Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

Continuing Midwifery Care for Pregnancy With Anemia

Lilik Agustin[1*], Sri Mukhodim Faridah Hanum[2]

[1,2]Midwifery Professional Education Study Program, Universitas Muhammadiyah Sidoarjo, Indonesia

Email: lilikagustin011@umsida.ac.id

Abstract. Anemia during pregnancy is a significant problem, especially in developing countries. Based on data from 2018 Basic Health Research (Riskesdas), the prevalence of anemia in pregnant women was 48.9% which can cause complications such as low birth weight and postpartum bleeding. One of the midwives' efforts to reduce the prevalence rate of pregnant women with anemia is by providing midwifery care (CoC).) comprehensive/sustainable. This case study aims to describe the results of implementing CoC midwifery care for pregnant women from postpartum to family planning. Method: This case study of midwifery care uses qualitative methods, where mother D is given care starting from the third trimester of pregnancy, childbirth, newborns, and postpartum to family planning. The CoC midwifery care given to mother D is standard. Results: After providing midwifery care to Mrs. We want all midwives to be able to provide comprehensive and sustainable midwifery services.

Highlights:

1. Prevalence of Anemia: Anemia in pregnant women affects 48.9% of cases, leading to complications like low birth weight and postpartum bleeding.
2. CoC Midwifery Care: Comprehensive and sustainable midwifery care (CoC) has shown promise in reducing anemia and improving maternal health outcomes.
3. Implementation and Implications: The study emphasizes the need for all midwives to provide CoC to enhance maternal well-being and reduce anemia-related risks.

Keywords: Continue of Care, Pregnancy, Anemia

Introduction

Maternal health is one of the main aspects in efforts to improve public health, especially in developing countries such as Indonesia. One of the major challenges faced in maternal health is the high number of pregnant women with anemia. Anemia during pregnancy can increase the risk of serious complications, both for the mother and the baby including the risk of premature birth, low birth weight and maternal death during childbirth [1].

Anemia, especially that caused by iron deficiency, is one of the urgent health problems to be addressed because Indonesia still faces a high infant mortality rate

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

(MMR), which is around 305 per 100,000 live births [2].According to the 2018 Basic Health Research (RISKESDAS) data, pregnant women who experience anemia in Indonesia reached 48.9%, while based on the 2022 East Java Health Profile, the incidence of pregnant women with anemia reached around 44.3%. This figure shows that almost half of pregnant women in Indonesia experience significant hemoglobin deficiency. This condition can cause fatigue, impaired fetal development and increase the risk of postpartum hemorrhage, all of which can worsen the quality of life of the mother and baby.

Pregnancy, childbirth, newborns, and postpartum are natural conditions experienced by a woman. However, during pregnancy, situations can occur that can threaten the lives of the mother and child and even lead to death. Therefore, it is very important to provide quality and continuous health services (continuity of care) starting from ANC, INC, postpartum and newborns to the selection of contraceptives. Minister of Health Regulation Number 28 of 2017 Chapter 3 Article 18 regulates that midwives are authorized to provide reproductive health services for mothers, children, and women and family planning [3].

Intrauterine growth retardation (IUGR) or fetal growth retardation can occur due to pregnant women who are anemic, then the baby born will be at risk of experiencing LBW [4]. The body of a pregnant woman experiences significant changes, blood volume increases by around 20 - 30% from before pregnancy, so that a sufficient supply of iron and vitamins is needed to make hemoglobin (Hb). [1].

Indonesia has a program that has focused on continuous midwifery services (Continuity of Care), in order to accelerate the reduction of MMR and IMR. Continuity of care in Indonesian can be interpreted as continuous care starting from pregnancy, childbirth, newborn care, postpartum care, neonatal care and quality family planning services, which if implemented completely have proven to have high leverage in reducing mortality and morbidity rates that have been planned by the government [3]. By treating maternal anemia with evidence-based interventions, we can prevent other medical complications for mothers and newborns such as congestive heart failure and kidney failure [5].

