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Continuity of midwifery care for a woman with moderate anemia in the third trimester: A case report

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Abstract:
Anemia in pregnancy remains a major contributor to adverse maternal and neonatal outcomes in Indonesia, and continuity of care (COC) offers a framework for detecting and managing it across the reproductive continuum. This study aimed to describe the implementation and outcomes of midwifery COC for a woman with moderate anemia from the third trimester to postpartum family planning. A descriptive single-case study was conducted at an independent midwifery practice in Indonesia from November 2024 to March 2025 and reported following the CARE guidelines. The participant was a 33-year-old woman (G2P1001) at 32–33 weeks of gestation with a hemoglobin (Hb) level of 8.0 g/dL. Care was documented using the SOAP format. Nutritional counseling, oral iron, beetroot supplementation, and intravenous iron at a referral hospital raised Hb from a nadir of 7.0 to 9.7 g/dL before birth. A prolonged active phase of labor was recognized early and referred, resulting in a spontaneous vaginal birth of a healthy 3,700 g term infant. Postpartum recovery was uncomplicated, neonatal miliaria was managed with skin care education, and the mother continued condom use after counseling. Midwife-led COC enabled timely anemia management, early referral, and family-centered education, supporting safe outcomes for mother and baby.

Keywords:
anemia in pregnancy; case report; continuity of care; intravenous iron; midwifery

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INTRODUCTION

Maternal and neonatal mortality remain central indicators of how well a health system protects women and children. Globally, obstetric hemorrhage, hypertensive disorders, and sepsis together account for more than half of maternal deaths, while indirect causes, including pre-existing conditions aggravated by pregnancy, account for over a quarter (Say et al., 2014). Most of these deaths occur in low- and middle-income countries and are preventable through timely, good-quality care delivered by skilled midwives (Renfrew et al., 2014). Indonesia has made progress, but its maternal mortality ratio remains well above the Sustainable Development Goal target of fewer than 70 deaths per 100,000 live births, underscoring the need to keep the quality of primary maternity care at the center of national policy.

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Anemia is one of the most common and most modifiable risk factors in pregnancy. In 2019, an estimated 36.5% of pregnant women worldwide were anemic, with the heaviest burden in low- and middle-income regions (Stevens et al., 2022). Maternal anemia is associated with low birth weight, preterm birth, and perinatal and neonatal death (Rahman et al., 2016; Jung et al., 2019). It also increases the risk of postpartum hemorrhage, the leading direct cause of maternal death (Nair et al., 2016; Omotayo et al., 2021). Iron requirements rise steeply in the third trimester to support fetal growth and the expansion of maternal red cell mass (Means, 2020). Women in whom moderate anemia is identified late in pregnancy therefore have little time to rebuild iron stores before birth.

International guidance recommends daily oral iron and folic acid for all pregnant women and regular antenatal contacts to detect complications early (Tunçalp et al., 2017). When anemia does not respond to oral iron or is diagnosed late in the third trimester, parenteral iron should be considered (Pavord et al., 2020). Intravenous iron raises hemoglobin faster than oral iron and causes fewer gastrointestinal side effects (Lewkowitz et al., 2019). In Indonesian practice, iron therapy is commonly combined with dietary counseling that uses affordable local foods, such as beetroot, green vegetables, and liver (Nursela et al., 2021; Ardiana et al., 2020).

Managing anemia identified in late pregnancy requires more than initiating iron supplementation. Healthcare professionals need to consider the severity of anemia, the gestational age at diagnosis, the time remaining before delivery, and the woman's response to the selected treatment. Regular reassessment is important to determine whether hemoglobin levels improve and whether additional clinical management or referral is necessary. This is particularly relevant when moderate anemia is identified in the third trimester, as the limited time before childbirth may limit opportunities to optimize maternal hematological status. Coordinated management can therefore help ensure that treatment decisions, maternal monitoring, and birth preparedness are addressed as interconnected components of antenatal care.

