Dietary Patterns and Occupation as Characteristics of Pregnant Women with Anemia at the PMB of Midwife Millatin Khusniyati, S.Tr.Keb, in Mayong Jepara

Triana Widiastuti*, Desi Suryani, Lailatul Mustaghfiroh

Sekolah Tinggi Kesehatan Bakti Utama, Indonesia
Program Studi Kebidanan, Universitas Al Hikmah, Indonesia
* Corresponding Author: maktri03@gmail.com

Abstract. Poor nutrition, malabsorption issues, and unhealthy dietary habits during pregnancy can increase the risk of anemia among expectant mothers. Women often shoulder a dual burden—managing reproductive tasks within the household while also engaging in productive work to earn a living—resulting in shorter rest periods compared to men. This dual burden makes women more susceptible to health issues, including anemia. The general objective of this study is to describe the dietary patterns and employment status of pregnant women suffering from anemia at the Independent Midwifery Practice (PMB) of Midwife Millatin Khusniyati, S.Tr.Keb. This is a descriptive study. The population consists of all pregnant women diagnosed with anemia, with a sample size of 53 respondents selected via total sampling. Data processing involved editing, coding, and tabulation, followed by univariate analysis. The results indicate that the majority of the pregnant women (35 respondents or 66.6%) had poor dietary habits; the majority (30 respondents or 56.6%) were employed; and the majority (31 respondents or 58.3%) suffered from mild anemia. Consequently, healthcare providers are encouraged to enhance health services—particularly during Antenatal Care (ANC) visits—by consistently providing information, education, and communication (IEC) regarding healthy diets, adequate rest, and the nature of anemia during pregnancy.

Keywords: Diet and Occupation, Incidence of Anemia, Pregnant Women

INTRODUCTION

Pregnancy is a natural physiological process that requires special attention because various anatomical, physiological, and metabolic changes occur to support fetal growth and development. These changes increase the nutritional requirements of pregnant women, particularly iron, folic acid, protein, and vitamins, which play an essential role in the formation of red blood cells. Failure to meet these nutritional needs may increase the risk of anemia, which can adversely affect both maternal and fetal health (Proverawati, 2020).

Anemia during pregnancy remains a major public health problem worldwide, including in Indonesia. According to the World Health Organization (WHO), anemia in pregnancy is defined as a hemoglobin (Hb) level of less than 11 g/dL. Maternal anemia increases the risk of preterm birth, low birth weight (LBW), postpartum hemorrhage, infection, and maternal and neonatal morbidity and mortality. Therefore, the prevention and management of anemia are important priorities in maternal healthcare services (Deswati et al., 2019).

According to WHO, the prevalence of anemia in Indonesia remains high and continues to be a public health concern. The prevalence of anemia is reported at 50.9% among pregnant women, 40.5% among children under five years of age, 47.3% among school-aged children, 57.1% among adolescent girls, and 39.5% among women of reproductive age (Kementrian Kesehatan Republic of Indonesia, 2025). The five leading causes of maternal mortality are hemorrhage, infection, eclampsia, prolonged labor, and abortion complications. Indirect causes include anemia, accounting for 51% according to the 2024 Household Welfare Survey, as well as Protein Energy Malnutrition (PEM) and Calorie Energy Deficiency, accounting for 4.8% according to the 2000 census (World Health Organization, 2025).

Pregnant women are among the groups most vulnerable to nutritional problems, particularly iron deficiency anemia. Anemia can be prevented by consuming a balanced diet that provides adequate iron to meet the body's requirements. Several factors influence the occurrence of anemia, including maternal age, parity, educational level, knowledge, iron tablet consumption, socioeconomic status, nutritional status, and dietary patterns. Poor nutrition, malabsorption, and unhealthy eating habits during pregnancy

may increase the risk of anemia (Deswati et al., 2019). A study conducted by Herlina et al. in Bogor City in 2023 found that poorer dietary patterns were associated with a higher incidence of anemia (Mantasia, 2021).

Anemia is one of the major contributors to pregnancy complications. Based on the Indonesian Household Health Survey, the prevalence of anemia among pregnant women was 40.1% and decreased to 24.5% according to Riskesdas (2007). Approximately 95% of anemia cases during pregnancy are caused by iron deficiency. The primary cause is inadequate dietary intake in terms of quantity, food variety, and cooking methods (Proverawati, 2011). Iron deficiency anemia may result from insufficient intake of iron- and protein-rich foods, impaired iron absorption, or increased iron requirements during pregnancy (Febriyeni, 2021).

