similarities in the main nursing diagnoses, namely the risk of deficient fluid volume. Both babies were also born inappropriately at 40 weeks.

The characteristics of the baby's parents in the first subject were primiparous, age 26 years, undergraduate education level. The characteristics of the baby's parents in the second subject are primiparous, age 22 years, level of elementary school education. Both mothers have never received information about baby care.

Based on the data above, the results of the case study analysis in the application of infant massage showed an increase in body weight in both subjects. In the first case there was an increase in body weight from 3150 grams to 3300 grams during 5 days of intervention, in the second case there was also an increase in body weight from 3050 grams to 3275 grams during 5 days of intervention.

The average weight gain in the first and second subjects was 30 grams per day and 45 grams per day. Apart from being given baby massage, babies are also given oral stimuli. All interventions were carried out by the mother every morning and afternoon visit schedules. Baby massage also has an effect on increasing the activity of the vagal nervous system and motility (movement) of the stomach which causes faster absorption of nutrients.

The growth of baby weight gain that occurs in baby massage will be able to increase the baby's weight so that it does not interfere with the child's growth and development in the future. The baby's weight gain in this study is in accordance with what is presented in the literature, namely for LBW 20-30 grams / day and 10-15 grams / day for babies with normal weight.

One of the research results states that infant massage has biochemical effects and physical or clinical effects on the baby's body. For babies it can develop communication, reduce stress or pressure and reduce pain distraction or reduce pain. The mother can increase milk production, understand baby's cues, increase self-confidence and understand the baby's needs.

In addition, the benefits of baby massage in general are that it can increase endurance, improve blood circulation and respiration, stimulate digestive and excretory functions, increase weight gain, reduce stress and tension, increase alertness, make sleep more soundly, reduce pain (such as flatulence and abdominal pain), improves the inner connection between parent and baby, and increases the production of breast milk.

J One of the research results states that babies who are massaged regularly from birth often gain weight faster than others, she thinks that maybe because massage stimulates the production of growth hormones.

One of the research results states thatthere are two aspects in the baby's body that are affected when massage takes place, namely: 1). Emotional aspects, including: instilling confidence, freedom and safety, and balance, instilling trust between parents and children, reducing the hormone cortisol (stressors) in the bloodstream or maintaining stability during massage, stimulating the production of endocrine hormones (pain relievers) so as to make the baby feel comfortable, maintain the closeness between the parent and the baby through physical contact, such as eye contact, kissing, gently caressing, rubbing, and talking to him; 2).

Physical aspects which include: smooth digestion and disposal so that the baby is stimulated to breastfeed properly, avoiding constipation, colic and diarrhea, increasing growth and development of the baby, increasing growth hormones produced by the pituitary gland, increasing blood flow in the body so that a feeling of warmth arises in the hands and feet, relaxes the muscles and flexes the joints, especially when the baby stretches the body to start more physical movements, helps remove dead cells and flushes body toxins through the skin, smoothes breathing such as: reducing mucus, overcoming coughs, flu, ear infections, and nose disorders.

The same results with Katili, Dasuki, Mawart's research in 2010 entitled The Effect of Stimulation of Infant Massage on Weight Gain for Low Birth Weight Infants in Yogyakarta showed that there was a difference in average weight gain for low birth weight babies in the treatment and control groups. amounting to 53.67 grams with a p value <0.001, 95% CI = -79.02 - (-28.38).

Baby massage should not only be done occasionally, considering its high effectiveness in increasing baby weight has been very proven. The findings of the above studies have also been confirmed by experts who have proven that touch therapy and massage in babies provide many benefits.

Touch therapy, especially massage produces beneficial physiological changes that can be measured scientifically, including measuring saliva levels, urine hormone/eatecholamine levels, and EEG examinations (electro enchepalogram/brain wave images).

Regular baby massage is useful for maintaining the health of the baby. Especially since baby massage is cheap, easy and commonly done in Indonesia, so it is not something new to our culture.

Increasing Baby Weight Through Massage at Salewangang Maros Hospital, South Sulawesi, showed the results of the relationship between massage and increased baby weight and stated that nerve stimulation will increase intestinal peristalsis, so that gastric emptying is faster with thus will stimulate the baby's

appetite to eat more heartily in sufficient quantities.