Continuity of care (COC) is a model in which a known midwife, or a small team, provides care from pregnancy through labor, the postpartum period, newborn care, and family planning. A Cochrane review found that women who received midwife-led continuity models were less likely to have a preterm birth or to lose their baby, and received fewer obstetric interventions, than women who received other models of care (Sandall et al., 2016). The Quality Maternal and Newborn Care framework identifies continuity, prevention, and timely referral as core features of effective midwifery (Renfrew et al., 2014). In Indonesia, COC is a core competency in midwifery education and is applied in independent midwifery practices (Tempat Praktik Mandiri Bidan, TPMB) (Aprianti et al., 2023).

For women with pregnancy-related complications, the value of COC lies in its ability to connect clinical management across different stages of maternity care. A midwife who follows a woman throughout pregnancy can maintain a comprehensive understanding of her clinical history, treatment progress, and individual care needs. This continuity may facilitate early recognition of changes in maternal condition, timely coordination with referral facilities, and consistent follow-up after hospital-based treatment. It also provides an opportunity to address other needs that emerge during childbirth and the postnatal period, including maternal recovery, newborn assessment,

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breastfeeding support, and postpartum contraception. Thus, COC offers a framework for integrating condition-specific management with broader maternal and newborn care.

Despite this evidence, most data on COC come from trials of service models in high-income settings. Few reports describe in detail how one midwife carries a woman with moderate anemia, identified late in pregnancy, through referral for intravenous iron, a labor complication, the postpartum and neonatal periods, and contraceptive decision-making in Indonesian primary care. Case reports written according to the CARE guidelines can make this clinical reasoning transparent and show where practice meets or departs from the evidence (Riley et al., 2017). This case report therefore aimed to describe the implementation and outcomes of continuity of midwifery care for a woman with moderate anemia from 32–33 weeks of gestation through labor, the postpartum and neonatal periods, and family planning, and to compare the care provided with current evidence.

METHODS

This study used a descriptive single-case study design and is reported in accordance with the CARE guidelines for case reports (Riley et al., 2017). A case study design was chosen because it allows an in-depth, contextual description of clinical decision-making across successive episodes of care, an approach used in previous Indonesian nursing and midwifery practice research (Afandi et al., 2023; Azkiya et al., 2024). Care was provided at an independent midwifery practice (TPMB) in Indonesia from November 2024 to March 2025, with referral to a hospital when indicated. The participant was selected purposively because she was in the third trimester, had anemia identified at antenatal screening, and agreed to receive continuous care until postpartum contraception. Mrs. L, a 33-year-old woman (G2P1001) at 32–33 weeks of gestation with a hemoglobin (Hb) level of 8.0 g/dL, met these criteria.

Nine care episodes were documented: three antenatal visits (13 November, 22 November, and 1 December 2024), one intrapartum assessment (23 December 2024), one postpartum visit (26 December 2024), three neonatal visits (24 December 2024, 26 December 2024, and 22 January 2025), and one family planning visit (27 March 2025). Data were collected through interviews (subjective data), physical and obstetric examination (objective data), observation, and review of maternal, neonatal, and referral records. Hb values were taken from antenatal and hospital records.

Anemia severity was classified using the World Health Organization thresholds for pregnancy: mild (10.0–10.9 g/dL), moderate (7.0–9.9 g/dL), and severe (<7.0 g/dL) (Stevens et al., 2022). Pregnancy risk was screened with the Poedji Rochjati Score Card (Kartu Skor Poedji Rochjati, KSPR), the national antenatal risk-screening tool, in which a score of 6–10 indicates a high-risk pregnancy. Labor progress was monitored using cervical dilation, uterine contractions, fetal heart rate (FHR), and maternal vital signs. Neonatal outcomes included anthropometry, vital signs, and clinical findings.