Dietary restrictions and poor eating habits during pregnancy may worsen iron deficiency anemia. A diet that does not meet the principles of balanced nutrition and contains limited iron-rich foods, such as meat, fish, liver, and other animal-source foods, is one of the main causes of anemia because iron from animal sources has higher bioavailability than plant-based sources. Healthy dietary habits should be established to meet nutritional requirements during pregnancy. Inappropriate dietary patterns may result in either excessive or inadequate nutrient intake. Excessive intake can lead to overweight and nutrition-related diseases, whereas insufficient intake may result in undernutrition and increased susceptibility to disease (Sjahriani & Faridah, 2019).

Adequate nutritional intake is essential during pregnancy to support fetal growth and development and to prepare the mother physically for safe childbirth. Throughout pregnancy, the fetus depends entirely on the mother for essential nutrients. Therefore, midwives play an important role in educating pregnant women about the importance of consuming nutritious foods. In modern society, food choices are often influenced by taste preferences rather than nutritional quality. Maintaining a balanced diet during pregnancy improves the health status of both mother and baby and supports successful breastfeeding during the postpartum period (Sulistyawati, 2009).

In addition to dietary patterns, maternal occupation is another characteristic that may influence maternal health during pregnancy. Working pregnant women generally have greater physical activity and heavier workloads, resulting in increased energy and nutritional requirements. Work-related demands may lead to irregular meal times, inadequate rest, and poor adherence to iron supplementation. However, unemployed pregnant women may also experience anemia if their nutritional requirements are not adequately met. Therefore, occupational status is an important characteristic to describe among pregnant women with anemia. Pregnant women are often encouraged to "eat for two," meaning that they must consume sufficient food to meet both their own nutritional needs and those of the developing fetus. Pregnant women are advised to consume one to two additional servings of food each day, either by increasing meal frequency, increasing portion sizes, or consuming healthy snacks between meals (Sjahriani & Faridah, 2019).

An individual's occupation reflects daily activities and socioeconomic status. A study conducted in Jati Rawamangun Village by the Women's Study Group of the Faculty of Social and Political Sciences, Universitas Indonesia (2024), found that 47.5% of working women considered their primary role to be that of a housewife. This finding illustrates that women often carry dual responsibilities, including reproductive roles within the household and productive work to earn income. Consequently, women tend to have shorter rest periods than men, increasing their risk of health problems, including anemia (Almatsier, 2020). Pregnant women should reduce activities that are physically exhausting but should not use pregnancy as an excuse to avoid routine responsibilities. They should also avoid prolonged sitting or standing and maintain adequate rest and sleep to support maternal and fetal health. Late-night sleeping habits and nighttime activities should be minimized whenever possible. Pregnant women are generally advised to sleep approximately eight hours at night and take a one-hour daytime nap (Marmi,

2019).

PMB Midwife Millatin Khusniyati, S.Tr.Keb is one of the independent midwifery practices located in Mayong District, Jepara Regency. Based on records from April to June 2026, there were 68 pregnant women receiving antenatal care, of whom 37 were diagnosed with anemia. A preliminary survey conducted at PMB Midwife Millatin Khusniyati, S.Tr.Keb identified 10 pregnant women with anemia. The findings indicated that many pregnant women with anemia had poor dietary patterns and performed physically demanding work. Several women also experienced adverse pregnancy outcomes, including low birth weight infants, congenital abnormalities, and miscarriage. These findings demonstrate that anemia remains a significant health problem among pregnant women attending PMB Midwife Millatin Khusniyati, S.Tr.Keb. Based on this background, the researcher was interested in conducting a study entitled "Dietary Patterns and Occupation as Characteristics of Pregnant Women with Anemia at PMB Midwife Millatin Khusniyati, S.Tr.Keb, Mayong Jepara."

METHODS

This study employed a descriptive research design (Sugiono, 2020). The population consisted of all pregnant women diagnosed with anemia. The sample included 53 pregnant women with anemia, selected using a total sampling technique (Adiputra, 2021). Data were collected using a respondent-completed questionnaire and an anemia observation checklist. The data were processed through editing, coding, and tabulation, and were analyzed using univariate analysis with a frequency distribution.

RESULTS AND DISCUSSION

Dietary Pattern

Table 1
Frequency Distribution of Dietary Patterns among Pregnant Women with Anemia at PMB Midwife Millatin Khusniyati, S.Tr.Keb

Dietary Pattern	Frequency (f)	Percentage (%)
Good	18	34.0
Poor	35	66.0
Total	53	100.0

Based on Table 1, the majority of respondents had a poor dietary pattern, accounting for 35 respondents (66.0%).

