

MIDWIFERY CARE FOR LEG CRAMPS IN THE THIRD TRIMESTER OF PREGNANCY

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Abstract

When pregnancy occurs, there are several changes, including physiological changes and psychological changes. These changes occur due to the presence of the hormone estrogen and progesterone during pregnancy. One of the effects of physiological changes includes leg cramps, this condition causes discomfort and if left unchecked has further impacts such as disrupting the mother's rest pattern as a result of leg cramps. The aim of this care is to carry out midwifery care during pregnancy appropriately, so that any discomfort that arises can be resolved. The research method used is descriptive research and uses a case study approach and research studies using Midwifery Care and documented in the form of SOAP (Subjective, Objective, Analysis, Management). The care provided is in the form of education about the various discomforts of the third trimester and how to deal with leg cramps.

Keywords: Physiological changes, Leg cramps, how to overcome

1. INTRODUCTION

Pregnancy is a period of fetal growth and development starting from the union of spermatozoa and ovum until the birth of the product of conception or fetus. This pregnancy lasts 280 days (40 weeks or the same as nine months and seven days) (Ratnawati, 2020). Pregnancy is a process that begins with the meeting of ovum cells and sperm cells in the uterus, specifically in the fallopian tubes. After that, the conception process occurs and nidation occurs, then implantation occurs in the uterine wall, specifically in the endometrium layer, which occurs on the sixth and seventh days after conception (Robert & Brown, 2020). During pregnancy, several changes occur, including physiological and psychological changes. As the fetus develops, the mother's body will also experience changes in order for the fetus to grow and develop (Fitriani, 2022).

Changes that occur due to changes in the levels of the hormones estrogen and progesterone during pregnancy. Changes occur comprehensively, including changes in the reproductive system, endocrine system, immune system, urinary system, digestive system, musculoskeletal system, integumentary system, cardiovascular system, respiratory system, as well as changes in body weight (Ariana, 2016). Physiological changes that occur can cause discomfort in the third trimester of pregnancy, including frequent urination, varicose veins, hemorrhoids, shortness of breath, edema or swelling, cramps in the legs, as well as sleep disturbances and fatigue. The incidence of leg cramps in pregnancy is 21% in the 1st trimester, and 57% in the 2nd trimester, and 75% in the 3rd trimester. The risk of leg cramps in subsequent pregnancies increases by 30-40% in mothers who have a history of leg cramps in previous pregnancies (Natalia & Handayani, 2022). Discomfort in pregnant women is

physiological, but if left alone it will cause further impacts both physically and psychologically for the mother or fetus. Physically, the mother will feel uncomfortable and her activity patterns will also be disrupted due to the onset of cramps. And psychologically the mother will also feel uncomfortable with her pregnancy and will think that her pregnancy is very difficult to go through. Efforts that can be made include providing education or counseling regarding discomfort in the third trimester and how to deal with complaints that arise.

Leg cramps in pregnant women are contractions that appear in the leg muscles and are a complaint often experienced by pregnant women. This disorder can cause pain that is very pressing on the calf or sole of the foot. These symptoms are usually felt at night and improve in the morning. The cause is thought to be pregnancy hormones, lack of calcium, fatigue, pressure from the uterus on the muscles, lack of movement so that blood circulation is not smooth (Bloom & Reenen, 2020).

Counseling during pregnancy is part of midwifery services. According to the Republic of Indonesia Minister of Health Regulation No. 28 of 2017, the second part is stated in article 18 that in carrying out midwifery practice, midwives have the authority to provide maternal, child and reproductive health services as well as family planning. In article 19 paragraphs 2 and 3 of the Republic of Indonesia Minister of Health Regulation No. 28 of 2017, it is explained that maternal health as referred to in article 18 is provided in the period before pregnancy and during pregnancy. Maternal health services include pre-pregnancy, antenatal counseling in normal and physiological pregnancies (Bashoriyah et al., 2023). This research was carried out with the aim of providing midwifery care for Mrs. S, 27 years old G1P0A0, 38 weeks pregnant, who experienced leg cramps at the Fauziah Clinic.

2. METHODOLOGY

The method used is a qualitative method, which is a research method carried out with the main aim of describing an event which is carried out systematically and places greater emphasis on facts rather than conclusions. This research uses a descriptive type of research, with a case study approach and the research study used is Midwifery Care and is documented in the form of SOAP (Subjective, Objective, Analysis, Management). The subject of this research on midwifery care was Mrs. S G1P0A0, 27 years old, 38 weeks pregnant, who experienced leg cramps at the Fauziah Clinic, underwent treatment in January 2024.

3. RESULTS

From the results of the anamnesis carried out on Mrs. S, the following complaints were obtained:

3.1 Leg Cramps:

From the results of the anamnesis conducted on Mrs. S, complaints such as leg cramps were obtained. The following is Mrs. S statement regarding the complaints experienced:

3.2 Subjective:

Subjective data found during the first ANC visit on January 5, 2024 at the Clinic, the mother said she wanted to check her pregnancy in order to find out the condition of the mother and her fetus. When anamnesis was performed on Mrs. S, the results were that the mother complained that sometimes both of her legs cramped when used to walk. Leg cramps are sudden contractions of the calf muscles or the muscles of the soles of the feet.

