



CONTINUITY OF CARE IN MRS. R WITH MILD ANEMIA AT SARFINA INPATIENT PRIMARY CLINIC, MEDAN POLONIA DISTRICT MEDAN CITY, NORTH SUMATRA PROVINCE IN 2025

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ABSTRACT

Anemia during pregnancy, particularly in the third trimester, remains a significant contributor to maternal and infant mortality due to the risk of postpartum hemorrhage and low birth weight. In Indonesia, despite a decline in prevalence, integrated monitoring remains crucial to ensure hemoglobin stability before delivery. This study aimed to evaluate the effectiveness of the Continuity of Care (CoC) model in managing mild anemia in a pregnant woman through combined pharmacological and nutritional interventions. This research employed a longitudinal case study approach following a 30-year-old multigravida (G4P3A0) patient, Mrs. R, at the Sarfina Inpatient Primary Clinic, Medan. The midwifery care was conducted over three antenatal visits in the third trimester, adhering to the national standard of at least six ANC visits. Interventions included the administration of 90 iron (Fe) tablets, intensive health education (KIE), and the incorporation of natural iron boosters, specifically dragon fruit and beetroot juice. At the second visit, the patient presented with symptoms of dizziness and fatigue, with a laboratory-confirmed hemoglobin (Hb) level of 8.9 g/dL, indicating mild anemia. Following the implementation of the CoC model and nutritional therapy, the patient showed significant clinical improvement. By the third visit, the hemoglobin level increased to 12.8 g/dL, reaching a normal range. Furthermore, physiological discomforts such as frequent urination and sleep disturbances were successfully managed through fluid regulation and hygiene education. The Continuity of Care (CoC) model is highly effective in stabilizing hemoglobin levels and preventing pregnancy complications. The synergy between iron supplementation and superfood-based nutrition (beetroot and dragon fruit) provides a robust framework for improving maternal health outcomes. This study suggests that healthcare providers should integrate holistic nutritional counseling into standard antenatal care to optimize maternal well-being.

Keywords: Anemia in Pregnancy, Continuity of Care, Hemoglobin, Iron Tablets, Beetroot Juice, Maternal Health

Introduction

Anemia in pregnant women is a condition in which a pregnant woman has a hemoglobin level of < 11.0 g/dL in the first and third trimesters or a hemoglobin level

of < 10.0 g/dL in the second trimester. Anemia is a body condition where the level of hemoglobin in the blood is decreasing or less than normal (Anashrin, Aryanti, & Februanti, 2024)

. This study focuses on the treatment of anemia in Mrs. R to prevent various complications before childbirth. According to the *World Health Organization* (WHO, 2020) the most common cause of bleeding is anemia in pregnancy. The incidence of anemia in the world ranks third with a prevalence of anemia in pregnant women of 74%. According to WHO, 40% of maternal deaths in developing countries are related to anemia in pregnancy.

Symptoms of anemia generally arise due to a lack of oxygen brought to the body's tissues due to low HB, so that the oxygen-deficient tissue cannot function optimally and anemia symptoms appear. Symptoms of anemia that often occur according to the category are: Mild anemia: Tired, weak, lethargic, moderate anemia: Heart palpitations, often feeling tired, shortness of breath, and looking pale, and Severe anemia: Prolonged tiredness, chills, rapid heart palpitations, paleness, shortness of breath, chest pain, and other organ function disorders (Ministry of Health of the Republic of Indonesia, 2023).

Based on the Indonesian Health Survey (SKI, 2023), the prevalence of anemia in pregnant women decreased to 27.7%. The prevalence of anemia in pregnant women decreased by 21.2% (from 48.9% to 27.7%). (Indonesian health survey (SKI, 2023), n.d.) Anemia in pregnancy is anemia characterized by the *Hemoglobin* less than 11 gr/dl. The highest prevalence of anemia occurs in the pregnant women's group, with an average incidence in developed countries of 18%, while the average incidence of anemia in developing countries is around 63.5%-80%. (Fowor & Dwi Wahyunita, 2021).

Despite the global efforts to mitigate nutritional deficiencies, anemia in the third

trimester remains a critical challenge due to the physiological hemodilution process, which significantly increases the risk of postpartum hemorrhage and low birth weight. Current clinical management often focuses on sporadic interventions; however, there is a substantial lack of integrated monitoring that combines pharmacological supplementation with evidence-based nutritional support, such as superfoods rich in antioxidants and iron. Continuity of Care (CoC) emerges as a pivotal strategy to bridge this gap, ensuring that pregnant women receive consistent education and clinical oversight. By focusing on a holistic approach that integrates the administration of Fe tablets with natural boosters like beetroot or dragon fruit juice, this study aims to demonstrate how continuous midwifery care can effectively restore hemoglobin levels and improve maternal health outcomes in a primary clinical setting.

Research Method

This research was conducted on November 24, 2024 – February 09, 2025 at the Sarfina Inpatient Primary Clinic. An initial survey at the Sarfina Inpatient Primary Clinic found that mothers with mild anemia pregnancies so that the researcher needed to carry out *Continuity of Care* care for Mrs. R. The implementation of the study on Mrs. R was carried out 3 times in the third trimester. Then carry out care for giving Fe tablets, education on consuming dragon fruit/beets. Where the data collection technique is the collection of data related to patients which will be studied more deeply. This data collection can be done by conducting interviews from the patient himself (auto anamnesa) and data obtained from the family (allo anamnesa).