Efforts to reduce the prevalence of anemia in pregnant women in Indonesia are still high. The approach taken to detect high-risk pregnancies as early as possible

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

is through midwifery care starting from pregnancy to family planning services, using a continuous approach or Continuity of Care (CoC). CoC is a process or method in which patients and health workers work together in managing health services in a sustainable manner, with the aim of achieving high-quality and efficient care in financing [2]. Midwives take preventive measures against maternal mortality through Antenatal Care (ANC) visits. Antenatal care services for pregnant women are provided in accordance with quantity and quality standards.

The quantity standard is a minimum of six visits by pregnant women during the pregnancy period (K6) with the provision of two times in the first trimester, one time in the second trimester and three times in the third trimester [6]. The quality standard is antenatal care that meets 10 T, including 10 T antenatal care services, namely weighing and measuring height, measuring blood pressure, measuring LILA, measuring the height of the uterine fundus, determining fetal presentation and fetal heart rate (DJJ), screening tetanus immunization status and providing tetanus diphtheria (Td) immunization if necessary. administration of TTD, laboratory tests including pregnancy tests, HB, golda,triple elimination (HIV, syphilis and hepatitis), case management or handling according to authority and consultation (counselling)[6].

Methods

The method used is Comprehensive midwifery care for pregnant women, giving birth, postpartum, neonates and family planning. Conducted at RSU 'Aisyiyah Siti Fatimah Tulangan, on Mrs. "D" a woman in her second pregnancy, aged 30 years, married, Muslim, last educated high school, and had her last menstrual period on November 17, 2023 with an estimated delivery on August 24, 2024. Using a descriptive research method, namely a case study, namely by examining a problem/a case consisting of a single unit.

Data were collected through primary data obtained from interviews, as well as secondary data from related documents. Data assessment was carried out following the SOAP method and documentation.[7] The case study began in the third trimester of pregnancy on August 23, 2024, followed by delivery care, newborn care, postpartum period, and family planning services on September 30, 2024.

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

Result and Discussion

A. Result

1. Midwifery Care for Pregnant Women

Third trimester midwifery care for Mrs. D was carried out on August 23, 2024. Mrs. D complained of stomach often feeling tense since the evening accompanied by the discharge of mucus mixed with blood. From the anamnesis, information was obtained that this was the second pregnancy with a history of the first spontaneous delivery handled by a midwife; the first child was 5 years old, male, with a birth weight of 2700 grams. HPHT was November 17, 2023, with complaints of nausea and vomiting in early pregnancy. The second trimester ANC visit on May 12, 2024, the mother complained of frequent dizziness, fatigue, and weakness, and the patient was given a referral by the FKTP to check her pregnancy at the 'Aisyiyah Siti Fatimah Tulangan General Hospital. Examination of vital signs showed blood pressure of 104/78 mmHg, respiratory rate of 20 times per minute, temperature of 36.1°C, and DJJ 138x/minute. Hail screening showed that the mother had moderate anemia with low Hb levels at 9 g/dL, non-reactive triple elimination. USG showed TBJ slightly smaller than 23 weeks of gestation. As an intervention, Mrs. D was given iron tablets (Ironyl) containing 60 mg of elemental iron and 400 mcg of folic acid. which was taken 1 tablet daily, as well as education on nutritional intake that can increase Hb levels, such as consumption of red meat, green vegetables, milk, and nuts. She was also advised to avoid drinking tea after meals and was encouraged to consume drinks containing vitamin C to help iron absorption.

On August 10, 2024, Mrs. D (G2P1A0) underwent a pregnancy visit at 37 weeks with complaints of abdominal tension in the lower abdomen and decreased appetite. Laboratory examination showed Hb 10.9 g/dL, blood type O, negative protein and albumin, non-reactive HbsAg, HIV, and Syphilis, and GDA 105 mg/dL. The interventions provided were education about the signs of labor and when to immediately go to a health facility, the importance of

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

adequate rest, and a comfortable sleeping position using additional pillows to reduce discomfort. A balanced diet is recommended by eating small portions but more often.

