

# **Case Study : Providing Iron Tablets and Education on Balanced Nutrition As a Treatment For Moderate Anemia in Pregnant Women**

**Akma Listiana<sup>1</sup>, Kadek Yuke Widyantari<sup>2</sup>, Yeni Lisa Beliga<sup>3</sup>**

<sup>1,2,3</sup> STIKes Panca Bhakti, Indonesia

\*Email Korespondensi : kdyuke7@gmail.com

## **ABSTRACT**

Anemia is a condition where the amount of hemoglobin is abnormal or does not reach 11g% and can affect pregnancy, such as bleeding during pregnancy, low birth weight, prolonged 1st stage, prolonged 2nd stage, and bleeding. The factors that influence the lack of hemoglobin levels are mostly a lack of adequate nutrition. If left untreated, it can cause problems for the mother and fetus. Objective, to provide Continuity of Care Midwifery Care for pregnant women in the 3rd Trimester with moderate anemia for Mrs. N at PMB Wirahayu. S.Tr. Keb in 2023. Method this research uses a descriptive research design with a case study. The aim is to provide midwifery care to pregnant women in the third trimester by telling mothers how to treat anemia in pregnant women in PMB WK Bandar Lampung City by conducting interviews and direct examination. Respondents are willing and sign the informed consent. This case study research was conducted from 23 February 2023 to 03 March 2023. The subject of this research was Mrs. N Pregnant women in the 3rd trimester. The result midwifery Services for Mrs. N is carried out in accordance with midwifery care standards. The midwifery care provided is providing counseling on the nutritional adequacy of pregnant women with moderate anemia so that the need for red blood cells can be met. The midwifery care provided resulted in an increase in anemia. From the assessment it was found that the mother said she often felt tired and the mother's conjunctiva was pale, and the results of the examination of the mother's supporting data included a hemoglobin level of 8.8 gr%. From the results of Mrs. N is given therapy according to subjective data by providing counseling on the nutritional adequacy of mothers who experience moderate anemia as well as providing fe and vitamin C tablets. PMB can provide posters, leaflets and create WhatsApp groups related to anemia during pregnancy so that patients can easily get information

**Keywords:** Anemia in Pregnant Women, anemia in pregnancy, explains the increase in anemia.

## INTRODUCTION

Maternal Mortality Rate or MMR is the number of maternal deaths due to pregnancy, childbirth and postpartum processes which is used as an indicator of the level of maternal health and one of the goals of the Sustainable Development Goals (SDGs) in accelerating the reduction of maternal deaths to 70 per 100,000 live births by 2030 (WHO , 2020). Based on the causes of most maternal deaths in 2021 cases and bleeding were 1,320 cases (Ministry of Health of the Republic of Indonesia, 2022). Based on the data above, it shows that one of the causes of maternal mortality is bleeding. Cases of bleeding can occur during pregnancy, childbirth, postpartum. Bleeding in pregnant women, parturient women and postpartum women is caused by the impact of a lack of red blood cells such as anemia (Wulandari et al., 2021)

Anemia is a condition where there is a lack of red blood cells in the body (Amalia et al., n.d.) Prevention of anemia during pregnancy needs to be done as early as possible by providing education to pregnant women, such as nutrition education. the impact of complications that arise if anemia is not resolved. one of the causes of anemia in pregnant women is due to lack of compliance in consuming iron tablets (ikhtiarinawati Fajrin, 2020. Anemia is also caused by inadequacy in pregnancy check-up behavior, lack of confidence in the benefits of Fe tablets (Kadir et al., 2019).

The importance of consuming fe tablets is to increase hemoglobin levels so as to avoid anemia (Fajrin et al., 2022). Iron is an ingredient in food and Fe tablet medication which functions to increase hemoglobin levels in the body of pregnant women (Purwaningsih et al., 2018). Signs and symptoms of anemia in pregnant women include complaints of fatigue, frequent dizziness, dizzy eyes, and frequent complaints of nausea and vomiting, especially in early pregnancy. On physical examination, the sufferer looks weak and less enthusiastic. On facial inspection, the conjunctiva, lips, tongue and nails appear pale. On palpation examination it is possible to show splenomegaly and tachycardia. On auscultation, heart murmurs were heard (Fitriany & Saputri, 2018).

That anemia in pregnancy has a negative impact on pregnant women, both for pregnancy, childbirth, postpartum, and the subsequent period. Various complications due to anemia include abortion, premature birth, inadequate contractions, and infection. Apart from that, anemia in pregnancy is also associated with increased maternal morbidity during childbirth. Factors

causing anemia such as lack of nutrition, lack of adequate rest are common causes of anemia in pregnant women. The classification of hemoglobin levels is said to be moderate anemia with hemoglobin levels of 7-8 gr% (Wulandari et al., 2021). Factors causing anemia other than iron deficiency are parity and maternal age (Astriana Program Studi DIII Kebidanan STIKES Al-Ma et al., 2017). Upper arm circumference is one of the indicators used to see the nutritional status of pregnant women, which can cause anemia in pregnant women (Novyriana et al., 2016).

