The Importance of Filling Nutrition in Mothers Pregnancy at Talumelito Village

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Abstract. The purpose of the counseling activity "The Importance of Filling Nutrition for Mothers During Pregnancy in Talumelito Village" is to teach about fulfilling nutrition for pregnant women in Talumelito village, Telaga Biru sub-district. Balanced nutrition for pregnant and lactating mothers indicates that food consumption for pregnant and lactating women must meet the needs for themselves and for the growth and development of the fetus and baby. The method of activity carried out in this activity is percentages with the help of power points, leaflets, lectures and discussions with documentation, materials and attached attendance lists. This service activity can generally be carried out properly on January 16 in Talumelito Village, Telaga Biru District, Gorontalo Regency. This service was attended by 40 participants, both those who took part in counseling and those who took part in demonstrations. From the analysis of the results of the activity, it can be concluded that this community service activity ran smoothly and was of great interest to pregnant women in the village of Talumelito. Health information in counseling adds to the provision of knowledge for pregnant women and those who are planning a pregnancy.

Keywords: Nutritional Fulfillment, Gestation Period

INTRODUCTION

Balanced Nutrition is a daily food composition that contains nutrients in the type and amount according to the body's needs, taking into account the principles of food diversity, physical activity, clean living behavior, and maintaining normal body weight to prevent nutritional problems.

Balanced nutrition for pregnant and lactating women indicates that food consumption for pregnant and lactating women must meet the needs for themselves and for the growth and development of the fetus and baby. Therefore, pregnant and lactating women need more nutrients than those who are not pregnant or not breastfeeding, but their food consumption remains varied and balanced in quantity and portion. (Lingsar et al., 2020).

During pregnancy at least women need about 400 kcal of calories. The increase in these needs is at least 15% of what is consumed normally or in daily life. The need is 40% for the fetus and 60% for the mother. Nutritional intake consumed needs to be considered by pregnant women. The nutritional adequacy rate for pregnant women must be sufficient and balanced. If nutrition during pregnancy is not fulfilled, it will cause malnutrition and the worst impact will be imperfect fetal growth, low birth weight (LBW) and fetal defects (Pratiwi et al., 2021)

Nutritional requirements during pregnancy:

Carbohydrate: (1) As a source of energy; (2) Can be obtained from types of grains, tubers such as potatoes.
Proteins; (1) As the main substance to build tissues - tissues of the body; (2) Sources of animal protein, meat, fish, poultry, eggs; (3) Vegetable protein sources: soybeans, peanuts, red beans, nuts and others.

Vitamin C; (1) Can increase the body's resistance to infection; (2) Can be obtained from: Yellow fruits such as: oranges, carrots, vegetables

Vitamin A; (1) For the psychomotor development and vision of children; (2) Source of vitamin A; (3) Animal ingredients: - Fish oil, egg yolk; (4) Vegetable ingredients: - Carrots and leaf vegetables such as spinach, kale; (5) Red fruits such as tomatoes and papayas

Iron; (1) For the formation of blood; (2) Can be obtained from: Animal food ingredients such as eggs, liver, meat; (3) Vegetable food ingredients such as nuts, peanuts, soybeans, green vegetables such as spinach, cassava leaves, kale.

Fluid; (1) Water is the largest part of the body. Almost ¾ of body weight is water. The body uses water for several functions. Water is the solvent for all the results of digestion, the carrier of waste substances from the cells to the kidneys. Water also helps regulate body temperature. A person needs about 6-8 glasses of water a day; (2) Pregnant women are recommended to drink 2 liters per day; (3) Principles of food for pregnant women - Eat 1 – 2 plates more than usual during pregnancy; (4) Eat a variety of foods 4-5 times a day to meet the mother's nutrition during pregnancy; (5) Avoid foods that are spicy and fatty; (5) Avoid alcohol, because it can interfere with digestion and the fetus.

