

MIDWIFERY CARE FOR A 16-YEAR-OLD ADOLESCENT GIRL WITH ANEMIA

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ABSTRAK

Anemia merupakan masalah gizi yang banyak dialami remaja putri di Indonesia dengan prevalensi yang masih tinggi meskipun berbagai program intervensi telah dilakukan. Studi kasus ini bertujuan memberikan gambaran asuhan kebidanan pada seorang remaja usia 16 tahun dengan anemia melalui pendekatan manajemen asuhan kebidanan 7 langkah Varney serta pendokumentasian dalam format SOAP. Pasien mengeluh sering lelah, mengantuk, sesak, dan berkunang-kunang. Pada pemeriksaan fisik menunjukkan tanda klinis anemia (konjungtiva pucat). Asuhan yang diberikan berupa edukasi gizi, peningkatan konsumsi makanan bergizi seimbang, pemberian Tablet Tambah Darah (TTD), serta pemantauan kondisi kesehatan. Setelah 1 minggu, klien mengkonsumsi vitamin C dan tablet tambah darah disertai dengan kondisi pasien menunjukkan perbaikan berupa tubuh lebih bugar, konsentrasi belajar meningkat, dan keluhan mengantuk, mudah lelah, sesak dan berkunang-kunang berkurang. Studi ini menegaskan pentingnya edukasi gizi dan kepatuhan dalam pencegahan serta penanganan anemia pada remaja putri.

Kata Kunci : Anemia, Remaja, Gizi, Tablet Tambah Darah

ABSTRACT

Anemia is a prevalent nutritional issue among adolescent girls in Indonesia, with rates remaining high despite various intervention programs. This case study aims to describe the midwifery care provided to a 16-year-old adolescent with anemia, utilizing Varney's seven-step midwifery management approach and SOAP documentation. The patient complained of frequent fatigue, drowsiness, shortness of breath, and dizziness (visual disturbances). A physical examination revealed clinical signs of anemia (pale conjunctiva). Care interventions included nutritional education, promoting the consumption of a balanced diet, administering iron-folic acid supplements (blood-boosting tablets), and monitoring health status. After one week of taking Vitamin C and iron-folic acid supplements, the patient showed improvement: she felt more energetic, her concentration during studies increased, and symptoms such as drowsiness, fatigue, shortness of breath, and dizziness subsided. This study underscores the importance of nutritional education and adherence to treatment in the prevention and management of anemia among adolescent girls.

Keywords : Anemia, Adolescents, Nutrition, Iron Supplements

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INTRODUCTION

Adolescence is a period of rapid growth and development that requires adequate nutritional intake. Adequate macronutrients and micronutrients, including energy, protein, iron, vitamins, and minerals, are needed to support physical growth, cognitive development, and reproductive health. Adolescent girls are particularly vulnerable to anemia because iron requirements increase during growth and because of monthly blood loss through menstruation. Adequate nutritional intake is associated with anemia among adolescent girls aged 14–16 years (Yustika et al., 2020).

Anemia among adolescent girls remains an important nutritional problem. Globally, approximately 30% of women aged 15–49 years are affected by anemia (WHO, 2025). In Indonesia, the 2018 Basic Health Research reported an anemia prevalence of 32% among adolescents aged 15–24 years, while the 2023 Indonesian Health Survey reported a decrease to 15.5%, with the prevalence among adolescent girls estimated at approximately 18%. Despite the decrease, anemia remains a significant health concern requiring sustained intervention.

Anemia among adolescent girls may be associated with an unbalanced diet.

Inappropriate dieting, low consumption of animal-source protein, inadequate iron intake, drinking tea or coffee after meals, stress, and poor sleep patterns have been associated with anemia among adolescent girls (Sunarti et al., 2025). In addition, limited knowledge about the benefits of iron supplementation may contribute to irregular consumption and reduce the effectiveness of anemia prevention efforts (Asrina et al., 2021).

