

Midwifery Care on Pregnancy Exercise Support for Mrs. I in the Third Trimester to Reduce Lower Back Pain

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ABSTRACT

Background: Discomfort that usually occurs in third trimester pregnant women is frequent urination, soreness or pain, constipation, leg cramps, respiratory problems and edema. Low back pain is one of the discomforts that pregnant women often experience in the third trimester. The growth of the uterus causes the body's center of gravity to shift forward. Therefore, pregnant women need to adjust their standing position. This means that expectant mothers must rely on their muscle strength, deal with weight gain, changes in joint relaxation, fatigue, and also pay attention to their pre-pregnancy posture. The need for pregnancy exercise is very important in strengthening and maintaining the elasticity of the abdominal wall muscles, ligaments and pelvic floor muscles associated with the birthing process. Pregnancy exercise can also help relieve low back pain which is often experienced by pregnant women because it involves movements that strengthen the abdominal muscles. *Method:* A case study report with descriptive method, location at Mrs. I Pekaja Village Rt 02/03 Kalibagor District Banyumas Regency. The subject of the case study is Mrs. I is 33 years old G2P1A036 weeks gestation with low back pain. The case study time is January 19, 2023. Data analysis from interviews was conducted to collect primary data, and documentation and literature studies were conducted to collect secondary data. *Results:* In general, Mrs. I was a normal pregnancy, and Mrs. I is a normal thing to happen in the third trimester of pregnancy. *Conclusion:* Doing pregnancy exercises at least twice a week can reduce pain in the lower back.

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1. INTRODUCTION

Pregnancy is a biological process that begins with the union of the egg and sperm cells, leads to fertilization, followed by implantation, and ends with the birth of the fetus (Syaiful et al., 2019) dan (Yuliani, Musdalifah, and Suparmi, 2017)^[7]. The pregnancy process is divided into three trimesters, namely the first trimester lasts from 0-12 weeks, the second trimester lasts from 12-28 weeks, and the third trimester lasts from 28-40 weeks (Yuliani, Musdalifah, dan Suparmi, 2017)^[7].

Discomfort that usually occurs in third trimester pregnant women is frequent urination, soreness or pain, constipation, leg cramps, respiratory problems and edema (Serri H, 2013)^[4]. Low back pain is one of the discomforts that pregnant women often experience in the third trimester. According to research conducted

(Fitriani, 2018), around 70% of pregnant women often experience pain in the waist area or low back pain (LBP) which may occur since the beginning of the trimester, and experience peaks when entering the second and third trimesters (Wantini, 2021)^{[1][2]}.

The definition according to the International Society for the Study of Pain is "sensory experiences as well as unpleasant emotions that result in damage to tissues, both actual and potential". Pain causes a person to experience fear and anxiety, increasing stress and experiencing drastic physiological changes during pregnancy. Pain and anxiety synergize and worsen each other (Purnamasari, 2019)^[8].

During pregnancy, as the uterus grows, the body's center of gravity shifts forward. Therefore, pregnant women need to adjust their standing position. This means that expectant mothers must rely on their muscle strength, deal with weight gain, changes in joint relaxation, fatigue, and also pay attention to their pre-pregnancy posture. If posture is not optimal, this can cause extra strain and fatigue on the body, especially in the spine, which can eventually cause pain or discomfort in the pregnant woman's waist.

The basic needs of third trimester pregnant women besides nutrition, adequate rest, elimination, sex, and personal hygiene are also needed for sports such as pregnancy exercise (Fox, 2018; Gamelia, Sistiarani, & Masfiah, 2013)^[5]. Pregnancy exercise is a form of movement therapy given to pregnant women to prepare themselves physically and mentally for the birth process. Every pregnant woman really needs this pregnancy exercise, because pregnancy exercise has the benefit of maintaining health and fitness, and allows pregnant women to remain active in carrying out their daily activities. This can help reduce the level of stress and anxiety that pregnant women may experience before delivery (Bartini, 2012)^{[6][9]}.

Pregnancy exercise also plays a role in strengthening and maintaining the elasticity of the muscles of the abdominal wall, ligaments and pelvic floor muscles associated with the delivery process. This exercise aims to increase core strength and stability, which can support spinal health. Having good body strength can improve individual balance and stability and reduce the risk of spinal injuries or falls during pregnancy. Pregnancy exercise can also help relieve low back pain which is often experienced by pregnant women because it involves movements that strengthen the abdominal muscles (Megasari, 2015)^{[3][10]}.