There are three sources of water for the body: Through liquids that are drunk such as clean water, milk, fruit juices and so on. Through foods such as raw vegetables, water-rich fruits, soups and other foods that contain lots of water. Through metabolism in the body.

Mineral

Minerals are needed for the formation of blood and bones, the balance of body fluids, healthy nerve function, heart blood vessel system function and others. Minerals function as co-enzymes, enabling the body to perform functions such as energy production, growth and healing. There are 15 kinds of minerals that the body needs, such as calcium, ferrum, iodine, manganese, chlorine, phosphorus, sulfur, zinc, potassium, sodium, etc. Foods that contain minerals include milk, liver, egg yolks, green vegetables, meat and fish. The benefits of balanced nutrition in pregnant women; (1) For the growth of the fetus in the womb; (2) To maintain the health and strength of the mother's own body; (3) So that labor wounds heal quickly in the puerperium

Example of a pregnant woman's diet; (4) Have breakfast

Rice 150 grams = 1 glass
Eggs 60 grams = 1 item
Tempeh 50 grams = 2 pieces
Vegetables 50 grams = ½ cup
Oil 5 grams = ½ tablespoon
Milk 200 cc = 1 cup

10 o'clock: 1 glass of green bean porridge
Lunch / afternoon rice 200 grams = 1 ½ cups
Fish 50 grams = 1 piece
Tempeh 50 grams = 2 pieces
Vegetables 100 grams = 1 cup
Papaya 100 grams = 1 piece
Oil 10 grams = 1 tablespoon

Impact if the mother is malnourished

The impact if the mother is malnourished according to (Sukarni K & p, 2013) includes: (1) Influence for pregnant women; (a) Mother is weak and lacks appetite; (2) Bleeding during pregnancy; (3) The possibility of infection is high; (4) Anemia / lack of blood.

Effect of delivery time; (1) Labor is difficult and long; (2) Premature (premature) labor; (3) Bleeding after delivery.

Influence on the fetus; (1) Miscarriage; (2) Stillborn baby; (3) Congenital defects; (4) Anemia in babies; (5) eLow birth weight.

METHODS

The present study falls under the purview of quantitative research methodology. The research employed a pre-experimental design known as the "one-group pretest-posttest design." Prior to administering the treatment, this design incorporates a preliminary assessment known as a pretest. The execution of this design was exclusively conducted within a singular group. According to Nursalam (2017) the absence of a control group in an experimental study allows for a more precise assessment of the treatment's effects, as it enables a direct comparison with the pre-treatment conditions. Sample Research Objects consist of an accessible population that can be used as a subject through sampling. While sampling is the process of selecting a portion of the population that can represent the existing population (Nursalam, 2020). The samples in this final scientific work are two in-partu patients in the 1st stage of labor. The method of data collection is through interviews with respondents explaining the purpose of the research, after If the patient is willing to become a respondent, fill in the consent form by signing an informed consent. Then the nurse assesses the degree of pain using the NRS (Numerical Ranking Scale) prior to treatment.

RESULTS AND DISCUSSION

Intensity of Pain in Maternity Stage I Latent Phase Before being given the Effleurage Massage Technique in the Delivery Room of RSIA Siti Khadijah.

Table 1. Assessment of the level of labor pain in the first stage before being given effleurage massage therapy to mothers in labor in the delivery room of RSIA Siti Khadijah

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Labor Kala I Latent Phase</th>
<th>Pain Scale Measurement Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Intensity Before Intervention</td>
<td>Patient 1</td>
<td>Below Average</td>
</tr>
<tr>
<td>Patient 2</td>
<td>Average</td>
<td></td>
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</tbody>
</table>

Based on the table above, it can be seen that there were 2 respondents with the first stage of labor in the latent phase. where the researcher measured the pain scale at opening 3 and the results were obtained before the effleurage massage was carried out in case I multiparous pain scale with mild intensity. And in case II Primipara obtained a pain scale with moderate intensity. Intensity of Pain in Maternity Stage I Latent Phase After being given the Effleurage Massage Technique in the Delivery Room of RSIA Siti Khadijah.

