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CONTINUITY OF CARE FOR MRS. S WITH MILD ANEMIA AT THE BPM MISBAH CLINIC, MEDAN CITY, NORTH SUMATRA PROVINCE, 2025

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ABSTRACT

Anemia is a condition in which HB levels are below normal, in Indonesia anemia is generally caused by iron deficiency so it is better known as iron nutritional anemia which is one of the most common disorders during pregnancy pregnant women generally experience iron depletion so they provide little to the fetus needed for normal iron metabolism, Then it will become anemia when the mother's hemoglobin level drops below 11g / dl during the third trimester. Purpose: of this study is to increase the understanding of pregnant women about the risks of pregnancy and complications that can occur before pregnancy and during pregnancy. Method: used in midwifery care for Mrs. S with Mild Anemia using the Design in this study is a case study described descriptively, namely a case study or case study. from the results of data collection obtained from several methods used for primary data, namely by using observation data, interviews (anamnesis), and the results of direct obstetric physical measurements. Secondary data with, examination, KIA book as a client development record book. Results: From this study shows an increase in emergency treatment for mothers with Mild Anemia. It is hoped that comprehensive midwifery care can improve patient knowledge. Conclusion: Midwifery care in New York City was conducted in accordance with the theory and documented in Helen Varney's 7-step plan for mild anemia.

Keywords: Midwifery Care, Mild Anemia, MMR, Fetal Iron Tablets, Vitamin C

Introduction

Maternal health is a crucial indicator for improving public health. Anemia during pregnancy is a major risk factor that can impact the quality of pregnancy, the delivery process, and the health outcomes of both mother and baby. According to the Indonesian Ministry of Health (2022), anemia remains a common health problem, particularly in the third trimester of pregnancy. This condition often goes undetected early and can potentially lead to complications such as prolonged labor, postpartum hemorrhage, uterine atony, premature rupture of membranes, low birth weight, and delayed recovery after delivery. The World Health Organization (2022) states that anemia during pregnancy is an indirect cause of maternal death, especially in developing countries. Severe anemia can increase the risk of shock, infection, and organ failure during labor. Although mild anemia carries a lower risk than moderate and severe anemia, this condition still requires adequate intervention and monitoring to prevent it from developing into a more serious condition. In the third trimester, iron requirements increase significantly due to increased plasma

volume and fetal needs. Insufficient intake, infrequent use of iron tablets, and low iron absorption are common causes of anemia in pregnant women (Azizah *et al.*, 2023).

Mild anemia is a condition in which the red blood cell count or oxygen-carrying concentration (Hb) in the blood is insufficient to meet the mother's physiological needs. The most common anemia during pregnancy is iron deficiency anemia, caused by insufficient iron intake in the diet, impaired absorption, and increased iron requirements. The occurrence of anemia in pregnant women can be influenced by a lack of knowledge about anemia, and this lack of knowledge about anemia influences maternal health behaviors (Farhan, 2022)

Anemia during pregnancy is largely caused by iron deficiency, which plays a vital role in red blood cell formation. When pregnant women are iron deficient, red blood cell production decreases. Anemia can lead to various medical complications for both mother and baby, including preeclampsia, premature birth, low birth weight, and an increased risk of maternal and infant mortality (Salma et al., 2024).

According to (Agustina 2021), anemia in pregnancy consists of several types, each with its own causes and treatment. Iron deficiency anemia is the most common type in pregnant women. This condition arises from insufficient iron intake, impaired absorption, or iron loss due to bleeding. Treatment involves administering at least 90 iron tablets during pregnancy and continuing during breastfeeding. Megaloblastic anemia occurs due to a deficiency of folic acid or vitamin B12 and is characterized by the presence of megaloblasts in the blood or bone marrow. Recommended therapy consists of 15–30 mg of folic acid per day, along with vitamin B12 if needed. Hypoplastic anemia is caused by impaired red blood cell production because the bone marrow is unable to form new cells. Causes can include sepsis, radiation exposure, toxins, or drugs, and treatment is primarily through blood transfusions, as iron supplements are ineffective. Meanwhile, hemolytic anemia occurs when red blood cells are destroyed faster than they are formed. In pregnant women, this condition tends to worsen anemia and can cause blood count abnormalities and severe fatigue. Treatment depends on the type of hemolytic anemia, but often requires repeated blood transfusions to prevent hypoxia (Sinaga *et al.*, 2024).