Occupation

Table 2
Frequency Distribution of Occupation Among Pregnant Women with Anemia at PMB Midwife Millatin Khusniyati, S.Tr.Keb

Occupation	Frequency (f)	Percentage (%)
Employed	30	56.6
Unemployed	23	43.4
Total	53	100.0

Based on Table 2, the majority of pregnant women with anemia were employed, accounting for 30 respondents (56.6%), while 23 respondents (43.4%) were unemployed.

Type of Anemia

Table 3.
Frequency Distribution of Anemia among Pregnant Women
at PMB Midwife Millatin Khusniyati, S.Tr.Keb

Anemia	Frequency (n)	Percentage (%)
Mild	31	58.3
Moderate	22	41.5
Total	53	100.0

Based on Table 3, the majority of respondents had mild anemia, accounting for 31 respondents (58.3%).

Dietary Patterns of Pregnant Women with Anemia

Based on the research findings described above, further discussion was conducted using data collected from 53 respondents through questionnaires. The data were analyzed using univariate analysis with a frequency distribution to determine the percentage distribution of each variable.

The results showed that the majority of respondents had poor dietary patterns, with 35 respondents (66.0%). This finding indicates that most pregnant women with anemia at PMB Midwife Millatin Khusniyati, S.Tr.Keb had not adopted dietary practices that met the nutritional requirements during pregnancy. Poor dietary patterns were characterized by irregular meal frequency, inadequate consumption of iron-rich foods, protein, folic acid, and vitamin C, as well as low intake of vegetables and fruits, which are important for enhancing iron absorption.

Based on observations made during the study, most respondents reported consuming less varied diets and relying primarily on staple foods rather than animal protein, green leafy vegetables, and fruits. Several pregnant women also reported decreased appetite, occasional nausea, the habit of drinking tea after meals, and limited knowledge regarding foods that could improve hemoglobin levels. Furthermore, economic constraints, work-related commitments, and family eating habits were considered factors that contributed to inadequate dietary patterns, resulting in suboptimal nutritional intake during pregnancy.

Dietary pattern refers to the way individuals or groups select and consume food in response to physiological, psychological, cultural, and social influences. Food itself provides nutrients required for growth, body functions, and tissue repair.

During pregnancy, nutritional requirements increase and are influenced by the mother's nutritional status before conception. This increased demand occurs because fetal growth depends almost entirely on nutrients supplied by the mother (Arisman, 2021). Three indicators are commonly used to assess dietary patterns in pregnant women: meal frequency, types of food consumed, and food quantity. A healthy dietary pattern consists of consuming sufficient amounts of a variety of nutritious foods in balanced proportions (Hardinsyah, 2021).

Accordingly, pregnant women's dietary intake should follow the Indonesian Balanced Nutrition Guidelines (Pedoman Umum Gizi Seimbang/PUGS), which evolved from the former "Four Healthy, Five Perfect" dietary concept introduced in the 1950s. The Balanced Nutrition Guidelines emphasize consuming a variety of foods every day to ensure adequate intake of all essential nutrients, as different foods complement each other nutritionally (Kusmiyati, 2021).

A study conducted by Aisyah, et al (2024) involving 25 pregnant women found that 15 respondents (60%) had anemia, while 10 respondents (40%) did not. Interviews with the anemic pregnant women at Dawe Community Health Center revealed that 11 respondents ate fewer than three meals per day due to nausea and vomiting, consumed only small portions, and preferred sour and spicy foods with limited dietary variety (Aisyah, S. N. Q., Azka, A., & Margiyati, 2024).

These findings suggest that dietary patterns are associated with the occurrence of anemia during pregnancy. According to Aruan et al (2025), maintaining a healthy diet throughout pregnancy helps the

mother's body adapt to the increased physiological demands of pregnancy and contributes positively to fetal health. Dietary patterns are influenced by various factors, including personal habits, food preferences, cultural beliefs, religion, socioeconomic status, and environmental conditions. Therefore, these factors may affect the nutritional status of pregnant women(Aruan, L. Y., Manullang, R., Sinaga, P. N., & Meliyanti, 2025) .

This finding is further supported by the Ministry of Health of the Republic of Indonesia (2023), which recommends that pregnant women consume a balanced diet consisting of animal-source protein, green vegetables, fruits, and iron-folic acid supplements to prevent anemia. Poor dietary habits remain one of the major contributing factors to the high prevalence of anemia among pregnant women in Indonesia.