Each episode followed Varney's seven-step midwifery management process and was documented in SOAP format (Subjective, Objective, Assessment, Plan). Data were analyzed descriptively. Findings from each episode were tabulated, trends in key indicators (Hb, blood pressure, fundal height, and neonatal weight) were summarized, and the care provided was compared with current guidelines and research evidence to identify consistencies and gaps between

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theory and practice. Written informed consent was obtained from Mrs. L for her care and for the publication of this report. Her identity and the practice's name were anonymized.

RESULTS

Mrs. L received continuous midwife-led care across five phases: pregnancy, labor, the postpartum period, the neonatal period, and family planning. The findings demonstrate changes in maternal hemoglobin levels during pregnancy, the need for hospital referral during labor, an uncomplicated early postpartum assessment, and a concern regarding neonatal weight identified during follow-up. Findings for each phase are presented in Tables 1–5, while the trajectory of key maternal and neonatal indicators is summarized in Table 6.

Table 1. Antenatal Visits of Mrs. L

Parameter	13-11-2024	22-11-2024	01-12-2024
Gestational Age	32-33 Weeks	33-34 Weeks	35-36 Weeks
Complaints	Lower back pain for the past 2 days	No complaints	No complaints
Body Weight	64.5 kg	65.5 kg	66 kg
Blood Pressure	112/73 mmHg	113/75 mmHg	105/70 mmHg
Fundal Height (FH)	29 cm	30 cm	30 cm
Fetal Heart Rate (FHR)	140 bpm	134 bpm	138 bpm
Hemoglobin (Hb)	8.0 g/dL	7.0 g/dL	9.7 g/dL
Diagnosis	G2P1001, 33 years old, 32–33 weeks of gestation with moderate anemia, single live intrauterine fetus, KSPR = 6	G2P1001, 33 years old, 34 weeks of gestation with moderate anemia, single live intrauterine fetus, KSPR = 6	G2P1001, 33 years old, 35–36 weeks of gestation with moderate anemia, single live intrauterine fetus, KSPR = 6
Health Education	- Health education on consuming iron-rich foods - Routine consumption of iron supplement tablets - Consumption of beetroot supplement - Physiological changes in the third trimester and recommendation to attend pregnancy exercise classes - Follow-up visit in one week or sooner if complaints arise	- Health education on consuming iron-rich foods - Routine consumption of iron supplement tablets - Consumption of beetroot supplements - Follow-up visit in one week (scheduled for 1 December 2024)	- Health education on consuming iron-rich foods - Routine consumption of iron supplement tablets - Consumption of beetroot supplements - Follow-up visit in two weeks (scheduled for 22 December 2024)

During the antenatal period, Mrs. L was diagnosed with moderate anemia at 32–33 weeks of gestation, with an initial hemoglobin (Hb) level of 8.0 g/dL. At the subsequent visit, Hb decreased to 7.0 g/dL despite iron supplementation and dietary counseling. Following intravenous iron

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administration at the referral hospital, Hb increased to 8.7 g/dL and subsequently reached 9.7 g/dL at the third antenatal visit. This represented an overall increase of 2.7 g/dL from the lowest recorded value. However, the Hb level remained below the normal range for pregnancy, indicating persistent anemia. Blood pressure, fundal height, and fetal heart rate remained within the recorded normal ranges throughout the three visits. The KSPR score of 6 classified the pregnancy as high risk (Table 1).

At 38–39 weeks of gestation, Mrs. L presented in the active phase of labor with cervical dilation of 4 cm and a fetal heart rate of 144 bpm. The clinical assessment documented a prolonged active phase, prompting referral to the hospital for further management. The midwife monitored fetal heart rate, uterine contractions, and maternal vital signs, provided guidance on breathing relaxation, involved the family in providing psychological support, and prepared the referral. The woman subsequently delivered vaginally at the hospital (Table 2).