2. Midwifery Care for Mothers in Labor

Mrs. "D" returned to RSU 'Aisyiyah Siti Fatimah Tulangan Sidoarjo on August 23, 2024 at 15.30 WIB with a gestational age of 39 weeks, complaining of regular contractions accompanied by mucus and blood discharge. On physical examination, the mother's general condition was good, blood pressure 108/68 mmHg, respiration 20 times/minute, pulse 84 times/minute, and body temperature 36°C. Abdominal examination showed an enlarged abdomen lengthwise and fetal movement was visible. Leopold I showed the fetus' buttocks, Leopold II showed the fetus' back on the left side of the mother's abdomen, and a small part of the fetus on the right side. Leopold III showed the fetal head had entered the PAP and Leopold IV divergence, with a 2/5 head descent, uterine fundus height (TFU) 27 cm. Fetal heart rate (FHR) was 138 beats/minute with doppler, uterine contractions occurred 4 times in 10 minutes, duration 40 seconds with strong intensity. No swelling or varicose veins were seen in the extremities. Internal examination (VT) found 6 cm dilation, 75% cervical thinning, intact amniotic fluid, posterior presentation of the head, small fontanel on the left front, H-II head descent, no small parts palpable around the lowest part of the fetus, and 0 infiltration.

Based on the results of the examination, it was concluded that Mrs. "D" aged 30 years GIIP10001 size 39 weeks THIU letkep infusu active phase with mild anemia. Provision of management by explaining the results of the examination to the mother and family then asking for approval for the action. Observation of labor progress, fetal well-being and possible danger signs that arise with a partograph, preparing the tools and medicines needed during labor and completing the documentation.

At 10.35 WIB, spontaneous rupture of membranes was found to be clear, and the mother wanted to push like a bowel movement, an internal examination was performed, the opening was complete, 100% effacement, negative amniotic fluid, Hodge III, HIS 5 times in 10 minutes 30 seconds,

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

head descent 0/5, the results of the internal examination resulted in an opening of 10 cm, clear amniotic fluid, head presentation at the back, small fontanel in front, H-IV decreased, and there were no small parts other than the lowest part of the fetus. The results of the analysis obtained Second stage labor with mild anemia. Given labor management according to APN 60 steps, accompanied by the patient's husband. The baby was born at 11.05 WIB, crying loudly, female gender, weighing 2600 grams, body length 48 cm, immediately after being cleaned of mucus and blood, the baby was placed on the mother's stomach with a blanket and baby hat covered to perform Early Breastfeeding Initiation.

The next step is to perform active management of the third stage to ensure there is no second fetus, give an intramuscular injection of oxytoxin 10 IU and empty the bladder. Controlled umbilical cord tension is performed, when the contraction is followed by a sudden gush of blood, the placenta is born spontaneously complete at 1:00 p.m. 11.15 WIB, marginal insertion and umbilical cord length approximately 50 cm.

Management of the fourth period immediately performed uterine massage to ensure good contractions, Fundus Uteri as high as the navel, bleeding approximately 250 cc and perineum intact. The mother was wiped and bandaged and changed into clean clothes. Observation was carried out for two hours, divided into the first hour every 15 minutes and the second hour every 30 minutes. The results of the examination during the first two hours postpartum were obtained, Blood pressure 100/60 mmhg, Pulse 80 times per minute, Temperature 36 degrees Celsius, respiration 18 times per minute. TFU 2 fingers below the navel, UC hard, bleeding 1 softek not full, empty bladder.

3. Midwifery Care for Newborn Baby

Midwifery care for baby Mrs. "D" who was born at 11.05 WIB by providing management of a healthy baby born full term with joint care with the mother. After the baby was born and dried by wiping the blood mucus, the baby was placed on the mother's chest without cutting the umbilical cord to initiate early breastfeeding for the mother after early breastfeeding initiation and complete placenta birth, the umbilical cord was cut and

ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

anthropometric examination was performed with the results of a weight of 2600 grams, body length 48 cm, chest circumference 30 cm and head circumference 29 cm. The skin color is reddish, there are no congenital abnormalities, the baby has urinated and defecated. Given a 1 ml vitamin K injection in the left thigh intramuscularly, and an HB0 injection in the right thigh intramuscularly. Both baby's eyes were given antibiotic eye ointment. The baby's umbilical cord was wrapped in sterile dry gauze, then the baby was changed into clean and dry clothes and given a hat to keep the baby warm without being given a gurita.