In addition, the vagus nerve can also stimulate the maximum production of digestive enzymes. On the other hand, baby massage can improve blood circulation and increase cell metabolism, from which the baby's weight will increase. Babies who are massaged also experience a decrease in stress hormone levels because massage can make babies calmer, not easily fussy because they are tired, so the baby can sleep better.

Massage can also make babies experience an increase in endurance so that babies don't get sick easily so that the baby's growth will not be disturbed and his weight will increase. The Effect of Massage Therapy on Increasing Baby Weight in the Room Perinatology Arifin Achmad Regional Hospital, Riau Province, showed that there was an effect of massage therapy in increasing the baby's weight with an increase in body weight that occurred, namely by 700 grams for 2 weeks of massage

In addition, the results of this case study analysis showed that babies who received massage therapy had longer sleep times, so babies were less fussy. The results of the case study analysis are in line with the research statement that The Effect of Infant Massage on the Growth and Development of Babies Aged 0-12 Months in Margodadi Village, showing that baby massage is done twice a week for four weeks, which shows that baby massage affects sleep duration baby, so that the baby is not fussy like babies who do not get massage.

The results of the case study analysis are in line with research statement that Massage For Promoting Mental and Physical Health In Typically Developing Infants Under The Age Of Six Months showing that infant massage on infant development has benefits both physically and mentally. This case study concludes that giving infant massage has an impact on improving the baby's sleep pattern, the baby's respiratory system and increasing the baby's growth.

Giving baby massage also reduces the baby's stress level due to the intensity of the baby's touch with the parents. The results of this study are also in line with the research says that The Effect of Infant Massage on Weight Gain for Infants aged 0–6 Months at the Buluk Agung Polindes, the Working Area of the Klampis Bangkalan Health Center, concluding that baby massage has many benefits for babies, namely that it can increase baby's weight, baby's growth, baby's endurance, baby's concentration, make baby sleep more soundly and strengthen the bond of affection between parent and child.

The results of the analysis of this case study indicate that infants who receive massage therapy will improve their suction reflex with oral stimuli. The results of the case study analysis are in line with the case study of oral stimuli in infant massage.

The increase in weight of LBW babies refers to the opinion expressed that where the baby's body weight is divided into 2, namely at the age of 0-6 months. For ages 0-6 months, your weight will increase every week around 140-200 grams and your body weight will be 2 times your birth weight at the end of the sixth month. Meanwhile, at the age of 6-12 months there is an increase every week around 24-40 grams and at the end of the 12th month there will be a 3-fold increase in birth weight.

The author understands that there are other factors that influence the baby's weight gain, such as hereditary / genetic factors, gender, intake factors and environmental factors (prenatal environment, postnatal factors).

Postnatal factors are also influenced by several factors such as nutrition, physical and chemical environment, psychological factors, chronic disease factors / congenital disorders, endocrine, socioeconomic factors, environmental factors, stimulation factors. However,

giving baby massage treatment to babies is considered very effective in increasing body weight.

This study also found an increase in knowledge and skills as well as changes in mother's behavior during infant massage. The mothers of the first and second subjects initially felt tense and nervous when practicing the massage method again, besides that there were procedures that were forgotten to be carried out, however, due to habituation every day and continued to be practiced and accompanied, finally the parents of the first and second subjects were skilled at massaging their babies according to standard operating procedures.

The results of other studies that appear to be an increase in knowledge and skills of caring for babies by both mothers. This is evidenced by the mother's ability to answer the definition, benefits and the right time to carry out infant massage. The results of this study are the same as the research conducted that The Effect of Health Education on Knowledge Levels of Children Under Five for ISPA. Health education that involves many senses of sight and hearing will be easier to remember than using only one sense. Health education is able to increase someone's knowledge and abilities through learning practices with the aim of changing or influencing human behavior as individuals, groups and communities to be more independent in achieving life goals.

Caring for babies is influenced by several factors, namely the mother's education and experience. Both mothers have no experience caring for newborn babies, but because of the mother's belief and willingness to care for the baby, finally both mothers tried to learn something related to how to care for newborns, with the hope that the baby's optimal growth and development after returning from the hospital.