Result

Parenting *Continuity of Care* which had been done on Mrs. R at the Sarfina Inpatient Primary Clinic in Medan Polonia district, on the first visit conducted an interview with Mrs. R to find out more about the condition of the patient and provide *Informed consent*. On the second visit, a laboratory examination of hemoglobin was carried out on Mrs. R. and 8.9 gr/dL. Then he encouraged the mother to eat nutritious food, giving 90 Fe tablets (stuti Purba, Mesrida Simarmata, Lidya Sinuhaji, Nopalina Damanik, 2023). Taking care of consuming dragon fruit juice/beets. On the third visit, a laboratory examination of hemoglobin was carried out on Mrs. R. and 12.8 gr/dL which stated that the mother's condition had returned to normal. Furthermore, continue to provide care about nutritious food to Mrs. R.

At the second visit on December 15, 2024, the mother's gestational age was 36 weeks and 2 days, complaints were received that the mother still felt dizzy, and tired. During this visit, a supporting examination was carried out, HB 8.9 gr/dL was obtained. Anemia in pregnancy is divided into three, namely mild anemia Hb 8-9.9 g/dL, moderate anemia HB 6-7.9 g/dL, and severe anemia Hb <6 g/dL.(Simorangkir, Br.Sitepu, & Gunny N, 2022)

Generally, the causes of anemia are corneal blood loss, insufficient iron intake and inadequate absorption and increased

iron needs in pregnant women. According to wati (2020), the occurrence of anemia in pregnant women can be caused by various things, such as iron deficiency, excessive destruction of red blood cells in the body prematurely (hemolysis), chronic bleeding, suboptimal blood cell production, impaired erythrocyte formation by the spinal cord, age of pregnant women, parity, chronic energy deficiency (SEZ), infections and diseases, pregnancy distance, and maternal knowledge. During pregnancy, the second and third trimesters of pregnancy require iron which continues to increase by 200-300%. This trimester causes the blood volume of pregnant women to increase by 25% so that iron is needed. Babies also need iron to build their blood supply. Another factor that affects anemia is the anemia factor, namely knowledge, which is one of the stimulating or stimulating factors for the realization of a health behavior. If pregnant women know and understand the consequences of anemia and how to prevent anemia, they will have good health behavior in the hope of avoiding various consequences or risks from anemia and pregnancy.(Simarmata et al., 2023)

Especially for pregnant women who experience anemia during pregnancy, they will continue to receive regular fe tablets at the Sarfina Inpatient Primary clinic. The purpose of this *continuity of care* is to prevent complications from occurring in the run-up to childbirth, and especially to stabilize Mrs. R's condition.

Discussion

The researcher visited and provided obstetric pregnancy care to Mrs. R at the age of 30 years G4P3A0 HPHT 08 April 2024 by conducting antenatal care visits 3 times in the third trimester by collecting subjective and objective data, determining

assessments and planning care for Mrs. R at visit I, then for mothers, it is also expected to get enough rest and continue to consume balanced nutritional food. Then at visits II and III the mother had complaints of difficulty sleeping and often Bak, here the researcher told the mother that it was a

physiological thing also in TM III. To overcome these complaints, mothers are encouraged to reduce drinking water at night/just enough so as not to interfere with the mother's rest hours going back and forth to the bathroom at night, BAK at night is also caused by the enlargement of the uterus due to the growing fetus also to the point of pressure on the bladder which causes the mother to often BATH. In addition, mothers also maintain personal hygiene and vulvar hygiene, mothers are also recommended when their underwear is wet or damp, they should replace it with dry and clean ones. And conducting laboratory hemoglobin examinations on Mrs. R, as well as providing education about nutritious food, giving Fe tablets, consuming dragon fruit juice/beets The researcher carried out care according to the planned intervention.

Conclusion and Suggestion

Based on the Continuity of Care (CoC) provided to Mrs. R (30 years old, G4P3A0) at the Sarfina Inpatient Primary Clinic, it can be concluded that integrated midwifery care effectively resolved mild anemia during the third trimester. The comprehensive care, which included three antenatal visits, resulted in a significant clinical improvement in hemoglobin levels from **8.9 g/dL** at the second visit to **12.8 g/dL** at the third visit, returning the patient to a normal status. This success was attributed to the synergistic intervention of administering 90 iron (Fe) tablets combined with the consumption of dragon fruit and beetroot juice, alongside intensive nutritional education. Furthermore, the continuity of care successfully addressed common physiological discomforts of the third trimester, such as frequent urination and sleep disturbances, through targeted counseling on fluid management and personal hygiene. Ultimately, the implementation of CoC played a vital role in stabilizing the patient's condition and

preventing potential complications in the lead-up to childbirth.

To improve maternal health outcomes and reduce the prevalence of pregnancy-related anemia, it is strongly recommended that healthcare practitioners and clinical facilities adopt the Continuity of Care (CoC) model as a standard practice, specifically by integrating evidence-based nutritional interventions such as beetroot and dragon fruit juice alongside traditional iron supplementation. Pregnant women should be encouraged to enhance their health literacy and compliance by fulfilling the minimum requirement of six antenatal care visits to ensure early detection and consistent monitoring of hemoglobin levels. Furthermore, future research should expand upon these findings by conducting large-scale experimental studies or randomized controlled trials to evaluate the comparative efficacy of various natural iron boosters across different demographic groups, thereby strengthening the clinical evidence for holistic midwifery care.

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