4. Midwifery Care for Post-Partners

Postpartum period after the first 2 hours of labor and the mother is in good condition, there is no bleeding and strong uterine contractions, the mother is moved to the postpartum room and is cared for together with her baby. The mother is taught the danger signs of postpartum, and IEC is carried out to immediately report to the midwife on duty. While in the postpartum room, the mother is checked every 6 hours, and given vitamin A capsules 200,00 IU. The mother is taught to always maintain her personal hygiene by always changing pads every time they are wet, early ambulation, ensuring adequate nutrition and nutrition for postpartum mothers, getting enough rest, and to always provide breast milk to her baby as often and as much as the baby, the correct way to breastfeed, danger signs for postpartum babies and newborns [1].

The second day of postpartum on August 24, 2024, an examination was carried out and the results showed that the mother's condition was sufficient, blood pressure 110/70 mmHg, pulse 84 x / minute, temperature 36 degrees Celsius, respiratory 18 x / minute, TFU 2 fingers below the navel, strong uterine contractions, bleeding half the pad, lochia sanguinolenta and an empty bladder. The mother was allowed to go home after 24 hours postpartum with the approval of the DPJP.

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

5. Midwifery Care for Family Contract Acceptors

From the patient's KIA book, data was obtained that during the postpartum period, the mother checked her health at the nearest midwife, and her baby was also monitored by the village midwife at the local health center. On October 7, the mother checked into the obstetrics polyclinic at the 'Aisyiyah Siti Fatimah Tulangan Hospital, the mother said that the IUD had been installed by the midwife at the health center 3 days ago. From the results of the examination, blood pressure was 120/80 mmHg, pulse 84x/min, temperature 36 degrees Celsius, respiratory 20 x/min, no breast milk engorgement, conjunctiva not pale. From the examination of the USG, the results showed that the IUD was intrauterine, in a good position. Management of midwifery care for the patient. IEC of the mother regarding the possibility of early side effects, such as mild abdominal cramps, blood spots, or discomfort. Teach the mother how to check the IUD strings herself at home (usually by feeling the strings in the vagina) to ensure that the IUD is in place. Inform the mother about possible side effects, such as longer or heavier periods, cramps, or spotting between cycles. Explain warning signs that require medical attention, such as severe pain, fever, smelly discharge, or inability to feel the IUD strings. Advise her to have a check-up 4-6 weeks after IUD insertion to confirm the position of the IUD and to check the mother's health. Make sure the mother understands that the IUD does not protect against sexually transmitted infections, so condoms are still needed if there is a risk.

B. Discussion

The case of Mrs. D with her second pregnancy at the age of 30 years accompanied by moderate anemia (Hb 9g/dL) provides an important illustration in the implementation of Continuity of Care (COC). Anemia in pregnancy is a common problem, if not treated properly can increase the risk of complications in the mother and baby. Mrs. D with moderate anemia was treated with iron supplementation and regular monitoring, considering the important role of hemoglobin in supporting maternal health and fetal development.