Iron deficiency anemia is a disorder in which the body produces fewer red blood cells due to a lack of iron. Iron is essential for hemoglobin production; iron supplements are needed in cases of iron deficiency anemia. Pregnant women with mild iron deficiency and blood loss can take iron supplements. Iron supplements, commonly known as iron supplement tablets (TTD), come in tablet/caplet/capsule form and are available through programs or independently. The effectiveness of iron supplementation combined with nutritional education can help increase Hb levels (Kusdalinah et al. 2023). A balanced nutritional intake is essential for pregnant women to meet their nutritional needs during pregnancy, improve the growth and development of their unborn baby, and ensure the mother's physical readiness for a safe and uncomplicated delivery. The general nutritional needs of pregnant women are: Folic acid, based on the results obtained, folic acid supplements are needed during the period. Iron is also important for pregnant women, with a requirement of around 700 to 800 micrograms per day (Icemis Sukarni K & Margareth ZH 2024).

According to the eighth edition of the postpartum care book in 2019, the nutritional recommendations for

postpartum mothers that can be met are: Consuming foods with a balanced diet containing enough carbohydrates, for example corn, wheat, fruits, proteins such as milk, eggs, meat, and nuts, vitamins and minerals, namely avocados, berries and nuts, Consuming additional foods with additional calories of 800 per day for the first six months, then 500 calories per day for the next six months, and 400 calories per day in the second year. The total number of calories can be accumulated from this amount. Likewise, fluid intake is also needed during the postpartum period, namely 3 liters per day, 2 liters obtained from drinking water and 1 liter from fluids obtained through vegetable soup, fruits and other foods, consuming iron tablets is also needed during the 40 days of the postpartum process, In providing vitamin A with a dose of 200,000 units which aims to make quality breast milk, and can strengthen the immune system of the mother and child. According to the book on continuity of care written by (MUNTHE 2023).

Anemia in pregnancy is influenced by several important factors. Being too young (<20 years) or too old (>35 years) in the mother's age increases the risk of anemia due to higher nutritional needs that are often not met. High parity also increases the risk, as repeated pregnancies (more than four) can deplete the body's iron reserves. Furthermore, low education levels make mothers less likely to understand the importance of nutrition and iron tablet consumption, making them susceptible to anemia. Another factor is nutritional status, particularly Chronic Energy Deficiency (CED) with a MUAC <23.5 cm, which disrupts the supply of iron, folic acid, and vitamin B12. Furthermore, physiological changes in pregnancy, such as an increase in plasma volume greater than erythrocytes, cause hemodilution, resulting in a decrease in hemoglobin levels. (Agustina 2021).

In Indonesia, the number of maternal deaths obtained from maternal and child health records at the Ministry of Health in 2022, mothers who experienced lacerations of the birth canal were 75% caused by episiotomy 28% and caused by spontaneous tears 29%. The number of maternal deaths due to bleeding was 742 cases. Among them, the prevalence of anemia in pregnant women in North Sumatra is around 15 to 39%. Therefore, the Ministry of Health is making efforts to accelerate the reduction of maternal mortality by ensuring that every mother can access quality health facilities, one of which is assistance by trained health workers and care for mothers. (Ministry of Health of the Republic of Indonesia, 2022).

In accordance with the SDG target in 2030 for sustainable development, namely reducing the maternal mortality rate to 70/100,000 live births, the maternal mortality rate is around 295,000 people with causes related to pregnancy and childbirth with a total of 6.3 million mothers per year (WHO, 2022).

To prevent anemia in pregnant women, it is recommended that they receive care during their pregnancy. Healthcare services for pregnant women can be provided at a minimum of six visits at a health care facility, with two visits to an ob-gyn (obstetrician-gynecologist). In the first trimester, one visit to an ob-gyn and one to a midwife; in the second trimester, one visit; and in the third trimester, three visits, one to an ob-gyn and one to a midwife (Zeng and He, 2024).

Health services during pregnancy in 10 T include weighing and measuring height, after which (TTV, vital signs) are carried out as follows: (BP, HR (Heart rate / heart rate) RR, (Respiratory rate / respiratory frequency) measuring the upper

arm circumference (MUAC) Measuring the height of the uterine fundus, determining the fetal presentation and fetal heart rate, administering TT (Tetanus Toxoid) immunizations, administering FE tablets of at least ninety (90) tablets during pregnancy, laboratory tests (urine protein hemoglobin, urine glucose) Case management, according to indications, counseling on pregnancy examination results. (Ministry of Health of the Republic of Indonesia 2022.

Continuity of Care (COC) is the provision of continuous services starting from pregnancy, childbirth, postpartum, newborn care, and family planning provided by midwives. Continuous midwifery care aims to assess complications as early as possible to improve the well-being of mothers and babies (MUNTHE 2023). The realization of SDGs development can be achieved through health practices implemented in the Vision and Mission of Mitra Husada Health College, namely realizing the implementation of superior science and technology in the health sector with excellent service that is innovative, integrated, and competitive at the national level by 2030. This can be seen from the PACER culture, namely: professionals able to demonstrate expertise in the health sector, accountable and accountable, actions in accordance with providing wholehearted service, reliability, trustworthiness and reliability, and commitment in providing services.