Poor eating patterns in pregnant women, such as frequently snacking outside, and decreased appetite so that mothers are lazy about eating can cause mothers to be anemic (Jurnal & Gozali, 2018). Examples of pregnant women who experience anemia include fatigue, weakness, decreased appetite caused by a lack of iron, folic acid and acute bleeding. (Anggoro Wasono et al., 2021) foods that contain iron which can increase hemoglobin levels such as kale, spinach, broccoli and foods that contain vitamin C, namely oranges, guava, mango (Afrida, 2019)

Provide knowledge education to pregnant women about nutritional needs both from food and iron supplements, pregnant women who do not meet their nutritional needs can be at risk of experiencing pregnancy anemia (Ari et al., 2018). Management of anemia means providing nutritional counseling on nutritional needs containing iron and providing iron tablets regularly so that anemia is treated (Ari et al., 2018). Pregnant women in the third trimester tend to suffer from anemia due to increased circulation changes to the placenta and the fetus stores iron reserves for itself as a supply for the first month of birth. (Amalia & Tjiptaningrum, 2016). Anemia in pregnant women can be diagnosed by taking anamnesis, nutritional patterns and daily habits, physical examination of the eyes to see if they are anemic and supporting examinations such as LAB examination of hemoglobin levels in the mother's blood. (Kurniati, 2020).

Anemia is a condition characterized by a reduction in hemoglobin or metalloprotein, a protein containing iron in red blood cells which functions as a transporter of oxygen from the lungs throughout the body (Fitriany et al., 2018). Management that can be given in conditions of moderate anemia is telling the mother about the nutritional pattern of mothers with moderate anemia, namely consuming foods high in iron and providing examples of food portions for pregnant women with anemia per meal, namely 44 grams of rice, 32 grams of chicken, 20 grams of tofu, 916 grams of chayote and 20 grams of banana. Management of pregnant women with moderate anemia can be managed well by providing several IEC to pregnant women, changing

daily diet, monitoring ANC by providing ballet therapy Fe 2x1, Vit C 3x1 (Rimawati et al., 2018)

## **METHOD**

Telling mothers how to treat anemia in pregnant women at PMB WK Bandar Lampung City. The design is descriptive with a case review study approach from 23 February 2023 to 03 March 2023. The subject Mrs. N Pregnant women in the third trimester. The instruments are physical examination tools and midwifery care assessment formats. Uses primary data through observation, direct interviews and providing care to the case subjects.

## **RESULT**

This research was carried out at the independent practice of midwife (PMB) "WK", located in Panjang Bandar Lampung. On February 23, the researcher cared for the client Mrs. N assessment of subjective data describes Mrs. N on February 23 2023 at 13.00 WIB. At the ANC visit, 24 years old, Javanese, Muslim, high school education, housewife. Her husband Mr. Y is 25 years old, Javanese, Muslim, vocational school education, self-employed, they live in Harapan Jaya village, RT 05 Panjang. Mother said that she easily felt tired and mother said that she didn't like eating vegetables. Mother said the first day of her last menstruation was 05-06-2022, mother said this was her second pregnancy, her first child was 2 years old. The mother said that doing housework was helped by her husband. The mother said that the mother's rest pattern was normal, there were no complaints.

The assessment of objective data shows that the mother's general condition is good, consciousness, TTV is within normal limits when inspecting the mother's eyes, the mother's conjunctiva is pale white, and the results of the abdominal palpation examination are TFU 30 cm and DJJ sounds regularly with a frequency of 135 x/minute (Puka) Head preset A small part of the head has entered PAP (Convergent). There is no edema in the upper and lower extremities. The results of supporting examinations. The mother's hemoglobin examination was 8.8 gr%.

From the results of reviewing subjective and objective data, a diagnosis and problem was formulated that Mrs. N Gestational age 37 weeks 1 day single live fetus intrauterine head presentation with moderate anemia problems. Care planning is prepared based on the interpretation of data that has been formulated, namely:

Inform the mother that the mother's general condition and vital signs are normal, but on laboratory examination the mother's hemoglobin level is 8.8 gr%, which indicates that the mother has moderate anemia, the mother understands her condition.

1. Explain to the mother the results of the LAB examination that has been carried out, the results of the examination of the Hb level in the mother's body are less, namely 8.8 gr%. And inform the mother that the normal Hb level is 11 gr%. The impact of a lack of HB levels in the body can cause anemia in pregnant women. If anemia occurs in pregnant women, the lack of red blood cells in pregnant women can cause bleeding during childbirth and LBW, mothers understand the explanation given.
2. Inform the mother about the nutritional pattern of the mother with moderate anemia, namely consuming foods high in iron.
3. Pregnant and tell me examples of food portions for pregnant women with anemia per meal, namely 44 grams of rice, 32 grams of chicken, 20 grams of tofu, 916 grams of chayote and 20 grams of banana. Mother understands and will do it at home
4. Advise the mother to take Fe 300 mg tablets 2x1, Vit C 250 mg 3x1, the mother understands and will do it.

