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Maternal Care for Pregnancy in Mrs. Y Third Trimester G1p0a0 Pregnant 33 Weeks with The Risk of Chronic Energy Deficiency

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Abstract. Chronic Energy Deficiency (CED) is a condition in which a pregnant woman experiences long-term or prolonged malnutrition (calories and protein). The risk of Chronic Energy Deficiency (CED) refers to a state where an individual is prone to suffering from CED. A person is said to be at risk of CED if their MUAC (Mid-Upper Arm Circumference) is less than 23.5 cm. Chronic energy deficiency in pregnant women can also be understood as a condition where the mother experiences a lack of protein and energy intake during pregnancy, which can lead to health issues for both the mother and the fetus. The aim of this research is able to provide maternity care for "Mrs. Y G1P0A0 at 33 weeks of pregnancy in accordance with maternity service standards. This research is a descriptive qualitative study using a case study approach. Meanwhile, the design employs field observational methods. methods were carried out through interviews and analysis of midwifery documentation. Data analysis was obtained from case study research by creating a narrative from the results of observations and descriptive analysis. Chronic energy deficiency in pregnant women can lead to low birth weight (LBW), premature delivery, and an increased risk of complications during pregnancy and childbirths. Y has been provided with nutrition information and iron tablet supplementation, nutritional counseling for pregnant women, balanced nutrition campaigns, promotion of family nutrition awareness, activities for pregnant women classes, and enhancing the organization of antenatal activities at community health centers to improve the condition of chronic energy deficiency in pregnant women.

Keywords: Pregnancy, Chronic Energy Deficiency

1. INTRODUCTION

Pregnancy is a physiological process that brings about changes in both the mother and her environment. With pregnancy, a woman's body undergoes fundamental changes to support the development and growth of the fetus in the womb during the pregnancy process. Pregnancy, childbirth, and delivery are physiological processes, but complications can arise at any time and can have serious impacts on both the mother and the fetus. The term high-risk pregnancy is used when physiological or psychological factors significantly increase the likelihood of mortality or morbidity for the mother or fetus[1].

The World Health Organization (WHO) estimates that each year, around the world, 303,000 women die during pregnancy and childbirth, 2.7 million babies die within the first 28 days of life, and 2.6 million babies are stillborn. The Chair of the Scientific Committee of the International Conference on Indonesia Family Planning and Reproductive Health (ICIFPRH) stated that as of 2019, Indonesia's maternal mortality rate (MMR) remains high at 305 per 100,000 live births. In fact, Indonesia's target for MMR in 2015 was 102 per 100,000 live births. Maternal death refers to the death of a mother due to events related to pregnancy, childbirth, and the postpartum period. The maternal mortality rate

reflects the health status of the community, particularly women's health. This rate can illustrate nutritional status, accessibility and quality of healthcare services, as well as indicate low socioeconomic conditions[1].

Chronic Energy Deficiency (CED) is a condition in which a pregnant woman experiences long-term or prolonged malnutrition (calories and protein). The risk of Chronic Energy Deficiency (CED) refers to a state where an individual is prone to suffering from CED. A person is said to be at risk of CED if their Mid-Upper Arm Circumference (MUAC) is less than 23.5 cm. Chronic Energy Deficiency in pregnant women can also be understood as a condition where the mother experiences a lack of protein and energy intake during pregnancy, which can lead to health issues for both the mother and the fetus[2].

Pregnant women who experience chronic energy deficiency (CED) will face several issues for both the mother and the fetus. In pregnant women, it causes risks and complications such as anemia, bleeding, abnormal weight gain, and susceptibility to infectious diseases. The influence on the labor process results in it becoming difficult and prolonged, premature labor, increased bleeding, and a rise in deliveries by cesarean section. Chronic Energy Deficiency (CED) in pregnant women affects the growth process of the fetus and can lead to miscarriage, stillbirth, asphyxia, low birth weight, and even death[3].