Based on the above data, the results of a survey at the BPM Misbah Clinic, using service visit data from 2024, showed that 25 pregnant women visited, including 1 with anemia, 6 women giving birth, 6 postpartum women, 6 newborns, and 45 family planning visits.

Research Method

This study used a descriptive design with a case study approach to describe the continuity of midwifery care for Mrs. S, 26, with mild anemia. Care was provided at the BPM Misbah Clinic, starting from 28 weeks of gestation through the postpartum period and newborn care. Three ANC visits were conducted and included a physical examination, vital signs, interviews, observations, and hemoglobin testing. The study subjects were pregnant women in their third trimester, with a single sample of Mrs. S, who met the case criteria. Care was provided using Helen Varney's seven-step midwifery management. Data collection included primary data (interviews, physical examinations, observations) and secondary data (KIA Handbook, ANC records, and clinical documentation). Data analysis was carried out through data reduction, data presentation, and drawing conclusions to obtain a comprehensive picture of the mother's condition and the effectiveness of the care provided.

Result

This study describes the implementation of continuous midwifery care for Mrs. S, 26, at the Misbah Independent Midwife Clinic. The clinic has a waiting room, examination room, delivery room, postpartum room, and inpatient ward, and provides ANC, delivery, postpartum care, newborn care, and family planning services. In addition, the clinic also conducts health education programs, immunizations, and family planning outreach programs for the community.

The respondents in this study were Mrs. S, a 26-year-old housewife and her 27-year-old husband, who is self-employed. Based on the assessment, Mrs. S's pregnancy was her third and she had experienced one miscarriage (G3P2A1). At

her first visit to the clinic at 28 weeks and 5 days, she complained of fatigue, dizziness, and frequent urination. Her vital signs were within normal limits, but her hemoglobin level was 10 g/dL, categorizing her as having mild anemia. This finding aligns with a journal (Ginting et al. 2023), which explains that pregnant women's knowledge of the importance of taking iron tablets is closely related to the incidence of anemia during pregnancy. The fetus is in good condition, moving actively, and is palpable on the left side of the back, with the head not yet engaged in the fetal position. Her condition improved, although her conjunctivae remained pale. The examination showed gestational age-appropriate, with a normal fetal heart rate (FHR), and mild anemia (Rattanasak *et al.*, 2025). Nutritional education, calcium, and folic acid supplementation were provided to support fetal development. At the third visit, the gestational age reached 36 weeks, and the mother had no complaints. Her hemoglobin (Hb) increased to 10.8 g/dL, her TFU was 34 cm, the head had engaged in the PAP, and both mother and fetus were in good condition. She was educated on childbirth preparation, prenatal exercises, and nutritional support (Wakwoya, Belachew and Girma, 2023).

Mrs. S delivery took place on December 11, 2024. The first active phase of labor proceeded normally, with progressive dilation and regular contractions. An internal examination revealed 5 cm dilation, intact membranes, and a cephalic presentation. The second stage of labor lasted approximately 30 minutes, and the baby was born spontaneously. She was a female with a strong cry, a birth weight of 3410 grams, a length of 51 cm, and an APGAR score of 10 Labor proceeded without complications, and the third stage of labor concluded within 15 minutes, with the placenta delivered intact. In the fourth stage, the mother's condition is stable with bleeding within normal limits and the uterus contracting well. During the postpartum period, the mother received four visits. The first visit showed her in good general condition, although her milk supply was still low and she had mild perineal pain due to a second-degree laceration. Uterine involution was progressing well, with the TFU position two fingers below the umbilicus. At the third and fourteenth visits, the mother's condition improved, uterine contractions were good, the lochia gradually transitioned from rubra to serous, and she began to care for her baby independently. At the 29th visit, the mother had no complaints, her milk production was steady, and her physical condition had returned to normal.

Newborn care began immediately after delivery. The baby was healthy, crying strongly, and Early Initiation of Breastfeeding (IMD) was performed for one hour. The baby was then given intramuscular vitamin K1, eye ointment, and the HB0 immunization. At the From KN1 to KN3 neonates, the babies remained in good condition, were breastfeeding effectively, had stable weight, normal temperature, and showed no signs of umbilical cord infection (Wang *et al.*, 2022). The mothers received education on umbilical cord care, neonatal danger signs, and correct breastfeeding positions. In family planning services, the mothers chose to use the Lactational Amenorrhea Method (LAM) due to family support for using natural methods. Counseling was provided on how LAM works, its advantages,

limitations of effectiveness, and the importance of fertility monitoring during breastfeeding. At the end of the visit, the mothers understood how to use LAM and the rules for success.