**Table. 1 Result of observation of midwifery care for Mrs. N**

No	Date	Assessment	diagnosis	Management
1	23 february 2023	S. 1. Mother said she complained that she felt tired easily 2. The mother said that the mother's nutritional pattern rarely eats vegetables and has restrictions on not being able to eat chicken eggs because it itches	Mrs. N G2P1A0 gestational age 37 weeks 1 single live intrauterine fetus moderate anemia, namely 1. Inform nutritional patterns for moderate anemia, namely consuming foods high in iron and give examples of portion sizes for pregnant women with anemia to eat per meal, namely 44 grams of rice, 32 grams of chicken, 20 grams of tofu, 916 grams of chayote and 20 grams of bananas. Mother	mothers about nutritional patterns for moderate anemia, namely consuming foods high in iron and give examples of portion sizes for pregnant women with anemia to eat per meal, namely 44 grams of rice, 32 grams of chicken, 20 grams of tofu, 916 grams of chayote and 20 grams of bananas. Mother

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3. Mother said the pattern of rest is 1-2 hours during the day and 7-8 hours at night  
O.  
It was found that the mother's general condition was good, vital signs were normal

Inspection

Abdomen

Leopold 1 feels round and bouncy, namely the TFU buttocks 2 fingers below the PX

Leopold 2 The right side, namely the back of the fetus, and the left side is extremities

Leopold 3 which is hard, round, bouncy, a small part of the head entering the PAP

Leopold 4

Konvergen

DJJ 135 X permenit

understands and will do it at home.

2. Advise the mother to take Fe 300 mg tablets 2x1, Vit C 250 mg 3x1, the mother understands and will do it.

3. Tell the mother for a repeat visit on March 3 2023,

## Supporting investigation HB 8, 8 gr%

2 03 March 2023	S.	Mrs. G2P1A0	N	1. Remind mothers about nutritional patterns for mild gestational anemia, namely consuming foods high in iron and give examples of portion sizes for pregnant women with anemia to eat per meal, namely 44 grams of rice, 32 grams of chicken, 20 grams of tofu, 916 grams of chayote and 20 grams of bananas. Mother understands and will do it at home.
	1. The mother said that her complaint of frequently feeling tired had decreased	age 38 weeks 5 days		2. Remind the mother to take Fe 300 mg tablets 2x1, Vit C 250 mg 3x1, mother understands and will do it.
	2. The mother said she had improved her nutritional pattern	singleton live fetus intrauterine precept		3. Remind the mother for a repeat visit on March 3 2023, mother understands and will do it.
	3. The mother said that she had only done light housework	with mild anemia		
	4. Mother said she had had enough rest.	O.		
	vital signs were normal	DJJ 135 X per minute		
	Supporting investigation	HB 10, 8 gr%		

## **DISCUSSION**

At the first ANC visit the HB level was 8.8 gr%, the Hb level was 7-8 gr%. Based on the information obtained, the mother said that the mother's nutritional needs were not met. The mother rarely consumed vegetables and fruit. In accordance with research (Pratiwi, M. Arantika dan fatimah: 2019). The cause of anemia in pregnant women is a lack of nutrients containing iron. The diagnosis in the case found was Mrs. N gestational age 37 weeks 1 day single live fetus intrauterine head presentation with moderate anemia. The treatment given is giving the mother Fe tablet therapy taken 2 x 1 with a dose of 300 mg and vitamin C 3 x 1 with a dose of 250 mg. According to research (Dyah dan Evi: 2021).

Management of pregnant women with moderate anemia, namely giving pregnant women IEC, changing nutritional patterns and providing Fe tablet therapy 300 mg 2 x 1 and Vit C 250 mg 3 x 1. as well as improving nutritional patterns, encouraging mothers to eat foods that are high in iron, such as fruits that contain vitamin C, such as guava juice, oranges, beets, and vegetables such as kale, red spinach, green beans, seaweed, chicken liver, red meat. can increase hemoglobin levels. In accordance with theory (Rimawati Eti. Dkk: 2018). Nutrition for pregnant women with moderate anemia, namely consuming foods high in iron, vitamin C, oranges, beets, and vegetables such as kale, red spinach, green beans, seaweed, chicken liver, red meat can improve hemoglobin levels (Dewi, 2021). Nutrition for pregnant women with moderate anemia, namely consuming foods high in iron, vitamin C, oranges, beets, and vegetables such as kale, red spinach, green beans, seaweed, chicken liver, red meat can improve hemoglobin levels

## **CONCLUSION**

Lack of nutrition is one of the causes of a lack of red blood cell levels in the body, if not resolved it can harm the mother and fetus. Health workers increase education about the nutritional needs so do not experience anemia.

## **SUGGESTION**

There is a need for further research on pregnant women who experience moderate anemia and providing education to couples of childbearing age on how to prepare for reproductive health nutritional needs so that the mother's pregnancy is a healthy pregnancy.

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