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

1. Pregnancy Care (ANC)

Mrs. D attended ANC 8 times, according to the Ministry of Health standards which require a minimum of 6-8 visits during pregnancy. At each visit, blood pressure monitoring, uterine fundus height examination, and Hb level monitoring were carried out to monitor anemia. Mrs. D's moderate anemia was treated by providing iron supplements and nutritional education. In addition, an emphasis on consuming iron-rich foods such as red meat, green vegetables, and nuts was conveyed to improve Hb levels. At the Antenatal Care visit in the second trimester, at 22 weeks of pregnancy, the mother complained of dizziness, often tired easily and weak, and the screening results showed that the mother had moderate anemia with HB laboratory results of 9 g/dl. This is in accordance with Irianto's theory (2014), signs and symptoms of anemia begin with a decrease in hemoglobin (Hb) levels during pregnancy, which causes a decrease in oxygen supply to all body tissues and triggers the appearance of anemia symptoms [2]. Pregnant women with anemia usually experience dizziness, blurred vision especially from a sitting position then standing. Feeling weak and easily tired, tired, lethargic [3]. On physical examination, symptoms that are often seen in pregnant women with anemia include paleness of the face, mucous membranes of the eyelids, lips, and nails [3]. According to WHO (2016) anemia in pregnant women can be categorized as severe anemia (HB levels < 7 gr / dl), moderate anemia (HB levels 7 - 9.9 gr / dl), mild anemia (HB levels 10 - 10.9 gr / dl) and HB is said to be normal if the HB level is 11 gr / dl [4].

In Mrs. "D" with moderate anemia, she received iron supplementation (Ironyl) 1 tablet daily containing 60 mg of elemental iron and 400 mcg of folic acid, this is in accordance with the recommendations of ACOG which recommends anemia screening in all pregnant women and treating women with suspected iron deficiency with iron supplementation [8]. The average hemoglobin concentration of women with a history of iron supplementation during pregnancy was 1.02 g/dl higher [5]. Iron supplements during pregnancy increased the hemoglobin concentration of

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

pregnant women by 1.02 g/dl, entering the third trimester of pregnancy, Mrs. "D"'s hemoglobin level increased to 10.9 g/dl. This is due to the role of iron in the formation of red blood cells [8]. IEC mothers to consume FE tablets using juices such as guava juice, dragon fruit juice or orange juice. Pregnant women are not recommended to consume FE tablets with tea, coffee, and milk because they can inhibit iron absorption. FE tablets should be taken at night before bedtime to reduce the effects of nausea [5].

2. Maternity Care

Mrs. "D" returned to RSU 'Aisyiyah Siti Fatimah Tulangan Sidoarjo on August 23, 2024 at 15.30 WIB with a gestational age of 39 weeks, complaining of regular contractions accompanied by the discharge of mucus mixed with blood. Physical examination showed the mother's general condition was good with blood pressure of 108/68 mmHg, respiratory rate of 20 times per minute, pulse rate of 84 times per minute, and body temperature of 36° C. On abdominal examination, the abdomen appeared enlarged longitudinally, and fetal movement was visible. The results of the Leopold examination showed: Leopold I found the fetus' buttocks, Leopold II showed the fetus' back on the left side of the mother's abdomen, and a small part of the fetus on the right side. Leopold III showed that the fetal head had entered the pelvic inlet (PAP), while Leopold IV was divergent with the fetal head descending 2/5, and the height of the uterine fundus (TFU) was 27 cm. Fetal heart rate (FHR) was 138 times per minute using a doppler, uterine contractions occurred 4 times in 10 minutes with a duration of 40 seconds and strong intensity. There was no swelling or varicose veins in the extremities. Internal examination (VT) showed 6 cm dilation, cervix thinned 75%, amniotic fluid was intact, fetal position behind the head, small fontanel on the front left, head descent on H-II, no small part was felt around the lowest part of the fetus. According to researchers, the complaint conveyed by Mrs. "D" is one of the signs of labor. Real contractions will arise and disappear regularly with increasing intensity. The stomach will experience contractions and

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

relaxation, at the end of pregnancy the contraction process will occur more often [9].

On August 23, 2024, Mrs. D gave birth normally without complications. Based on the data, there was no gap between the theory and the fact that the anemia that occurred in Mrs. "D" was caused by a lack of iron intake, which caused a decrease in red blood cells. The older the gestational age, the greater the need for red blood cells in the body [6]. However, if the body does not have enough iron, the body will not be able to produce the red blood cells needed to make extra blood, so Mrs. "D" experienced anemia in TM III. However, during this pregnancy, no complications were found. This happened because the mother routinely underwent check-ups during her pregnancy so that the condition of the fetus was monitored regularly [2]. The delivery process was carried out with strict supervision of the possible effects of anemia on the mother's physical endurance. Postpartum care is directed at restoring the mother's physical condition and preventing complications such as bleeding, which are often more risky for mothers with anemia. [7]