2. RESEARCH METHOD

This scientific paper uses a case study report with descriptive methods, located at Mrs. I Pekaja Village Rt 02/03 Kalibagor District Banyumas Regency. The case study subject is Mrs. I is 33 years old G2P1A0 36 weeks gestation with low back pain problems. The time for the case study is January 19 2023. Interviews were conducted to collect primary data, and documentation and literature studies were conducted to collect secondary data. The inclusion criterion for this case is the availability of necessary medical devices such as sphygmomanometers, thermometers, and metylins. As for the exclusion criterion, there is a relationship between the condition of the body and the state that is being experienced and the willingness of the client to participate.

3. RESULT AND DISCUSSIONS

In midwifery care observation for a pregnant woman with a problem, primary data collection was carried out, namely Mrs. I, 33 years old, G2P1A0, 36 weeks gestation. Subjective data from the mother indicate pain in the lower back. Objective data obtained from the patient are as follows: general condition is good, consciousness is *compos mentis*, blood pressure: 110/60 mmHg, pulse: 83 beats per minute, temperature: 36.5°C, respiration: 20 breaths per minute, weight: 62 kg. On palpation examination, the following results were obtained: Leopold I: The upper part is soft, round, not protruding (buttocks), Leopold II: The left part feels small (extremities), the right part feels long and firm (back), Leopold III: It feels round, firm, and protruding (head), Leopold IV: The head is already engaged in the pelvis (divergent), Fundal Height (TFU): 29 cm, Estimated Fetal Weight (TBJ): 3100 grams, and on auscultation, the fetal heart rate (DJJ) is 140 beats per minute with a regular rhythm.

Based on the results of Leopold's palpation examination and 36 weeks of gestation, a diagnosis can be made that Mrs. I is 33 years old G2P1A0 with a normal pregnancy. To manage the problems experienced by Mrs. I carried out several actions, namely informing the mother about the results of the examination that had been carried out that the condition of the mother and fetus were normal and healthy, informing the mother of health education about discomfort in the third trimester of pregnancy, informing the mother of health education about danger signs and signs of labor. Apart from that, it is recommended for mothers to do pregnancy exercises to help reduce low back pain, such as squatting and tilting the pelvis. Based on the evaluation/management results, the results were that the mother did pregnancy exercises at least twice a week and the low back pain was slightly reduced.

Based on the above data, the theory and field practice are in accordance. Mrs. I's case did not present an emergency condition. Consequently, no immediate treatment was administered. Therefore, the theoretical and practical aspects demonstrate congruence.

4. CONCLUSION AND RECOMMENDATION

Conclusion

Based on the discussion regarding the management of Mrs. I, 33 years old G2P1A0, 36 weeks gestation with pain in the lower back in the village of Desa Pekaja Rt 02/03 Kalibagor District, Banyumas Regency using midwifery management according to Varney with the SOAP documentation method, so the authors can draw the following conclusions:

From the research conducted by the author, subjective data was obtained that the mother said she had pain in the lower back. Objective data obtained from the patient are as follows: general condition is good, consciousness is *compos mentis*, blood pressure: 110/60 mmHg, pulse: 83 beats per minute, temperature: 36.5°C, respiration: 20 breaths per minute, weight: 62 kg. On palpation examination, the following results were obtained: Leopold I: The upper part is soft, round, not protruding (buttocks), Leopold II: The left part feels small (extremities), the right part feels long and firm (back), Leopold III: It feels round, firm, and protruding (head), Leopold IV: The head is already engaged in the pelvis (divergent), Fundal Height (TFU): 29 cm, Estimated Fetal Weight (TBJ): 3100 grams, and on auscultation, the fetal heart rate (DJJ) is 140 beats per minute with a regular rhythm.

From the subjective and objective data above, based on the results of Leopold's palpation examination and 36 weeks of gestation, a diagnosis can be made that Mrs. I is 33 years old G2P1A0 with a normal pregnancy. To manage the problems experienced by Mrs. I carried out several actions, namely informing the mother about the results of the examination that had been carried out that the condition of the mother and fetus were normal and healthy, informing the mother of health education about discomfort in the third trimester of pregnancy, informing the mother of health education about danger signs and signs of labor. Apart from that, it is recommended for mothers to do pregnancy exercises to help reduce low back pain, such as squatting and tilting the pelvis. Based on the evaluation/management results, the results were that the mother did pregnancy exercises at least twice a week and the low back pain was slightly reduced.

Recommendation

Based on the case study that has been carried out, the authors can give suggestions as follows:

1. For Authors
As a medium to assist writers in implementing midwifery care according to Midwifery Service Standards in cases of low back pain in Trimester 3 pregnancy with assistance with pregnancy exercise.
2. For Field
As a material for health services and to improve the quality and quantity of midwifery care for pregnant women with cases of low back pain using pregnancy exercise assistance.
3. For Clients
As an effective way to reduce pain in the lower back.
4. For Institutions
As a medium to increase knowledge, especially in terms of providing pregnancy exercise assistance in cases of low back pain in third trimester of pregnancy.

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