Table 2. Labor Visit of Mrs. L

Parameter	23-12-2024 (23:30 WIB)
Complaints	Complained of abdominal tightening and cramping since 11:00 PM, accompanied by mucus mixed with blood.
Blood Pressure (BP)	120/70 mmHg
Fundal Height (FH)	32 cm
Contractions	4 times/10 min, 30 s each
Fetal Presentation	Cephalic
Fetal Heart Rate (FHR)	144 bpm
Vaginal Examination	Cervical dilation: 4 cm
Diagnosis	G2P1001 at 38–39 weeks of gestation, in the first stage of labor, active phase, with prolonged active phase
Care Provided	- Monitoring of FHR, uterine contractions, and maternal vital signs - Encouraged the mother to practice breathing relaxation - Advised the family to provide psychological support - Prepared for referral to the hospital

Table 3. Postpartum Visit of Mrs. L

Parameter	26-12-2024
Complaints	Perineal suture pain and discomfort while breastfeeding
Blood Pressure (BP)	110/70 mmHg
Breasts	Nipples protruding, clean, colostrum present (+)
Abdomen	No surgical scar, fundal height midway between umbilicus and symphysis pubis, good uterine contraction, bladder empty
Genitalia	Lochia sanguinolenta, no odor, no signs of REEDA (Redness, Edema, Ecchymosis, Discharge, Approximation)
Diagnosis	P2002 Postpartum day 3
Care Provided	- Health education on vulvar hygiene - Health education on consuming protein-rich foods - Health education on proper breastfeeding technique and position - Health education on follow-up visits if complaints occur

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On postpartum day 3, the maternal assessment showed a blood pressure of 110/70 mmHg, adequate uterine contraction, fundal height midway between the umbilicus and symphysis pubis, and sanguinolent lochia without odor. No signs of perineal infection were documented using the REEDA assessment. The main complaints were perineal suture pain and discomfort during breastfeeding. Care focused on vulvar hygiene, adequate protein intake, and appropriate breastfeeding techniques and positioning (Table 3).

The infant was born at term with a birth weight of 3,700 g and a length of 49 cm. On day 2, the infant's weight decreased to 3,600 g, representing a 2.7% reduction from birth weight. At 28 days, the recorded weight was 3,400 g, which was 300 g (8.1%) below birth weight, while body length had increased to 51 cm. The infant was also assessed for a red papular rash on the neck and diagnosed with miliaria. Care included breastfeeding education, skin care advice, immunization education, and guidance on home newborn care (Table 4).

Table 4. Neonatal Visits of Mrs. L's Baby

Parameter	24-12-2024	26-12-2024	22-01-2025
Complaints	None	None	The mother reported that the baby developed a red rash with small spots on the right side of the neck three days ago, which has since spread.
Respiration	32 breaths/min	34 breaths/min	34 breaths/min
Temperature	36.3 °C	36.5 °C	36.3 °C
Body Weight	3,700 g	3,600 g	3,400 g
Body Length	49 cm	49 cm	51 cm
Diagnosis	Term neonate, age 0 days	Term neonate, age 2 days	Term neonate, age 28 days with miliaria
Care Provided	Routine newborn care management at the hospital	- Health education on exclusive breastfeeding - Health education on sun exposure in the morning (maximum 30 minutes between 7–10 a.m.) - Health education on newborn care - Follow-up visit if complaints occur	- Health education on exclusive breastfeeding - Health education for mothers to keep the baby's skin dry by using cotton clothing - Health education on using VCO (Virgin Coconut Oil) for skin rashes - Health education on using lotion containing calamine - Health education on routine immunization - Health education on home-based newborn care

At the family planning visit, Mrs. L requested counseling regarding condom use. Following counseling on correct use, potential failure, and long-acting contraceptive methods, she chose to continue using condoms, which she had used before pregnancy. Her blood pressure and other recorded vital signs were within normal ranges at the time of the visit (Table 5).