Factors that influence the occurrence of Chronic Energy Deficiency (CED) in pregnant women include age, infectious diseases, pregnancy spacing, level of knowledge, and parity. In general, the causes of malnutrition in pregnant women are due to the consumption of food that does not meet nutritional requirements. Low levels of knowledge lead to mothers not understanding how to fulfill the nutritional needs required during their pregnancy[4]. (Kemenkes, 2022). Pregnant women who experience the risk of Chronic Energy Deficiency (CED) will face several issues, both for themselves and for the fetus. Chronic Energy Deficiency (CED) in pregnant women can lead to risks and complications for the mother, including: anemia, bleeding, abnormal weight gain, and susceptibility to infectious diseases. Meanwhile, the influence of Chronic Energy Deficiency (CED) on the childbirth process can lead to difficult and prolonged labor, premature delivery, postpartum bleeding, as well as an increased tendency for cesarean deliveries. Pregnancy-related Chronic Energy Deficiency (CED) can affect the growth process of the fetus and may lead to miscarriage, abortion, stillbirth, neonatal death, congenital defects, anemia in infants, intrapartum asphyxia (intrauterine death), and low birth weight (LBW)[5].

According to data from the WHO (World Health Organization), 40% of maternal deaths in developing countries are related to Chronic Energy Deficiency[6]. Chronic Energy Deficiency is one of the nutritional issues faced by pregnant women and is one of the most common nutritional disorders among expectant mothers. Chronic Energy Deficiency (CED) can occur due to a prolonged deficiency in food intake, specifically over a period of years[7]. Chronic energy deficiency in pregnant women can also be understood as a condition where the mother experiences a lack of protein and energy intake during pregnancy, which can lead to health issues for both the mother and the fetus[2].

The Macro Nutritional Improvement Program, chronic energy deficiency is a condition where a mother suffers from long-term food shortages that lead to health issues for the mother, resulting in her nutritional needs during pregnancy being increasingly unmet. There are several factors that affect a mother's nutritional needs being unmet, such as poor food intake and infectious diseases. Pregnant women who have adequate food intake but suffer from illness will experience malnutrition, and those with insufficient food intake will have weakened immune systems, making them more susceptible to illness. Additionally, low levels of maternal education, high parity, or having too many pregnancies can deplete the body's nutritional reserves. Closely spaced births prevent mothers from having the opportunity to recover after childbirth. Pregnant women who work require more energy because their energy reserves are divided among themselves, the fetus, and their work. This opinion is supported by research findings that family opinions influence the nutritional status of pregnant women[8].

Prevention measures that can be taken include strengthening the quality of healthcare services, providing and enhancing educational media both in visual and electronic formats, and expanding educational activities to improve nutritional intake. The provision of supplementary food in the form of biscuits and iron tablets is very important, as well as encouraging pregnant women to consume nutritious foods, especially iron, to produce red blood cells, such as red meat, liver, legumes, spinach, and fish[9].

The percentage of pregnant women with chronic energy deficiency (CED) in Indonesia is 18.2%. Meanwhile, in Central Kalimantan Province, the percentage of pregnant women with CED is 11.39%, ranking among the top 15 cases of CED in Indonesia[10]. The number of cases of pregnant women with chronic energy deficiency (CED) in Palangka Raya City has fluctuated from year to year. In 2019, there were 541 cases of pregnant women with CED (Central Statistics Agency, 2020). The highest number of CED cases in Palangka Raya City was in the Jekan Raya District, with a total of 173 cases.

From the above points, the author considers the knowledge and characteristics of pregnant women as independent variables, as they are directly related to the occurrence of chronic energy deficiency in pregnant women. According to

preliminary study results conducted by the researcher, there were 16 cases of pregnant women with chronic energy deficiency at the Kereng Bangkirai Health Center in 2024 (January-July).

2. METHODS

This research is a descriptive qualitative study using a case study approach. Meanwhile, the design uses field observation. Data collection methods were conducted through interviews and documentation analysis of midwifery care. Data analysis was obtained from case study research by creating a narrative from the results of observations and descriptions of midwifery care analysis, assessments, formulating midwifery diagnoses, planning, implementing, and evaluating midwifery care. This research and case study analysis was conducted in January 2024 at the KIA Room of the Kereng Bangkirai in Palangka Raya.

3. RESULTS AND DISCUSSION

Based on the case report of Midwifery Care conducted on Mrs. Y, an 18-year-old G1P0A0 at 33 weeks of gestation with nutritional risk, at the Kereng Bangkirai Health Center, the subjective data assessment revealed that the mother frequently experiences intermittent tightening sensations. From the assessment of objective data, the examination results show blood pressure: 120/80 mmHg, height: 145 cm, weight: 44.7 kg, mid-upper arm circumference: 18.7 cm. The pregnant woman is experiencing Chronic Energy Deficiency. Based on the examination results, the main issue identified is that the woman is pregnant with Chronic Energy Deficiency.

