



THE EFFECT OF PRENATAL MASSAGE ON REDUCING BACK PAIN IN PREGNANT WOMEN IN THE THIRD TRIMESTER AT THE PEBAYURAN COMMUNITY HEALTH CENTER IN 2023

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Abstract

Background: Pregnancy is a natural physiological process that occurs in women. However, health workers, especially midwives, who help pregnant women must provide care that is in accordance with their needs and authority. Based on a preliminary study conducted at the Pebayuran Community Health Center, Bekasi Regency, there were 112 pregnant women and 37 (33%) of them were third trimester pregnant women who experienced back pain. . Based on the results of interviews with midwives on duty at the community health center, it was found that treatment of back pain in pregnant women in the third trimester was carried out by counseling that back pain that occurs is a normal condition experienced by pregnant women at advanced stages of pregnancy, from interviews with midwives at the community health center. stated that he had never had prenatal massage because pregnant women in the third trimester were afraid it would disrupt the development of the fetus. **Research Objective:** To determine the effect of prenatal massage on reducing back pain in pregnant women in the third trimester at the Pebayuran Community Health Center. **Research Method:** This research used quasi experimental with purposive sampling with a sample of 30 people. Data techniques include univariate analysis using frequency distributions and bivariate analysis using statistical calculations from the SPSS program. **Research Method:** This type of research is experimental research, namely research by carrying out experimental activities. The design used in this research is a pre-posttest control group design carried out at the Pebayuran Community Health Center involving pregnant women in the third trimester as research subjects, using statistical calculations from the SPSS program. **Research Results:** Based on the results of Bivariate Analysis with paired T-test with a sample size of 30 respondents (N=30), the data showed that T-Count (23.854) > T-table (0.462) and the p.Value (0.000) < alpha value (0.05) which means there is an influence between the back pain of pregnant women in the third trimester before and after being given prenatal massage at the Pebayuran Community Health Center **Conclusions and Suggestions:** After carrying out the Prenatal Massage, the majority of respondents who did not experience pain were 15 respondents (50.0%), 10 respondents had mild pain (33.4%), 5 respondents (16.6%) had moderate pain. .There is an influence between the back pain of pregnant women in the third trimester before and after being given prenatal massage at the Pebayuran Community Health Center.

Keywords: Prenatal message, Third Trimester Pregnant Women

Introduction

Pregnancy is a natural physiological process that occurs in women. However, health workers, especially midwives, who help pregnant women must provide care that is in accordance with their needs and authority. Therefore, midwives must understand the concept of pregnancy and provide appropriate guidance and care for pregnant women (Hatin EE. 2019).

According to Prawiroharjo (2017), discomfort in pregnancy according to gestational age, namely in TM I, the sensations include vaginal discharge, nausea, vomiting, dizziness/headaches, fatigue, insomnia, frequent urination, in TM II and TM III, the sensations include haemorrhoids, constipation, varicose veins, itching, heartburn, flatulence, and back pain. Back pain is a disorder of the bones and muscles of the lower back caused by an enlarged uterus resulting in a change in the curvature of the spine to hyperlordosis (Andarmoyo, 2017). This pain causes pregnant women to experience sleep disturbances which cause fatigue, irritability and discomfort. This causes the fetus to experience fetal distress where the mother's condition is closely related to the condition of the fetus she is carrying and hampers the mother's productivity (Mayonzo, 2019).

During pregnancy, important physiological and psychological changes occur to adapt the body to its normal task of providing support and nutrition for the fetus developing in the womb (Marni, 2017). In the third trimester of pregnancy, physiological changes occur in the musculoskeletal system, such as increased elasticity of connective tissue and muscles due to an increase in progesterone and other hormones. This can cause discomfort in the waist and joints, which is caused by shifts and changes in body structure (Megasan, Mirata, et al, 2015).

The musculoskeletal system also adapts to compensate for the weight gain of pregnant women which is centered in the stomach. This can result in altered body posture, which in turn can cause back pain due to the uterus pushing the body forward and causing lordosis (backward tilt) in the back (Megan, Mirato, et al, 2015).