Non-adherence to iron supplementation is another challenge in anemia prevention among adolescent girls. Providing iron tablets alone may not produce optimal benefits when they are not consumed regularly and according to recommendations. Reminder-based support has been shown to improve adherence, indicating that continued support and monitoring are important to help adolescents follow recommendations (Asrina et al., 2021).

Untreated anemia may affect adolescents' physical condition and daily activities. Low hemoglobin levels may cause fatigue, sleepiness, reduced physical fitness, and impaired concentration and cognitive performance. In adolescent girls, long-term anemia may also increase health risks when they enter pregnancy, including the risk of low birth weight and impaired child growth (Fuadia

et al., 2025; Sunarti et al., 2025).

Anemia may also affect learning processes and productivity. Symptoms such as fatigue and reduced concentration can interfere with school activities and adolescents' ability to participate optimally in learning (Fuadia et al., 2025). Therefore, anemia in adolescent girls is not only an individual health problem but also an important issue in efforts to improve the health of future generations.

Management of anemia among adolescent girls can include dietary improvement, nutrition education, iron supplementation, improved adherence, and monitoring of hemoglobin levels. Education about anemia can improve adolescents' and families' understanding of prevention and management. Education delivered through easy-to-understand media can also strengthen parents' role in supporting anemia management among adolescent girls (Fuadia et al., 2025).

Regular iron supplementation is another strategy that may improve hemoglobin levels in adolescent girls with mild anemia. Previous findings showed differences in hemoglobin levels before and after iron supplementation among adolescent girls with mild anemia (Sunarti et al., 2025). Supportive supervision during supplementation may also improve adherence and support

increases in hemoglobin levels (Khoirot & Karnasih, 2026).

Thus, nutrition education is an important intervention for adolescents because it can improve knowledge and awareness of healthy eating while encouraging healthier food choices. Such efforts can help prevent nutritional problems such as anemia, support optimal adolescent growth and development, and contribute to breaking the intergenerational cycle of malnutrition.

METHODS

This study used a descriptive case-study approach to document midwifery care for a 16-year-old adolescent girl with anemia. Assessment was conducted on 10 September 2026. Data were obtained through history taking, physical examination, and hemoglobin assessment. Care was documented using the seven-step Varney midwifery care management approach and the SOAP format. The intervention included nutrition education, recommendations to consume balanced and iron-rich foods, iron supplementation according to healthcare-provider recommendations, healthy lifestyle advice, and monitoring of the patient's condition. Follow-up was conducted for one week to assess changes in the patient's reported complaints, appetite, concentration, and general condition.

RESULTS

Table 1 General and Physical Examination Results of the Adolescent Patient

Examination	Result
Age	16 years
Gender	Female
General condition	Good
Level of consciousness	Compos mentis
Body weight	49 kg
Height	157 cm
Blood pressure	109/75 mmHg
Pulse rate	80 beats/minute
Respiratory rate	20 breaths/minute
Mid-upper arm circumference (MUAC)	24 cm
Conjunctiva	Pale
Sclera	Non icteric
Facial edema	Absent
Hemoglobin level	11,4 g/dL
Main complaints	Frequent sleepiness, fatigue, and occasional shortness of breath

Source: Primary Data, 2026

Based on Table 1, the assessment was conducted on September 10, 2026. The patient was a 16 year old adolescent girl who was in good general condition and fully conscious (composmentis). The patient reported frequent sleepiness, fatigue, and occasional shortness of breath. Physical examination showed a blood pressure of 109/75 mmHg, pulse rate of 80 beats/minute, respiratory rate of 20

breaths/minute, body weight of 49 kg, height of 157 cm, and MUAC of 24 cm. Pale conjunctiva was observed, while the sclera was non-icteric and facial edema was absent. The hemoglobin level was 11.4 g/dL. Adolescent health initiatives are directed not only at adolescents themselves but also at parents or caregivers, with the aim of fostering and ensuring adolescent health. These initiatives must actively involve adolescents in maintaining and improving their own health. Family support is essential to enable adolescents to grow up healthy in alignment with their abilities, interests, and talents; to prevent early marriage; and to facilitate access to standard-compliant health services. Such family support encompasses care, upbringing, education, and protection for the adolescent