Table 2. Assessment of the level of pain in the first stage of labor after being given effleurage massage therapy to mothers in labor in the delivery room of RSIA Siti Khadijah

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<th>Intervention</th>
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<tr>
<td>Pain Intensity After Intervention</td>
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<td>Patient 2</td>
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<td></td>
</tr>
</tbody>
</table>
Based on the table above, after being given the effleurage massage technique in both cases, in case I, multipara, after effleurage massage therapy by measuring the pain scale, the pain scale decreased with mild intensity. Whereas in case II Primipara a pain scale with mild pain intensity was obtained.

**Intensity of maternal pain during a latent phase before being given an effleurage massage technique in the delivery room of RSIA Siti Khadijah**

Based on the table above, it can be seen that there were 2 respondents with the first stage of labor in the latent phase. where the researcher measured the pain scale at opening 3 and the results were obtained before the effleurage massage was carried out in case I multiparous pain scale with mild intensity. And in case II Primipara obtained a pain scale with moderate intensity. From the results obtained the two cases had differences, in case I multipara with mild pain intensity where Mrs. Sm already has experience in controlling pain, when the pain scale was measured, Mrs.Sm seemed calm in dealing with her pain. Whereas in case II primipara with moderate intensity. In case II this was the first experience, so that Mrs. Sd could not adapt to pain because she responded to her pain with fear and anxiety which could stimulate the release of large amounts of stress hormones which resulted in uterine contractions which could cause labor pain. In accordance with Telfer's theory (Herinawati, Hindriati and Novilda, 2019) that labor pain is a subjective, personal, and complex multi-factorial phenomenon that is influenced by psychological, biological, socio-cultural and economic factors. So it is natural that the level of pain felt by each respondent varies according to the factors that influence it. Pain that is felt is influenced by several factors such as anxiety and fear, past pain experiences, preparation for childbirth, and respondent's support system.

In line with Research. (Gulo, 2017) suggests that primigravida and multigravida feel different pain during childbirth so that it affects the perceived comfort. In primigravidas it is possible to experience greater pain during early labour. Rizki and Anggraini's research (2020) showed the results that most of the research respondents had a history of more than one pregnancy (multigravida). Mothers who have a history of previous pregnancies will have experience in dealing with pregnancy and the delivery process so that mothers are more prepared and more confident in facing the delivery process.

**Intensity of maternal pain during a latent phase after being given an effleurage massage technique in the delivery room of RSIA Siti Khadijah**

Based on the aforementioned table, following the application of the effleurage massage technique in both scenarios, it is observed that in the case of multiparous individuals (Case I), the pain scale exhibited a reduction of mild intensity subsequent to the administration of effleurage massage therapy, as quantified through pain scale measurements. In contrast, in the second case involving a primipara, a pain scale was utilized to assess the intensity of pain, revealing a classification of mild discomfort. The findings from both scenarios revealed a notable reduction in pain levels as assessed by the numerical Rating Scale measurement. The respondent’s reaction to the effleurage massage therapy was indicative of a sense of composure, tranquility, and enhanced comfort. The therapeutic procedure commences with a gentle opening of 5 cm, wherein the researcher diligently seeks the respondent's informed consent prior to initiating the therapeutic intervention. Subsequently, the researcher meticulously prepares the requisite tools and proceeds to administer the effleurage massage technique, ensuring the patient’s optimal comfort through appropriate positioning. The therapeutic maneuver commences with the synchronized movement of both palms, which have been generously anointed with olive oil. The therapeutic procedure commences with the gentle placement of both palms upon the patient’s dorsal region, initiating a soothing motion characterized by a sequential rubbing and gliding action from the back towards the sacrum. Subsequently, a delicate circular motion is executed, employing the palms, along the spinal region. Furthermore, a sweeping stroke is administered, commencing from the cranial region and extending all the way down to the coccyx, specifically targeting the lumbar region. Throughout this therapeutic intervention, utmost consideration is
given to ensuring the patient's comfort and well-being. The administration of this therapeutic intervention occurs for a duration exceeding 20 seconds or specifically timed to coincide with the occurrence of contractions.