According to Adriyani, M., Wirjatmadi, B (2016), back pain in the third trimester of pregnancy can also be caused by pressure on the ligaments and muscles around the spine due to hormonal changes. Increased levels of progesterone and estrogen weaken the ligaments and muscles to prepare the pelvis for labor, which can also cause lower back pain. Based on research conducted by Manyozo, Steven, D, et al (2019), lower back pain is generally experienced by most pregnant women, especially in the third trimester. Research results show that lower back pain is experienced by around 62% to 68% of pregnant women. In another study, Gharaibeh, et al (2018) found that around 76% of pregnant women experienced lower back pain. Research conducted by Arum Sariati (2017) on "The Effect of Endorphin Massage on Reducing Lower Back Pain for Pregnant Women in the Third Trimester in the Kabuh Community Health Center Area" showed that before the massage, almost half (45.7%) of the third trimester pregnant women experienced back pain on a scale of 4 (very painful), whereas after the massage, half (34.3%) of the third trimester pregnant women were on a scale of 2 (a little more painful).

The results of research conducted by Pangeti, Chriatiani Bumi et al (2022) show that there is a significant effect of giving prenatal massage to the back on the back pain of pregnant women in the third trimester. Lower back pain during pregnancy is caused by a variety of factors, including hormonal changes and stress on body structures. Women who have experienced back pain before have a higher risk of experiencing back pain during pregnancy. Therefore, it is important for midwives to understand the causes of low back pain and take appropriate steps to manage this pain (Intarti, Pusitasari, 2017).

If low back pain is not treated well, it can become chronic and increase the risk of postpartum pain. Therefore, appropriate treatment needs to be given to avoid prolonged lower back pain and slow down the

healing process (Wahyuni S, Akbar R, Evi N, 2016). Treatment for lower back pain during pregnancy can be divided into two types, namely pharmacological therapy and non-pharmacological therapy. One effective non-pharmacological approach is Prenatal Massage, which is done to reduce pain intensity, stimulate relaxation, and increase blood circulation. Prenatal Massage uses hand pressure on soft tissue, tendons, or ligaments without changing the position of the joint. However, it is important for midwives to understand the contraindications for Prenatal Massage in order to provide it safely and effectively (Fitria, Ika, A, 2019).

Prenatal Massage has been shown to be effective in reducing discomfort during pregnancy, including back pain. Apart from that, massage therapy can also be used to treat lower back pain in pregnancy (Urtnowska, K., Bulatowicz, I., Ludwikowski, G, 2018).

Based on a preliminary study conducted at the Pebayuran Community Health Center, Bekasi Regency, there were 112 pregnant women and 37 (33%) of them were third trimester pregnant women who experienced back pain. Based on the results of interviews with midwives on duty at the community health center, it was found that treatment of back pain in pregnant women in the third trimester was carried out by counseling that back pain that occurs is a normal condition experienced by pregnant women at advanced stages of pregnancy, from interviews with midwives at the community health center. stated that he had never had prenatal massage because pregnant women in the third trimester were afraid it would disrupt the development of the fetus.

Based on the background description above, researchers are interested in conducting research on the Effect of Prenatal Back Massage on the Back Pain of TM III Pregnant Women at the Pebayuran Community Health Center, Bekasi Regency.

Research Purposes

To determine the effect of prenatal massage on reducing back pain in pregnant women in the third trimester at the Pebayuran Community Health Center.

Research Methods

This type of research is experimental research, namely research by carrying out experimental activities to determine the symptoms or effects that arise as a result of certain treatments or experiments. The special characteristic of experimental research is that there is an experiment or intervention or trial. With a research sample of 30 respondents, the design used in this research was a pre-posttest control group design carried out at the Pebayuran Community Health Center involving pregnant women in the third trimester as research subjects. Pre-posttest design is a type of experimental research design. This design consists of two stages, namely pretest and posttest. In the pretest stage, data is collected from research subjects before being given treatment. At the posttest stage, data was collected again from research subjects after being given treatment. Based on the background description above, researchers are interested in conducting research on the Effect of Prenatal Back Massage on the Back Pain of TM III Pregnant Women experimental activities

Research Result

5.2. Analisa Univariate

5.2.1. Distribusi Frekuensi Nyeri Punggung Ibu Hamil Trimester III Sebelum diberikan Prenatal Massage

Tabel 5.1.