3. Newborn Baby Care

Midwifery care for baby Mrs. "D" who was born at 11.05 WIB by providing management of a healthy, full-term baby with joint care with the mother. After the baby was born and dried by wiping the blood mucus, the baby was placed on the mother's chest without cutting the umbilical cord to initiate early breastfeeding in the mother. Umbilical cord clamping is an important step during the third stage of labor that separates the newborn from the placenta. Although there is evidence that delayed umbilical cord clamping is more beneficial for the baby, as well as the 2014 WHO recommendation that the umbilical cord should be clamped between 1 and 3 minutes, its implementation is still low in many countries. Delayed umbilical cord clamping (DCC) has been reported to have better neonatal outcomes and appears to be safe, feasible, and effective without causing side effects in both full-term and preterm newborns. Increased hematocrit

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

levels and decreased in-hospital mortality are the factors that most report significant effects associated with delayed umbilical cord clamping after the start of ventilation. In addition, studies have reported DCC is associated with a decreased risk of iron deficiency anemia (due to increased hemoglobin and hematocrit levels), decreased intravascular bleeding rates, less surfactant, increased cerebral oxygenation, mechanical ventilation and increased cardiovascular stability by increasing pulmonary blood flow to prevent ischemic conditions[8].

After early initiation of breastfeeding and complete placenta delivery, the umbilical cord was cut and anthropometric examination was performed with the results of weight 2600 grams, body length 48 cm, chest circumference 30 cm and head circumference 29 cm. The skin color is reddish, there are no congenital abnormalities, the baby has urinated and defecated. Given a 1 ml vitamin K injection in the left thigh intramuscularly, and an HB0 injection in the right thigh intramuscularly. Both baby's eyes were given antibiotic eye ointment. The baby's umbilical cord was wrapped in sterile dry gauze, then the baby was changed into clean and dry clothes and given a hat to keep the baby warm without being given a gurita.

Babies who are born in good condition receive care according to newborn care standards. A physical examination of the baby is performed to identify signs of hypoxia or developmental delays due to possible maternal anemia. Education to Mrs. D regarding early initiation of breastfeeding (IMD), umbilical cord care, and exclusive breastfeeding is also part of this care. Fast, safe, and high-quality postnatal care is essential to improve newborn survival [9].

4. Postpartum Care

Postpartum period after the first 2 hours of labor and the mother is in good condition, there is no bleeding and strong uterine contractions, the mother is placed in the postpartum room and is cared for together with her baby. The mother is taught the danger signs of postpartum, and IEC is carried out to immediately report to the midwife on duty. While in the

ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

postpartum room, the mother is checked every 6 hours, and given vitamin A capsules of 200,000 IU. High doses of vitamin A are given to mothers after giving birth for up to 6 weeks or 42 days. One capsule of red vitamin A is enough to increase the vitamin A content in breast milk for 60 days. Xerophthalmia in infants can be prevented by giving vitamin A to postpartum mothers, because vitamin A functions to maintain Retinol levels in red blood cells and breast milk. The World Health Organization (WHO), the UN, and the International Vitamin A Consultative Group (IVACG) recommend giving high doses of vitamin A (200,000 IU) to 400,000 IU until the 60th day after delivery in areas endemic to malnutrition [1].

Mothers are taught to always maintain their personal hygiene by always changing pads every time they are wet, early ambulation, ensuring adequate nutrition and nutrition for postpartum mothers, getting enough rest, and always giving breast milk to their babies as often and as much as the baby, the correct way to breastfeed, danger signs for postpartum babies and newborns. Efforts to prevent infection during the postpartum period must be carried out in basic steps by maintaining personal hygiene is about maintaining personal hygiene or genital hygiene so that it does not become a place for infection.main entry point for bacteria, and body hygiene is also very important to prevent infection[10].

In developing countries such as Indonesia, postpartum infection still plays a role as the main cause of maternal death, this problem occurs due to midwifery services that are still far from perfect. Personal hygiene behavior or personal cleanliness is an individual health effort to be able to maintain personal health [11].