This is in line with research says that The Effect of Combined Care on Bounding Attachments in Mothers and Babies. Educational background can influence someone to accept something new. This is because mothers who have just given birth feel unprepared for the birth of their babies, such as mothers not ready to hug or breastfeed or do not know how to breastfeed properly, as well as unstable conditions due to fatigue from postoperative childbirth

The Relationship of Parity I Postpartum Knowledge Levels on the Role of Newborn Care with Hypothermic Incidence states that good knowledge about newborn care causes mothers to pay attention to proper newborn care, on the other hand, the mother's lack of knowledge about Newborn care tends not to pay attention to proper newborn care.

The role of health workers, especially nurses, is very important in the care of newborns and must also provide education to postpartum mothers both by counseling on how to properly care for newborns so that babies can grow and develop optimally while in the hospital and when they return home. so that mothers can take care of newborns properly and can prevent weight loss in the golden period.

## Conclusion

Giving baby massage can help increase the baby's weight while in the hospital. This baby massage also needs to be taught to the mother, before the baby comes home so that the mother becomes skilled in caring for the baby. If the mother is skilled, it can increase the mother's confidence to care for her baby.

## Bibliography

Altimier, L., & Phillips, R. M. (2013). The neonatal integrative developmental care model: Seven neuroprotective core measures for family-centered developmental

care. *Newborn & Infant Nursing Reviews*, 13(2013), 9–22.

Bowen, L. (2009). The effects of light on the neonate. *FANNP NEWS*, 20(4), 3-5.

Casper ,C., Carnielli V.P., Hascoet J.M., Lapillonne ,A., Maggio, L., et al. (2014). Improves growth and LCPUFA absorption in preterm infants fed formula or pasteurized breast milk. *Journal of Pediatric Gastroenterology And Nutrition*. 59(1). 61–9. DOI: 10.1097.

Elya, D., Anggraeni, Y., & Ridwan, M. Efektifitas Pijat Bayi terhadap Peningkatan Berat Badan pada Bayi Usia 0 – 3 Bulan. *Jurnal Kesehatan Metro Sai Wawai*. 11(1), 1-15. DOI: 10.26630/jkm.v11i1.1763.

Girsang, M. (2016). Pengaruh rawat gabung terhadap bounding attachment pada ibu dan bayi. Jurnal Keperawatan Sriwijaya, 3 (1). ISSN: 2355 5459.

Latif, H.H.A. ((2017). Hubungan pijat bayi terhadap kenaikan berat badan pada bayi berat lahir rendah (BBLR) di RSKIA Ummi Khasanah Yogyakarta tahun 2016. *Skripsi*. Yogyakarta: Poltekkes Yogya. Diunduh dari http://eprints.poltekkesjogja.ac.id/1658/1/SKRIPSI.pdf

IDAI. (2010). Pemberian ASI pada bayi lahir kurang bulan. Diakses dari http://idai.or.id/public-articles/klinik/asi/pemberian-asi-pada-bayi-lahir- kurang-bulan.html

Irva, T.S., Hasanah,O., & Ginting, R. (2014). Studi kasus: Pengaruh posisi dan pijat bayi dapat meningkatkan berat badan bayi berat lahir rendah di ruang perinatologi rsud arifin achmad propinsi riau. 6(1), 1-8. DOI: http://dx.doi.org/10.31258/jni.6.1.1-8. Diunduh dari https://jni.ejournal.unri.ac.id/index.php/JNI/article/view/4351

Istiqomah, S.B.T., & Mufida, N. (2014). Hubungan Tingkat Pengetahuan Ibu Nifas Paritas I Tentang Peranan Perawatan Bayi Baru Lahir dengan Kejadian Hipotermi, 4(1), 47-52. Diunduh dari: https://media.neliti.com/media/publications/245414-hubungan-tingkat-pengetahuan-ibu-nifas-p-6632467a.pdf

Kalsum. (2014). Peningkatan berat badan bayi melalui pemijatan. Jurnal Keperawatan Indonesia, 17 (1), 25-29. ISSN : 2354-9203.