Nyeri Punggung Ibu Hamil Trimester III	Frekuensi	Persentase
Tidak nyeri	0	0
1-3: nyeri ringan	0	0
4-6: nyeri sedang	0	0
7-9: nyeri berat	12	40,0
10: nyeri sangat Berat	18	60,0
Total	30	100

Based on the research results in table 5.1. The results obtained from 30 respondents who conducted research on low back pain of pregnant women in the third trimester before prenatal massage were carried out were mostly respondents who experienced pain on a scale of 10 (very severe), namely 18 respondents (60.0%) and 12 respondents (40.0%). with a pain scale of 7-9(severepain).

5.2.2. Distribusi Frekuensi Nyeri Punggung Ibu Hamil Trimester III Setelah diberikan Prenatal Massage

Tabel 5.2.

Nyeri Punggung Ibu Hamil Trimester III	Frekuensi	Persentase
Tidak nyeri	15	50,0
1-3: nyeri ringan	10	33,4
4-6: nyeri sedang	5	16,6
7-9: nyeri berat	0	0,0
10: nyeri sangat Berat	0	0,0
Total	30	100

Based on the research results in table 5.1. The results obtained from 30 respondents who conducted research on low back pain of pregnant women in the third trimester after prenatal massage were mostly among respondents who did not experience pain, namely 15 respondents (50.0%), mild pain as many as 10 respondents (33.4%), pain. while there were 5 respondents (16.6%)

5.3. Analisa Bivariate

5.3.1. Uji Normalitas Nyeri Punggung Ibu Hamil Trimester III Sebelum dan Setelah diberikan Prenatal Massage

Tabel 5.3.

Nyeri Punggung Ibu Hamil Trimester III	Mean	Standart Deviation	Kolmogrov-Smirnov	Signifikan Symp
Pretes	0,336	4,711	0,445	0,647
Posttes	0,502	7,504	0,256	0,787

Based on the results of the normality test of respondents in this study, significant Symp results were obtained, namely > 0.05 , so it was stated that the residual value in this study had a normal distribution.

5.3.2. Uji Paired T Test Nyeri Panggang Ibu Hamil Trimester III Sebelum dan Sesudah diberikan Prenatal Massage di Puskesmas Pebayuran

Tabel 5.4.

Variabel	Mean	N	T-Tabel	T-Hitung	P-Value
Pretest	1,14	30	0,462	23,854	0,000
Posttest	29,5				

Based on the results of Bivariate Analysis with paired T-test with a sample size of 30 respondents (N=30), the data showed that T-Count (23.854) > T-table (0.462) and the p.Value (0.000) < alpha value (0.05) which means there is an influence between the back pain of pregnant women in the third trimester before and after being given prenatal massage at the Community Health Center. Pebayuran

Discussion

Based on the results of Bivariate Analysis with paired T-test with a sample size of 30 respondents (N=30), the data showed that T-Count (23.854) > T-table (0.462) and p.Value (0.000) < alpha value (0.05) which means there is an influence between the back pain of pregnant women in the third trimester before and after being given prenatal massage at the Pebayuran Community Health Center.

The results of the normality test for respondents in this study showed significant Symp results, namely > 0.05, so it was stated that the residual values in this study had a normal distribution.

This research is in line with Pangesti's (2022) research on the Effect of Prenatal Massage on the Back Pain Intensity of TM III Pregnant Women at Samudra Mom Kids SPA, Sragen Regency. The results of the research showed that the normality test obtained a pretest and posttest p value < 0.05 so the data was not normally distributed, so it was used. non-parametric statistical test, namely the Wilcoxon test. The Wilcoxon test results show p value 0.003 < 0.05 so there is an influence of Prenatal Massage on back pain in pregnant women TM III

The results of this study are in line with research conducted by Pangeti, Chriatiani Bumi et al (2022) showing that there is a significant effect of giving prenatal massage to the back on the back pain of pregnant women in the third trimester.