Based on information obtained from all 53 respondents (100%), most pregnant women with anemia (35 respondents; 66.0%) had poor dietary habits. This was attributed to decreased appetite during pregnancy, inadequate iron intake, and dietary restrictions, such as avoiding meat, fish, and other nutritious foods for irrational cultural reasons. In addition, not all families were able to consume meat, fish, vegetables, fruits, and other nutritious foods regularly because of economic limitations. These findings indicate that poor dietary patterns contribute to the occurrence of anemia among pregnant women. Dietary restrictions and inadequate nutritional intake during pregnancy may worsen iron deficiency anemia. Diets that fail to meet balanced nutritional requirements and contain insufficient iron-rich foods, such as meat, fish, and other animal-source products, are important risk factors for anemia. Therefore, misconceptions regarding food taboos during pregnancy should be corrected to reduce the risk of anemia (Zahra et al., 2026).

In the researcher's opinion, the high proportion of pregnant women with poor dietary patterns is influenced by several factors, including limited knowledge of nutritional requirements during pregnancy, unhealthy eating habits that do not follow the principles of balanced nutrition, economic limitations, and inadequate consumption of iron-rich foods. As a result, the nutritional needs required during pregnancy are not adequately fulfilled, increasing the risk of anemia. Therefore, continuous health education on balanced nutrition, increased consumption of iron-rich foods, and adherence to iron-folic acid supplementation should be strengthened as essential strategies for preventing anemia among pregnant women.

Occupation of Pregnant Women with Anemia

Based on the results of this study, the majority of respondents were employed, accounting for 30 out of 53 respondents (56.6%), while 23 respondents (43.4%) were unemployed. These findings indicate that more than half of the pregnant women with anemia at PMB Midwife Millatin Khusniyati, S.Tr.Keb remained actively employed during their pregnancy.

Field observations revealed that most employed respondents continued their daily occupations as employees, traders, laborers, or by assisting with family businesses. They reported that they continued working to meet their family's economic needs despite being pregnant. Their demanding workloads often left them with insufficient time to rest, maintain regular meal schedules, and consume nutritious foods appropriate for pregnancy. In addition, several respondents stated that they frequently delayed meals because of work commitments, resulting in inadequate nutritional intake during pregnancy (Sumantri, 2024).

The findings of this study are consistent with the theory, which states that occupation is one of the factors influencing the health status of pregnant women. Pregnant women who continue working with heavy physical demands require greater energy and nutrient intake than those who do not work. Failure to meet these increased nutritional requirements may lead to nutritional deficiencies, including anemia (Sarwono, 2019).

According to the Ministry of Health of the Republic of Indonesia (2024), iron requirements increase

during pregnancy to support red blood cell production, fetal growth, and the expansion of maternal blood volume. Pregnant women with high levels of physical activity should therefore compensate by consuming a balanced diet, obtaining adequate rest, and adhering to iron supplementation. If the balance between physical activity and nutritional intake is not maintained, the risk of anemia increases (Kemenkes RI, 2025).

Occupation is defined as an activity performed to earn a living. A study conducted in Indonesia on anemia among female workers demonstrated that anemia reduced work productivity by 5–10% and decreased work capacity by approximately 6.5 hours per week. Furthermore, anemia lowers the body's resistance to disease, making affected individuals more susceptible to illness and increasing absenteeism from work. Therefore, iron deficiency anemia has a significant negative impact on an individual's work productivity (Sirait et al., 2026).

According to (Susilowati, 2021), occupation reflects an individual's level of activity and socioeconomic status. Pregnant women should reduce physically exhausting activities; however, pregnancy should not be used as a reason to avoid routine responsibilities. They should also avoid prolonged sitting or standing and maintain adequate rest and sleep to support both maternal and fetal health. Late-night activities should be minimized whenever possible. Pregnant women are generally advised to sleep approximately eight hours at night and take a one-hour nap during the day.

The findings of Sirait, et al (2026) showed that 47.1% of employed mothers identified housework as their primary responsibility, and 51% of these women did not have domestic assistance. Many women have limited awareness of their reproductive rights while simultaneously carrying multiple household responsibilities (Sirait et al., 2026).