Katili, O.N.D., Dasuki, D., Mawart, R. (2010). Pengaruh stimulasi bayi terhadap kenaikan berat badan badan BBLR di Kota Yogyakarta. Diunduh dari https://osf.io/ehfcr/download

Kemenkes RI. (2016). Asuhan kebidanan neonatus, bay, balita dan pra sekolah. Jakarta: Pusdik SDM Kesehatan.

Kumalasari, I. (2015). Panduan Praktik Labolatorium dan Klinik Perawatan Antenatal, Intranatal, Postnatal, Bayi baru lahir dan Kontrasepsi. Jakarta: Salemba Medika.

Kozier, B. (2010). Buku Ajar Fundamental Keperawatan: Konsep, Proses dan Praktik. Jakarta: EGC.

Lee, H.K. 2006. The Effect of Infant Massage on Weight, Height, and Mother Infant Interaction. *Jurnal of Korean Academy of Nursing*. 36(8).

Notoadmojo, S. (2012). *Metodologi studi kasus kesehatan*. Jakarta: Rineka Cipta.

Pahlawan, G., Rustandi, B., Manalu, O., (2017). Pengaruh pendidikan kesehatan pada tingkat pengetahuan ibu balita ISPA. *JPPNI*. 3 (2), 89.97. DOI:

DOI: http://dx.doi.org/10.32419/jppni.v3i2

Pantiawati. (2010). Bayi dengan BBLR. Yogyakarta: Nuha Medika.

Proverawati, A & Sulistyorini, C., I., (2010). *Berat badan lahir rendah*. Yogyakarta: Nuha Medika.

Purwanti SP. (2010). *Konsep penerapan ASI eksklusif*. Jakarta: EGC.

Rahmi, Y., Wahyu, W., Anas, E. (2012). Pengaruh terapi pijat terhadap kenaikan berat badan bayi prematur di RSUP. Dr.M. Djamil Padang. Diunduh dari https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwim98Kj2YbrAhVXU30KHbplCiEQFjAAegQIBRAB&url=http%3A%2F%2Fners.fkep.unand.ac.id%2Findex.php%2Fners%2Farticle%2Fview%2F76&usg=AOvVaw21XWo0QNITuqOJRrWd2XL

Retnowati, D., Roymond, S., & Supriyadi. (2013). Pengaruh fisioterapi oral terhadap refleks hisap pada bayi berat badan lahir rendah di ruang perinatology RSD dr. Soebandi jember. *The Indonesian Journal Of Health Science*. Volume 3 (2),

Riskesdas. (2018). *Riset kesehatan dasar badan studi kasus dan pengembangan kesehatan kementrian kesehatan*. Jakarta: Kemenkes RI

Roesli, U. (2008). *Pedoman pijat bayi*. Jakarta : Trubus Agriwidya.

Roesli, Utami. 2013. *Pedoman pijat bayi prematur dan bayi usia 0 – 3 bulan*. Jakarta: Trubus Agrowida

Rukmini, Hendarto, Rohsiswatmo, Putra S. (2008). Pertumbuhan bayi berat lahir rendah yang memperoleh susu "*post discharge formula*" modifikasi dibandingkan dengan susu "post discharge formula" komersial. *Sari pediatri*. 9(6): 89-93.

Rustiana, Y., Nursasi, Y., Budiati, T., Syahreni, E., Fitriyani. E (2014). Pengaruh pemberdayaan terhadap status kesehatan bayi berat lahir rendah di Kota Jakarta. *Makara Journal Health Res*. 18 (1), 19-24. DOI : 10.7454.

Saragih, D. (2010). Panduan praktik keperawaan bayi dan anak. Yogyakarta : PT Citra Aji Parama.

Smeltzer, S., Bare, & Brenda G. (2008). *Buku ajar kesehatan medical bedah*, volume 2, edisi 8. Jakarta : Buku Kedokteran EGC.

Sudiana,K., surfyanti, A., & Indah, D., (2008). *Peningkatan berat badan pada bayi* 3-6 bulan melalui Infant exercise. Diunduh dari https://e-journal.unair.ac.id/JNERS/article/view/4960.

Wong, D. (2008). *Buku ajar keperawatan pedriatic*, edisi 6. Jakarta : EGC

World Health Organization. (2014). *Bayi Berat Lahir Rendah (BBLR)*. Jakarta: Indonesia

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