The second day postpartum on August 24, 2024, an examination was carried out and the results showed that the mother's condition was sufficient, blood pressure 110/70 mmHg, pulse 84 x / minute, temperature 36 degrees Celsius, respiratory 18 x / minute, TFU 2 fingers below the navel, strong uterine contractions, bleeding half a pad, lochia sanguinolenta and an empty bladder. The mother was allowed to go home after 24 hours postpartum with the approval of the DPJP. Mrs. D received a scheduled

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

postpartum visit, which included monitoring physical recovery, self-care education, and psychological monitoring. Support from the family, especially the husband, plays a very important role in the psychological health of the mother during the postpartum period [12]. More than half of postpartum women experience postpartum blues depression in Indonesia [13]. Psychological disorders in the mother cause [14] reduced breast milk production. Because it will inhibit the let down reflex. Psychological changes in postpartum mothers generally occur on the 3rd day postpartum. Two days postpartum, mothers tend to be negative about caring for their babies and are very dependent on others because their energy is focused on themselves[15].

Nutrition education and iron intake are still provided to improve postpartum anemia, and Mrs. D is taught the importance of maintaining personal health in order to be ready to return to optimal physical condition. The nutritional needs of breastfeeding mothers increase three times from normal needs. The food consumed will increase metabolism and reserves in the body as well as breast milk production. The food consumed must be balanced and contain sufficient carbohydrates, energy, protein, minerals, vitamins, and water. Nutrients are substances needed by the body for its metabolic needs. The nutritional needs of postpartum mothers, especially when breastfeeding, will increase, because they are useful for the healing process after giving birth and producing breast milk needed by the baby [6].

From these results, it can be concluded that postpartum care carried out follows good midwifery service standards. Assistance and education provided to mothers during the postpartum period are important in preventing complications, supporting the recovery process, and facilitating the mother's role in providing effective breastfeeding for her baby.

5. Family Planning (KB) Services

Mrs. D received an IUD as a long-term birth control method. IUD/Spiral birth control is a plastic contraceptive device that has a T-

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

shaped shape and is installed in the uterus to prevent pregnancy. The advantage of this IUD birth control is that it can be used for a long period of time. Side effects are generally asymptomatic but can be pain and bleeding, and disturbances during sexual intercourse feel uncomfortable [16]. The selection of the IUD is adjusted to Mrs. D's health condition and needs to provide a healthy pregnancy spacing and maintain reproductive health.

On October 7, the mother checked into the obstetrics polyclinic at RSU 'Aisyiyah Siti Fatimah Tulangan, the mother said that the IUD had been installed by a midwife at the health center on September 30, 2024. From the results of the examination, blood pressure was 120/80 mmHg, pulse 84x/min, temperature 36 degrees Celsius, respiratory 20 x/min, no breast milk stagnation, conjunctiva not pale. Supporting examination of USG showed that the IUD was intrauterine, in a good position. Management of midwifery care for IUD thread examination alone does not guarantee correct placement. Service providers offering postpartum IUDs must ensure that the right process for evaluating and managing devices with missing strings or abnormal positions is available for all patients [17].

Conclusions

Comprehensive midwifery care has been implemented for Mrs. D during the third trimester of pregnancy, labor, postpartum period, and selection of family planning methods. This care includes anemia management, nutrition education, labor monitoring with partograph, implementation of Early Breastfeeding Initiation (IMD), active postpartum management, and maternal education on postpartum care and family planning selection. The implementation of this care demonstrates a holistic approach that takes into account the needs of the mother and baby, from preparation for labor to postnatal care and family planning, all of which contribute to improving the overall health of the mother and baby.

Indonesian Journal on Health Science and Medicine
Vol 2 No 3 (2025): July
ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

References

[1] N. Hesti, PN Syofiah, G. Muthia, and S. Sunesni, "Improving Postpartum Mothers' Knowledge Through Nutritional Needs Education During the Postpartum Period," J. Pustaka Mitra, vol. 4, no. 1, pp. 13–17, 2024, doi: 10.55382/jurnalpustakamitra.v4i1.659.