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Table 5. Family Planning Visit of Mrs. L

Parameter	27-03-2025
Complaints	Wanted to consult about condom use
Blood Pressure (BP)	100/70 mmHg
Respiration	18 breaths/min
Pulse	82 beats/min
Temperature	36.7 °C
Body Weight	62 kg
Diagnosis	P2002, 33 years old, long-term condom user
Care Provided	- Health education on the side effects of condom use - Health education on long-acting contraceptive methods - Health education on proper condom use to prevent failure

Table 6. Summary of Key Maternal and Neonatal Indicators across the Continuum of Care

Phase and date	Indicator	Finding	Interpretation
Antenatal visit 1 (13-11-2024)	Hb; KSPR score	8.0 g/dL; 6	Moderate anemia; high-risk pregnancy
Antenatal visit 2 (22-11-2024)	Hb	7.0 g/dL	Lowest value; intravenous iron given at referral hospital
After intravenous iron	Hb	8.7 g/dL	Early response to therapy
Antenatal visit 3 (01-12-2024)	Hb	9.7 g/dL	Moderate anemia, improving (+2.7 g/dL from lowest value)
Labor (23-12-2024)	Cervical dilation; FHR	4 cm at admission; 144 bpm	Prolonged active phase; referred; spontaneous vaginal birth
Postpartum (26-12-2024)	Blood pressure; involution; perineum	110/70 mmHg; fundus midway umbilicus–symphysis; no REEDA signs	Normal recovery
Neonate, day 0 (24-12-2024)	Weight; length	3,700 g; 49 cm	Healthy term newborn
Neonate, day 2 (26-12-2024)	Weight	3,600 g	2.7% weight loss (physiological)
Neonate, day 28 (22-01-2025)	Weight; skin	3,400 g; red papular rash on neck	Miliaria; weight 8.1% below birth weight
Family planning (27-03-2025)	Blood pressure; method	100/70 mmHg; condom	Informed choice to continue condom use

Overall, the findings demonstrate improvement in maternal Hb following intravenous iron administration, although anemia persisted at the last antenatal assessment. Maternal postpartum findings were reassuring based on the documented clinical examination. However, the infant's weight at 28 days remained below birth weight, highlighting the need for further assessment of feeding adequacy and serial growth monitoring. These findings illustrate both the clinical achievements and the areas requiring continued follow-up within the continuum of midwifery care.

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DISCUSSION

This case report showed that continuous midwife-led care for a woman with moderate anemia identified late in pregnancy was accompanied by a clinically meaningful rise in Hb before birth, timely referral during a prolonged labor, and an uncomplicated postpartum course. It also revealed points where care could be strengthened. The findings are discussed below by phase and then in relation to the COC model.

Mrs. L entered the continuum at 32–33 weeks with an Hb of 8.0 g/dL, which fell to 7.0 g/dL nine days later despite counseling and oral iron. This decline was clinically important. Low Hb in pregnancy is associated with low birth weight, preterm birth, and perinatal death (Rahman et al., 2016; Jung et al., 2019), and maternal anemia increases the risk of postpartum hemorrhage (Nair et al., 2016; Omotayo et al., 2021). Because iron demand peaks in the third trimester (Means, 2020), the falling Hb signaled that oral iron alone was unlikely to restore adequate levels before term.

Obtaining intravenous iron at the referral hospital was consistent with current guidance. Oral iron is the first-line treatment, but parenteral iron should be considered when women do not respond to or tolerate oral iron, or when anemia is diagnosed late in pregnancy (Pavord et al., 2020). Meta-analytic evidence shows that intravenous iron produces a greater and faster rise in Hb than oral iron, with fewer adverse reactions (Lewkowitz et al., 2019). In this case, Hb rose from 7.0 to 9.7 g/dL, a gain of 2.7 g/dL, although it remained in the moderate range at the last antenatal visit. A repeat Hb test before labor was not documented. Such a test would have helped the team anticipate the risk of hemorrhage at birth and is a practical lesson for similar cases.