This research is also in line with research conducted by Lusi Haryanti (2023) entitled the effect of prenatal massage on the intensity of lower back pain in third trimester pregnant women in Gedongan village, sub-district. tray, the results of the study show that there is a significant influence between prenatal massage with back pain in third trimester pregnant women in Gedongan Village, Baki District, Sukoharjo Regency (p value 0.000 < 0.05). In research conducted by Oksi Trijayanti (2023) entitled The Effect of Prenatal Massage on Back Pain in Pregnant Women in the Third Trimester at the Jetak Community Health Center, Getasan, Semarang, Central Java. This research shows that the results of the Wilcoxon Test obtained p value = .000. < 0.05 obtained a Z value of 5.224 s.

Pregnancy is a period that starts from conception until the birth of the fetus. The third trimester of pregnancy is the last 3 months of pregnancy starting from the 28th week to the 40th week. (Sanjaya, 2020)

The process of pregnancy is often defined as the union of an egg and sperm, which marks the beginning of a pregnancy, and this event is not an isolated thing but is part of a series of events that surround it. (Purnamasari & Widyawati, 2021)

Low back pain negatively impacts a pregnant woman's ability to perform daily activities such as self-care, walking, sitting and involvement in sexual activity. These functional limitations are also associated with reduced quality of life and reduced productivity among pregnant women. Back pain in pregnant women who enter the third trimester when carrying out too much and excessive physical activity, usually pregnant women do more housework and have to work, making the mother feel tired and lack of adequate rest (Sanjaya, 2020)

Prenatal massage is a solution for low back pain in pregnant women, massage movements for pregnant women in the form of stroking and pressing in a way that does not stimulate contractions in order to reduce pain, produce relaxation and increase circulation and is one method that influences sleep pattern disorders in primigravida pregnant women is with the help of loving massage therapy in pregnancy and to bring about wellness for body and mind. (Dewiani et al., 2022). Massage given to the back of pregnant women can help reduce back pain and help stimulate endorphin hormones so that they can increase relaxation. Systematically, pregnant women who feel relaxed will improve their body health. (Suarniti et al., 2019)

Treatment for lower back pain during pregnancy can be divided into two types, namely pharmacological therapy and non-pharmacological therapy. One effective non-pharmacological approach is Prenatal Massage, which is done to reduce pain intensity, stimulate relaxation, and increase blood circulation. Prenatal Massage uses hand pressure on soft tissue, tendons, or ligaments without changing the position of the joint. However, it is important for midwives to understand the contraindications for Prenatal Massage in order to provide it safely and effectively (Fitria, Ika, A, 2019).

In the opinion of researchers, Prenatal Massage performed on pregnant women in the third trimester can reduce the level of back pain. The results of the analysis above show that Prenatal Massage on the back is very effective in reducing back pain for pregnant women in the third trimester. Because Prenatal Massage on the back has a non-pharmacological effect to reduce pain during and before delivery which is not harmful to the mother or fetus. When a pregnant woman does it regularly (2-3 times) every week during pregnancy, it can improve sleep quality, stimulate the release of endorphins and reduce adrenaline hormones so that it can increase feelings of relaxation and calm.

Conclusions

1. Before the Prenatal Massage was carried out, the majority of respondents experienced pain on a scale of 10 (very severe), namely 18 respondents (60.0%) and 12 respondents (40.0%) with a pain scale of 7-9 (severe pain).
2. After carrying out the Prenatal Massage, the majority of respondents who did not experience pain were 15 respondents (50.0%), 10 respondents had mild pain (33.4%), 5 respondents (16.6%) had moderate pain.
3. There is an influence between the back pain of pregnant women in the third trimester before and after being given prenatal massage at the Pebayuran Community Health Center.

Suggestion

For Midwifery Services

Can be used as education for independent midwifery care as well as education by providing learning and practice in accordance with good and correct breastfeeding techniques to help patients reduce low back pain in third trimester pregnant women.

For Peayuran Health Center

Hospitals as health service facilities can provide education through health education about the methods or techniques of Prenatal Massage for pregnant women in the third trimester with better and more structured implementation and utilizing media in accordance with current developments.

For Further Researchers

This research can be input and inspiration in conducting further research and conducting the same research with different variables and methods.

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