3.3 Objective:

On examination, the results obtained were that the mother's general condition was good, compositus consciousness, vital signs with the results of BP110/70 mmhg, N 82x/minute, S 36.8°C, RR 20x/minute, TB 153 cm, BB before pregnancy 55 kg, BB during pregnancy 67.5 kg, LILA 26 cm. Abdominal palpation Leopold I: TFU 25cm 3 fingers below the px (xyphoid process), in the fundus it feels round, soft, not bouncy (buttocks), Leopold II: the right side feels hard, elongated like a board (back), the left side feels the extremity or the smallest part of the fetus, Leopold III: the round, hard, bouncy part (head) is felt, Leopold IV: divergent, 4/5, DJJ: 123x/minute. Also, an examination of the genitals was carried out with the results that the vulva and vagina were clean, there was no vaginal discharge and there was no swelling of the Bartholin's glands. The analysis in this case is Mrs. S G1P0A0, 38 weeks of gestation with leg cramps. The care that will be given in this case is to provide education or counseling related to the discomfort of the third trimester and how to deal with the complaints that arise.

4. CONCLUSIONS

Leg cramps are sudden contractions of the calf muscles or the muscles of the soles of the feet. Muscles themselves are a part of the body that functions as a means of locomotion. Leg cramps are often complained of by pregnant women, especially in the third trimester, a form of disorder in the form of spasms in the calf muscles or the muscles of the soles of the feet. Leg cramps tend to attack at night for 1-2 minutes. Although short, it can interfere with sleep, because of the pain that presses on the calves or soles of the feet (Emilia, 2020).

Initial treatment for leg cramps can be done by encouraging mothers to soak their feet in warm water, do regular pregnancy exercises, and get enough rest. In a previous study by (Hutagaol et al., 2023) Jurnal Riset Kebidanan Indonesia tahun 2022, hydrotherapy or soaking feet in warm water was able to reduce symptoms of leg cramps in pregnant women in the third trimester. Hydrotherapy is a scientific treatment using warm water to cure and reduce pain and various minor illnesses in different ways. Soaking feet in warm water is done at a temperature of 37°C to 39°C. Soaking feet in warm water can cause vasodilation of blood vessels which causes blood flow to become smooth so that muscles can relax.

In a study conducted by (Bashoriyah et al., 2023) Jurnal Penelitian Pendidikan Bidan tahun 2023, prenatal gymnastics can also reduce the frequency of leg cramps. In addition, the movements arranged in prenatal gymnastics are designed to eliminate anxiety that arises before childbirth because they contain elements of relaxation that can stabilize the emotional condition of pregnant women.

Quoted from research (Rumanis et al., 2020) *Indonesian Journal of Innovation Studies* tahun 2020, said that leg cramps can be overcome by getting enough rest. This method successfully reduces and relieves leg cramps, in theory it is stated that reducing milk consumption (high in phosphorus content), dorsiflexion exercises on the feet to stretch the muscles that are under pressure, warming up the muscles of the legs that are cramping can help relieve leg cramps. On subsequent visits, leg cramps that usually arise are rarely felt again.

The problem of leg cramps that arose has been given care by providing education or counseling related to the discomfort of the third trimester, especially leg cramps and how to overcome them. It can be concluded that, from subjective and objective data, Mrs. S experienced leg cramps. The diagnosis of the problem is also in accordance with the case. From the care given, the problems that arose can be resolved well.

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6. REFERENCES

- [1] Ariana, R. (2016). *Adaptasi Anatomi Dan Fisiologi*.
- [2] Bashoriyah,M.,Rachmawati,F.,&Kayati.(2023).*Hubungan Senam Hamil Dengan Frekuensi Nyeri Kram Tungkai Pada Hamil Trimester III*. Jurnal Penelitian Pendidikan Bidan,1(2),26–32.
- [3] Bloom, N., & Reenen, J. Van. (2020). *Kram Kaki Pada Trimester ke III*. NBER Working Papers, 89.
- [4] Emilia, F.(2020).*Asuhan Kebidanan Dengan Kram Kaki*. Kebidanan, 6, 5–9.
- [5] Fitriani,A.etal.(2022).*Buku Ajar Asuhan Kehamilan DIII Kebidanan Jilid II*. www.mahakarya.academy
- [6] Hutagaol,I.O.,Karmila,C.,Lestari,K.F.,Mujiyanti,C.,&Situmorang,B.H.L.(2023).*Pengaruh Teknik Relaksasi Rendam Air Hangat Terhadap Nyeri Kram Kaki Pada Ibu Hamil*. Jurnal Riset Kebidanan Indonesia, 6(2), 90–95.
- [7] Natalia,L.,&Handayani,I.(2022).*Ketidaknyamanan Kehamilan Trimester III*. Jurnal Kesehatan Siliwangi, 3(2), 302–307.
- [8] Ratnawati.(2020).*Konsep Dasar Kehamilan. Paper Knowledge.Toward a Media History of Documents*, 7–20.
- [9] Robert,B.,&Brown,E.B.(2020).*Buku Ajar Asuhan Kehamilan (Issue 1)*.
- [10] Rumanis,A.R.,Cholifah,C.,&Kusumawardani, P.A. (2020). *Management of Pregnant Women with Leg Cramps in Maternity Hospital*. Indonesian Journal of Innovation Studies, 10, 1–9.