According to Rohmah[11], pregnant women with KEK are those whose Upper Arm Circumference (UAC) measurements are less than 23.5 cm. Chronic Energy Deficiency (CED) in pregnant women is a nutritional status characterized by an imbalance between the intake needed to meet energy requirements and energy expenditure[12]. Chronic Energy Deficiency is a condition in which mothers suffer from long-term (chronic) food shortages, leading to health issues for the mother.

Mrs. Y has several risk factors related to nutritional status with Chronic Energy Deficiency, including: a first-time pregnant mother, TB 145 cm, weight 44.7 kg, and Mid-Upper Arm Circumference (MUAC) 18.7 cm. When calculated using the normal MUAC formula for pregnant women, which is 23.5 cm, Ms. Y falls into the category of pregnant women with Chronic Energy Deficiency (CED). There are several theories and studies that discuss the risk factors for pregnant women with Chronic Energy Deficiency. According to Amalia[13], nutritional deficiencies in pregnant women can lead to risks and complications for the mother, including anemia, bleeding, inadequate weight gain, and susceptibility to infectious diseases. Pregnancy-related Chronic Energy Deficiency (Nutritional Deficiency) can affect the growth process of the fetus and may lead to miscarriage, abortion, stillbirth, neonatal death, congenital defects, anemia in infants, intrapartum asphyxia (death in the womb), and low birth weight. (BBLR).

According to Marjani & Anggi[14], a healthy diet and lifestyle can support the growth and development of the fetus in the mother's womb. Nutritional management during pregnancy is essential to achieve optimal nutritional status for the mother, ensuring a safe pregnancy and the birth of a baby with good physical and mental potential.Nurika also stated that the low economic status of unemployed pregnant women leads to unmet basic needs such as nutritious food, which impacts the risk of nutritional deficiencies due to the lack of pregnant women consuming nutrient-rich foods, resulting in insufficient nutrition for both the mother and the fetus.

Based on the main issues above, the management provided to Mrs. Y, an 18-year-old G1P0A0 at 33 weeks of pregnancy with Chronic Energy Deficiency, involves informing the mother and family of the examination results indicating that the mother is experiencing pregnancy with chronic energy deficiency. It is recommended that the mother reduce heavy physical activities that may lead to fatigue. Encouraging the husband or family to provide support, motivation, and prayers for the mother. Advising to eat a balanced diet in small but frequent portions, collaborating with nutrition staff at the community health center to provide information and education to the mother about the management of pregnant patients with chronic energy deficiency, including the provision of supplementary food and asking the husband and family to pay attention to the mother's pregnancy until delivery. It is also important to remember to have regular antenatal care check-ups to receive iron tablets, Vitamin B12, and education on nutritious eating patterns, which are essential for increasing the mother's weight. The management provided to Mrs. Y, who is 33 weeks pregnant and experiencing chronic energy deficiency, involves regulating food intake during pregnancy. Pregnant women should consume a variety of food types based on the principles of balanced nutrition. Pay attention to the types, amounts, and portions of food needed by pregnant women. Adequate nutritional intake is crucial for maintaining the mother's health, the growth and development of the fetus in the womb, and as a reserve during the breastfeeding period later on.

4. CONCLUSIONS

In the case of maternal care for Mrs. Y, G1P0A0, who is 33 weeks pregnant with a problem of Chronic Energy Deficiency, the following conclusions can be drawn:

1. Mrs. Y is experiencing Chronic Energy Deficiency, as indicated by a maternal Mid-Upper Arm Circumference (MUAC) of 18.7 cm.
2. Chronic energy deficiency in pregnant women can lead to low birth weight (LBW), premature delivery, and an increased risk of complications during pregnancy and childbirth.
3. Mrs. Y has been provided with health education on nutrition patterns and iron supplement tablets, nutritional counseling for pregnant women, balanced nutrition campaigns, family nutrition awareness promotion, prenatal classes, and enhanced antenatal care activities at the community health center to improve the condition of Chronic Energy Deficiency in pregnant women

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