Discussion

a. Midwifery Care During Pregnancy

Mrs. S's complaints of fatigue, dizziness, and frequent urination are physiological changes during the third trimester. Her hemoglobin (Hb) examination revealed mild anemia, consistent with the theory that anemia is often caused by increased iron requirements during pregnancy. This is consistent with research (Azizah *et al.*, 2023), which states that iron deficiency anemia is the most common type of anemia during pregnancy and can be minimized by consuming foods rich in iron and vitamin C. The management provided by the midwife, including nutritional education, iron supplementation, and follow-up monitoring, met the 10T ANC service standards.

b. Midwifery Care During Labor

Mrs. S labor progressed normally from the first to the third stage. Her labor was monitored systematically through the use of a partograph, as emphasized in Srilina Pinem's research, which emphasizes that proper labor monitoring is key to preventing complications. In Mrs. S case, labor progressed within normal limits, and no deviations were found from the partograph.

The second stage lasted approximately 30 minutes, consistent with the physiological timeframe for multigravida. This aligns with findings from the journal , which states that labor can be more effective if the mother receives assistance, education, and verbal support from health workers. During labor, the midwife provided education on pushing techniques, pain management, and comfortable labor positions, which were also key points in the journal regarding how midwifery education plays a role in improving maternal preparedness during labor (Liu *et al.*, 2025).

The 58-step Normal Delivery Care (APN) was implemented comprehensively and structured. The alignment of this practice with midwifery standards supports Srilina Pinem's statement that the quality of midwifery care is closely related to the implementation of SOP and appropriate clinical skills. Therefore, Mrs. S's labor can be concluded as safe, effective, and according to standards as described in the journal (Sari, Marliani and Hutabarat, 2021).

c. Midwifery Care During the Postpartum Period

Mrs. S's uterine involution showed normal results, with a decreasing TFU at each visit. The low milk supply on the first day is a physiological process. The postpartum period consists of physiological phases that require close monitoring from 6 hours to 6 weeks postpartum (Jin *et al.*, 2025). The midwife has provided comprehensive education on bonding attachment, exclusive breastfeeding, and postpartum danger signs.

d. Midwifery Care for Newborns

Based on the results, NY.S was a normal, male baby with a strong cry, active movements, good rooting reflex, normal breathing of 34 breaths, and a heart rate of 120 beats/minute. After a physical examination, the newborn was given early early attachment (IMD) for one hour after

birth to prevent hypothermia, stabilize the baby's heart rate and breathing, and foster a closer bond between mother and baby. One hour after birth, the baby was given a vitamin K injection, ointment, and a physical examination. All newborns should receive an intramuscular vitamin K immunization in the left thigh to prevent hemorrhage. One hour after the vitamin K administration, the baby's right thigh was continued. HB0 was given to the right thigh to prevent hepatitis in the baby.

e. Family Planning Midwifery Care

Mrs. S choice of the LAM (Mal) method of contraception was based on her family's preferences. Counseling covered how LAM works, its benefits, and the potential for failure, which is part of the standard family planning service. Effective counseling helped the mother make the right decision based on her family's circumstances and beliefs.

Conclusion and Suggestion

In conducting this case study, the author provided comprehensive midwifery care to the client from pregnancy through family planning. The care provided to the client was as follows:

1. Midwifery care during NY.S's pregnancy was provided, but it did not meet the 10T standards at the Misbah Independent Midwifery Clinic. Therefore, there is a gap between theory and practice.
2. Midwifery care was provided to the mother who gave birth vaginally. The baby was a female, weighing 2500 grams, measuring 48 cm tall, and crying loudly and actively.
3. Midwifery care during NY.S's postpartum period went well. The mother did not experience any postpartum danger signs during the postpartum period. The mother was willing to follow the recommendations given for maternal health during the postpartum period.
4. Midwifery care for a spontaneous newborn on December 11, 2024, at 9:30 a.m. WIB. Immediately assess the baby's Apgar score while drying the baby.
5. All midwifery care provided during pregnancy, delivery, postpartum care, and family planning has been documented through January 8, 2025.

b. Recommendations

After receiving continuity of care from the third trimester of pregnancy through family planning, it is hoped that knowledge and skills will increase, enabling early detection of potential maternal problems.

1. For Institutions

   The application of midwifery care management in problem-solving can be further improved and developed. This process is very beneficial in developing midwives to create potential and professional human resources.

2. For the Author

   It is hoped that the author will be able to apply the knowledge gained during his studies to provide continuous midwifery care throughout pregnancy and family planning.

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