The increase in Hb following intravenous iron indicates a favorable hematological response, but the improvement should not be interpreted as complete correction of maternal anemia. The Hb level of 9.7 g/dL remained below the normal threshold for pregnancy, indicating that further monitoring and treatment were still necessary. In women diagnosed with anemia near delivery, clinical management should therefore extend beyond the initial response to intravenous iron and include reassessing hematological status, evaluating symptoms, and preparing for potential blood loss during childbirth. This case highlights the importance of documenting both treatment administration and subsequent laboratory findings to support clinical decisions across the antenatal and intrapartum periods. It also emphasizes that referral for treatment should be accompanied by a clear follow-up plan to ensure that the response is adequately evaluated before delivery.

Alongside drug treatment, the midwife provided counseling on iron-rich foods, protein, and beetroot. Beetroot has been reported to increase Hb in Indonesian pregnant women (Nursela et al., 2021), and the use of affordable local foods fits community-based nutrition approaches in Indonesia (Ardiana et al., 2020). Dietary measures act slowly, however, and should complement iron therapy rather than replace it. Counseling also addressed lower back pain through antenatal exercise, in line with WHO recommendations that antenatal contacts respond to common physiological symptoms as well as clinical risks (Tunçalp et al., 2017). The KSPR score of 6 correctly flagged the pregnancy as high risk, which in Indonesian practice calls for closer monitoring and readiness for referral.

Mrs. L presented at 38–39 weeks in the active phase with 4 cm cervical dilation. Dilation from 4 to 10 cm took approximately 10 hours longer than the expected 3–4 hours, and a prolonged

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active phase was diagnosed. The traditional benchmark of 1 cm per hour has been questioned: a WHO-led systematic review found that many low-risk women with normal outcomes dilate more slowly than this, particularly before 5 cm (Oladapo et al., 2018). Even so, a delay of this size in a multiparous woman exceeds contemporary limits, and moderate anemia increased her vulnerability to exhaustion, infection, and postpartum hemorrhage (Omotayo et al., 2021). Referral to hospital was therefore appropriate.

Continuity was evident in how the referral was handled. The midwife monitored FHR, contractions, and vital signs, explained the need for referral to the family, and prepared the transfer. Structured handover tools such as SBAR (Situation, Background, Assessment, Recommendation) improve the completeness and safety of information shared between professionals (Putri & Afandi, 2023), and their routine use in midwife-to-hospital referrals would strengthen this step. Breathing relaxation and family support were also provided. Non-pharmacological methods reduce labor pain and anxiety and are safe, low-cost, and acceptable to women (Baljon et al., 2022; Nori et al., 2023). The spontaneous vaginal birth of a healthy term infant suggests that early recognition and timely referral prevented the complication from escalating.

Postpartum findings showed normal involution, lochia sanguinolenta without odor, and no signs of perineal infection. Perineal pain and breastfeeding discomfort were addressed through education on vulvar hygiene, protein intake, and breastfeeding technique. Because Mrs. L entered labor with moderate anemia, continued iron supplementation and a postpartum Hb check would have been advisable (Pavord et al., 2020); neither was recorded, which represents a gap in documentation. Breastfeeding counseling is a high-value intervention because optimal breastfeeding prevents a large share of child deaths and benefits maternal health (Victora et al., 2016). Clear health education also has psychological value, as it reduces anxiety and supports self-care (Azkiya et al., 2024).

The infant's anthropometric measurements at birth were within normal ranges, and the 2.7% weight loss on day 2 was physiological. At 28 days, however, the infant weighed 3,400 g, about 8% below birth weight. Population nomograms show that most newborns regain their birth weight within the first two weeks (Paul et al., 2016). A weight below birth weight at four weeks therefore warrants assessment of breastfeeding effectiveness and closer growth monitoring. This finding should be interpreted with caution, because differences in scales or measurement conditions may contribute. Nevertheless, it shows that neonatal follow-up within COC should include systematic growth assessment rather than focus only on presenting complaints.