As per scholarly investigations, the technique of massage effleurage emerges as a noteworthy determinant in mitigating labor pain. This phenomenon operates on the principle that tactile stimulation engenders impulse fibers, which traverse the cerebral pathways. These fibers possess the remarkable ability to impede the transmission of pain signals, effectively closing the metaphorical gates through which the brain would otherwise receive such stimuli. This observation aligns with the principles elucidated in the scholarly work of Wulandari & Hiba (2015), specifically the Gate Control Theory. According to this theory, the experience of pain diminishes subsequent to the application of massage therapy. This phenomenon can be attributed to the fact that pain fibers transmit pain stimuli to the cerebral cortex via narrower neural pathways, resulting in slower transmission of sensations compared to the broader fibers, which facilitate faster sensory conduction. The intricate interplay between touch and pain is a fascinating phenomenon, wherein the sensation of touch is accompanied by the activation of pain receptors. This sensory information is then transmitted to the brain, where a remarkable process occurs: the gate in the brain is effectively closed, resulting in a regulated perception of pain intensity. It is within this neural framework that the brain imposes limitations on the magnitude of pain experienced. Massage therapy is a captivating intervention that has the potential to enhance the production of endorphins within the descending control system, thereby inducing a heightened sense of comfort for patients through the promotion of muscle relaxation. Massage therapy is a therapeutic practice that places a significant focus on manipulating the soft tissues of the body, regardless of their organization. This can be achieved through a variety of techniques, such as deliberate movements or gentle vibrations, and may involve the use of specialized tools or be performed solely with the therapist's hands.

The therapeutic practice of massage has been observed to have a profound impact on alleviating and pacifying the inherent tension that often accompanies the transformative stages of pregnancy and childbirth. The application of therapeutic touch to the areas encompassing the neck, shoulders, back, legs, and hands has been known to elicit a profound sense of comfort and relaxation. Engaging in a tender caress of the abdominal region can elicit a soothing sensation amidst the throes of contractions. The selection of an optimal approach for employing massage or touch during the labor process can be delineated as follows: the application of delicate tactile contact accompanied by rhythmic tapping, the implementation of assertive strokes, the utilization of massage techniques to alleviate tension in rigid musculature, and the administration of firm massage or friction on the dorsal region (Vebyola, 2019). This study aligns with the theoretical framework positing that massage, specifically effleurage, serves as a modality of skin stimulation employed during childbirth to effectively alleviate pain. According to the scholarly work of Puspitasari (2020), the application of massage effleurage during the labor process involves the gentle and delicate utilization of fingertips. The application of the effleurage technique on the skin elicits a cascade of neural impulses along the superficial nerve fibers. These nerve fibers, being of considerable size, effectively obstruct the transmission of pain signals to the brain by closing the metaphorical "gate." Consequently, the perception of pain undergoes a transformative shift due to the inhibitory effect induced by the skin stimulation associated with this technique.

The findings of Tri Handayani’s (2020) study, as cited in Fathia et al. (2023), reveal a notable alteration in pain levels experienced by primigravida patients during the initial stage of the active phase following the implementation of the effleurage massage technique.

**Analyzing the decrease in maternal pain scale during the latent phase before and after being given massage effleurage techniques in the delivery room RSIA Siti Khadijah**

The findings derived from the meticulous research and comprehensive analysis of the collected data pertaining to the impact of effleurage massage on labor pain during the initial stage of the latent phase have revealed a noteworthy outcome. It has been observed that, on average,
the respondents experienced a reduction in pain subsequent to the administration of effleurage massage. This empirical evidence substantiates the efficacy of effleurage massage in mitigating the perception and experience of labor pain. In the event of a multipara scenario, following a session of effleurage therapy, a discernible reduction in pain intensity was observed, manifesting as a mild decrease on the pain scale. In the context of Case II Primipara, a pain assessment was conducted, revealing a scale indicative of moderate to mild intensity.