[2] SE Detlefs, MD Jochum, B. Salmanian, JR McKinney, and KM Aagaard, "Impact of Response to Iron Therapy on Maternal and Neonatal Outcomes in Pregnant Women with Anemia," J. Obstet. Gynecol., vol. 1, pp. 1–8, 2022.

[3] S. Sukmawati, R. Widiasih, L. Mamuroh, and F. Nurhakim, "Anemia in Pregnancy and Influencing Factors: A Correlation Study," J. Health. Bakti Tunas Husada, vol. 21, no. 1, p. 43, 2021, doi: 10.36465/jkbth.v21i1.679.

[4] PK Appiah, D. Nkuah, and A. Bonchel, "Knowledge and Adherence to Anemia Prevention Strategies among Pregnant Women Attending Health Care Facilities," J. Community Health, vol. 2020, pp. 1–8, 2020.

[5] M. Riski and SA Hamid, "Counseling, Nutritional Status Examination and Provision of Fe Tablets to Pregnant Women," Community Dev. J. Pengabdi. Masy., vol. 3, no. 3, pp. 2035–2037, 2022, doi: 10.31004/cdj.v3i3.9868.

[6] S. Kohort and U. Alberta, "Impact of Hereditary Bleeding Disorders and Iron Deficiency Anemia on Maternal Bleeding and Other Pregnancy Outcomes: A Population-Based Study of Arafah Ul Alam," Thesis, Univ. Alberta, 2023.

[7] S. Id, "Anindya Anggraeni's Publication Manuscript," 2024.

[8] DL Mwakawanga and LT Mselle, "Early or Delayed Cord Clamping? Experiences and Perceptions of Nurse-Midwives and Obstetricians in a Regional Referral Hospital in Tanzania," PLoS One, vol. 1, pp. 1–17, 2020. [Online]. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7307749/

[9] K. Kumar, "Abstract," J. Health Sci., vol. 1, pp. 1–25, 2021.

[10] B. E. Feleke and E. Feleke, "Effect of Pregnancy on Hemoglobin Concentration of Pregnant Women: A Longitudinal Study," J. Reprod. Health, vol. 2020, pp. 1–8, 2020.

[11] LP Sari, "Health Education on the Importance of Personal Hygiene during the Postpartum Period at the Bowong Cindea Health Center, Pangkep Regency," J. Altifani Researcher. and Community Service., vol. 2, no. 2, pp. 161–168, 2022, doi: 10.25008/altifani.v2i2.215.

[12] Setianingsih, "Effectiveness of Al Quran Murotal Therapy on Anxiety and Stress in Preoperative Patients," J. Nursing, vol. 13, no. 1, pp. 213–226, 2021.

[13] M. Jannah and N. Latifah, "Literature Review: Factors Affecting Psychological Adaptation (Postpartum Blues) during the Postpartum Period (Puerperium)," Bhamada J. Science and Technology. Health., vol. 13, no. 1, pp. 64–68, 2022, doi: 10.36308/jik.v13i1.382.

ISSN 3063-8186. Published by Muhammadiyah University of Sidoarjo

https://doi.org/10.21070/ijhsm.v2i3.135

[14] F. Hayati, "Personal Hygiene during the Postpartum Period," J. Abdimas Kesehat., vol. 2, no. 1, p. 4, 2020, doi: 10.36565/jak.v2i1.62.

[15] M. Ningsih, "The Miracle of Early Breastfeeding Initiation (IMD)," J. Ilm. Sangkareang Mataram, vol. 8, no. IMD, pp. 1–15, 2021.

[16] I. Baroroh, A. Midwifery, and H. Ibu, "Effectiveness of Sule Honey Consumption on Increasing Breast Milk Production for Working Mothers Using the Breast Pump Method (MPA)," J. Midwifery-ISSN, vol. 7, no. 1, 2021, doi: 10.21070/midwiferia.v7i1.45.

[17] SSN Impreso and I. En, "Machine Translated by Google," vol. 3651, pp. 12–19, 2020.