DISCUSSION

A 16-year-old adolescent girl with a hemoglobin level of 11.4 g/dL, accompanied by fatigue, sleepiness, occasional shortness of breath, and pale conjunctiva, requires attention within

adolescent midwifery care. Adolescent girls are vulnerable to anemia because iron requirements increase during growth and because of menstrual blood loss. Adequate nutritional intake, particularly iron, is therefore important in anemia prevention among adolescent girls (Yustika et al., 2020).

In this case, the patient received education on the importance of consuming a balanced diet and iron-containing foods. Iron can be obtained from both animal and plant sources. Education on selecting and preparing iron-rich foods can improve adolescents' knowledge and support anemia prevention (Suryani et al., 2024).

Education also addressed healthy eating habits, including avoiding skipped meals, consuming adequate protein, and increasing iron-rich foods. Nutrition education is an approach that can improve adolescents' understanding of anemia prevention and appropriate food selection (Suryani et al., 2024).

In addition to nutrition education, the patient was advised to consume iron tablets according to healthcare-provider recommendations. Adherence to iron supplementation is important in preventing and managing anemia among adolescent girls. Reminder-based support may help adolescents consume iron tablets regularly (Asrina et al., 2021).

Support during iron supplementation is also needed so that adolescents receive not only the tablets but also encouragement to take them regularly. Assisted iron-tablet consumption has been reported to improve adherence and support increases in hemoglobin levels (Khoirot & Karnasih, 2026).

Iron supplementation among adolescent girls with mild anemia may also result in changes in hemoglobin levels. Previous research demonstrated differences in hemoglobin levels before and after iron supplementation among adolescent girls with mild anemia (Sunarti et al., 2025). Therefore, iron supplementation was included in the care provided in this case, with adherence and monitoring supported by healthcare providers.

The patient was also advised to maintain a healthy lifestyle by obtaining adequate rest, drinking sufficient water, maintaining regular meals, and engaging in physical activity according to her ability. Monitoring included her reported complaints, physical condition, body weight, and adherence to the recommendations provided.

After one week of care and monitoring, the patient reported feeling fitter, experiencing fewer complaints, having an improved appetite, and being able to concentrate better at school. She

also reported less dizziness after improving her dietary pattern and taking iron tablets regularly. These changes indicate improvement in the patient's subjective condition after receiving care.

This case highlights that relatively simple interventions, including nutrition education, iron supplementation, and continued support from healthcare providers, may contribute positively to adolescent health. Appropriate management may help reduce long-term risks associated with anemia, including low birth weight, stunting, and pregnancy-related complications. Therefore, midwives have an important role in providing education, monitoring, and supportive care to promote optimal adolescent growth and development and reduce the intergenerational cycle of nutritional problems.

CONCLUSION

Anemia is a common nutritional problem among adolescents, particularly adolescent girls, and may be associated with inadequate macronutrient and micronutrient intake. In this case, the patient experienced fatigue, reduced concentration, dizziness, and pallor, which were consistent with an anemic condition. Midwifery care included balanced-nutrition education, increased intake of iron-rich foods, iron

supplementation according to healthcare recommendations, adequate fluid and rest, and health monitoring. After one week of care and monitoring, the patient reported feeling fitter, experiencing less fatigue, and being able to concentrate better at school, with reduced dizziness after improving her dietary pattern and taking iron tablets regularly. Overall, nutrition education, adherence to healthy lifestyle practices, and appropriate support are important components of preventing and managing anemia among adolescents.

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