This empirical investigation provides compelling evidence supporting the efficacy of massage effleurage in mitigating pain perception during the Latent phase of labor, specifically within the initial stage of labor. The findings presented align with the theoretical framework proposed by Tamsuri in the scholarly work of Setianto (2017). Tamsuri's theory posits that massage serves as an effective non-pharmacological approach for alleviating labor pain. Massage therapy is a widely employed technique that offers solace and respite to numerous women in the initial phases of childbirth. The practice under consideration involves the skilled manipulation of soft tissue in order to address a range of physical, functional, and occasionally psychological concerns.

Drawing upon Mander's assertion (2013) as cited in Sihite's recent publication (2021), it is posited that the primary function of massage therapy resides in its capacity to effectively "close the gate," thereby impeding the transmission of pain-inducing stimuli to the higher echelons of the central nervous system. In addition, the application of a compassionate and empathetic touch not only enhances the tactile stimulation but also fosters positive emotions, thereby reinforcing the efficacy of massage therapy in pain management. The provision of emotional support during the labor process can elicit a profound sense of pleasure, serving as a catalyst for the release of neurotransmitters within the limbic system. These neurotransmitters subsequently transmit signals to the amygdala, which acts as a relay station, facilitating the transmission of these signals to the hypothalamus. As a consequence, the ventromedial nucleus and its adjacent regions are stimulated, engendering a state of tranquility and serenity. The study conducted by Sheoran and Panchal (2015), as cited in Fathia et al. (2023), elucidated that effluarage demonstrates efficacy in mitigating the intensity of labor pain experienced by primigravida mothers during the active phase.

Based on the meticulous analysis conducted by the esteemed researcher, it can be confidently inferred that the application of massage effleurage yields a discernible impact in mitigating the intensity of labor pain experienced during the initial stage of the Latent phase in both primiparous and multiparous mothers. The maternal figure experiences an enhanced sense of nurturance, enabling her to effectively manage her discomfort in a state of tranquility and composure, thereby avoiding the recurrence of heightened apprehension and distress.

CONCLUSION

The results showed that in case I the pain scale before being given the effleurage technique with mild intensity at opening 3, and at opening 4 5 with moderate intensity, in case II Primipara the scale of mild pain at opening 3, moderate pain scale at opening 4, and at opening 5 with heavy intensity. The results of the study showed that in case I of multiparas after effleurage massage therapy, the pain scale decreased with mild intensity at opening 3 and 4 cm and at opening 5 with moderate intensity. Whereas in case II Primipara obtained a pain scale with mild pain intensity at opening 3 and 4 cm and at opening 5 with moderate pain intensity. From the results of the research and analysis before and after the intervention, it can be concluded that massage effleurage has an effect on reducing the scale of labor pain in women giving birth during the I RSIA Siti Khadijah.

SUGGESTION

Based on the research results and conclusions above, there are several things that can be suggested for the development of the results of this study. The suggestions are as follows:
Hospital

The results of this study can be used as an intervention in nursing care and midwifery care for pain management in labor.

For Further Research

The results of this study can be used as additional information to develop this research further so that we can conduct similar research using primigravida mothers because the pain level is higher than the multigravida mothers used in this study.

For the Nursing Profession

This research is expected to be able to add and enrich information for nursing, especially maternity nursing and can be used as a reference for non-pharmacological labor pain management in maternity nursing care for in-partu mothers who experience labor pain.

For Society

The results of this study provide information to the public that effleurage massage performed by husbands is effective in reducing labor pain and strengthening the bond between husband and wife in welcoming the birth of a child.

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