This finding also highlights the importance of linking maternal breastfeeding support with objective neonatal growth monitoring. Assessment of breastfeeding should not rely exclusively on maternal reports or the infant's apparent ability to attach to the breast; it should also consider feeding frequency, swallowing, urine and stool output, and serial weight measurements. When weight gain is inadequate, midwives should assess possible feeding difficulties, provide targeted lactation support, and arrange further evaluation or referral when clinically indicated. Within a COC model, these assessments can be documented and followed by the same provider, allowing changes in infant growth to be recognized over time. Such an approach helps ensure that neonatal care remains proactive and that potential nutritional problems are addressed before they become more serious.

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The presenting complaint at 28 days was miliaria, a benign condition caused by blocked sweat ducts in hot and humid environments. Management focused on keeping the skin cool and dry with loose cotton clothing, calamine lotion, and virgin coconut oil (VCO). Evidence for VCO comes mainly from pediatric atopic dermatitis, where topical VCO improved disease severity and skin barrier function (Evangelista et al., 2014). Its use for miliaria is plausible but less well supported, so environmental measures remain the basis of management. Education on immunization and home newborn care strengthened the parents' capacity to care for their baby.

At the family planning visit, Mrs. L chose to continue using condoms, the method she had used before pregnancy. Counseling covered correct use, possible failure, and long-acting reversible contraception. Supporting an informed choice is central to rights-based care, and birth spacing matters: interpregnancy intervals shorter than 18 months are associated with higher risks of preterm birth, low birth weight, and small-for-gestational-age infants (Conde-Agudelo et al., 2006). For a woman recovering from anemia, an adequate interval also allows iron stores to be replenished before the next pregnancy. Because condoms have a higher typical-use failure rate than long-acting methods, follow-up of correct use and satisfaction is advisable.

Taken together, this case illustrates how midwife-led continuity can improve outcomes. Continuity allowed the same provider to notice a falling Hb trend, act on it before birth, recognize labor delay, and carry information forward into postpartum, neonatal, and contraceptive care. Women who receive midwife-led continuity models are less likely to experience preterm birth and fetal or neonatal loss and receive fewer interventions (Sandall et al., 2016), and the Quality Maternal and Newborn Care framework places continuity, prevention, and timely referral at the core of effective midwifery (Renfrew et al., 2014). This case adds a practical example from Indonesian primary midwifery practice (Aprianti et al., 2023). It shows both the strengths of the model and four points where protocols can be tightened: repeat Hb testing before and after birth, structured referral handover, postpartum anemia follow-up, and routine infant growth monitoring.

The strength of this report is its documentation of a complete episode of care across five phases using a standard SOAP framework. Its limitations are those of a single case: the findings cannot be generalized or used to infer causality. Some data were incomplete, including the dose and exact date of intravenous iron, Hb values before and after birth, and hospital records of labor management. Future studies should use case series or larger samples with standardized outcome measures to evaluate COC among women with anemia in Indonesian primary care settings.

CONCLUSION

Continuity of midwifery care for Mrs. L, a woman with moderate anemia identified at 32–33 weeks of gestation, was implemented across pregnancy, labor, the postpartum and neonatal periods, and family planning. Nutritional counseling, iron supplementation, and timely intravenous iron raised Hb from 7.0 to 9.7 g/dL before birth; early recognition and referral of a prolonged active phase led to a spontaneous vaginal birth of a healthy term infant; and postpartum recovery and contraceptive decision-making were uncomplicated. Midwife-led COC therefore supported safe maternal and neonatal outcomes, and it can be strengthened by repeat Hb testing before and after birth, structured referral handover, and routine infant growth monitoring.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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