These findings suggest that maternal occupation is associated with the occurrence of anemia during pregnancy. According to the Women's Study Group of the Faculty of Social and Political Sciences, Universitas Indonesia (FISIP UI, 1990), women often bear dual responsibilities, including reproductive work within the household and productive work to earn income. Consequently, women generally have shorter rest periods than men, placing them at greater risk of poor health and pregnancy-related complications (Naibaho, F., Dias, R. H., dan Naifatin, 2024).

Among the 53 respondents included in this study, 30 pregnant women (56.6%) were employed. Of these, 16 worked as laborers, 6 as farmers, 5 as market vendors, and 3 as teachers. These occupations generally involve moderate to heavy physical activity, which may contribute to increased nutritional demands during pregnancy.

In the researcher's opinion, the high proportion of employed pregnant women with anemia may be attributed to the substantial physical demands and workload that are not always accompanied by adequate nutritional intake during pregnancy. Busy work schedules often prevent women from maintaining regular meal times, consuming a balanced diet, and obtaining sufficient rest. Nevertheless, occupation is not the sole cause of anemia. The occurrence of anemia among pregnant women is also influenced by dietary patterns, adherence to iron supplementation, gestational age, nutritional status, overall health condition, and maternal knowledge. Therefore, working pregnant women should receive education regarding the importance of balancing occupational activities with adequate nutrition and sufficient rest to prevent anemia during pregnancy (Almatsier, 2020).

The findings of this study also suggest that pregnant women engaged in physically demanding work are more likely to develop anemia because they frequently carry a double burden: performing household duties while simultaneously contributing to the family's income. As a result, they often experience fatigue due to inadequate rest. This burden becomes even greater during pregnancy, when energy requirements naturally increase. The additional energy expended through dual responsibilities may not be sufficiently compensated by their daily dietary intake, thereby increasing the risk of anemia.

Type of Anemia Among Pregnant Women

Based on the findings presented in Table 3, of the 53 respondents, the majority of pregnant women had mild anemia, accounting for 31 respondents (58.3%), while 22 respondents (41.5%) had moderate anemia. These findings indicate that mild anemia remains the most common health problem among pregnant women at PMB Midwife Millatin Khusniyati, S.Tr.Keb. Although most cases were classified as mild, this condition still requires serious attention because, if left untreated, it may progress to moderate or severe anemia, posing significant risks to both maternal and fetal health.

Based on observations made during the study, most pregnant women with mild anemia were still able to perform their daily activities. However, several respondents reported experiencing fatigue, dizziness, weakness, drowsiness, and shortness of breath during strenuous physical activities. Interview findings also revealed that some pregnant women did not regularly consume iron supplementation tablets, had inadequate intake of iron-rich foods, and followed less varied dietary patterns. Furthermore, several respondents were employed, resulting in insufficient rest and suboptimal dietary habits. These conditions were considered contributing factors to the occurrence of anemia during pregnancy.

The findings of this study are consistent with the theory proposed by the Indonesian Ministry of Health (2023), which defines anemia during pregnancy as a hemoglobin (Hb) level of less than 11 g/dL, generally caused by iron deficiency. During pregnancy, iron requirements increase due to expanded maternal blood volume, placental development, and fetal growth. If these increased iron requirements are not met through dietary intake or iron supplementation, pregnant women are at greater risk of developing anemia (Maarif et al., 2026).

This finding is further supported by (Sarwono, 2019), who stated that anemia is one of the most common complications of pregnancy. Mild anemia often presents with few or no specific symptoms; however, if it persists, it may reduce maternal immunity and increase the risk of preterm birth,

postpartum hemorrhage, low birth weight (LBW), and impaired fetal growth.

The results of this study are also consistent with the findings of Afifah et al. (2026). Their study involving 118 pregnant women reported that 61 respondents (51.7%) had mild anemia and 57 respondents (48.3%) had moderate anemia, while no cases of severe anemia were identified. Based on the Mean Corpuscular Hemoglobin (MCH) characteristics, all participants (100%; n = 118) were classified as having microcytic hypochromic anemia, with no cases of normocytic normochromic or macrocytic anemia. Analysis of erythrocyte indices indicated that microcytic hypochromic anemia was the predominant type, while mild anemia represented the largest proportion based on hemoglobin levels (Izatil Afifah, Istiqamah, Iwan Yuwindry, 2026).

Similarly, Gigih et al. (2026) the majority of pregnant women at the Kembaran I Community Health Center (Puskesmas) fell into the non-anemic category, accounting for 83.8% (124 individuals). The researcher assumes that the incidence of anemia is influenced by the pregnant women's age, parity, and education level. These findings suggest that although many pregnant women possess adequate knowledge about anemia, preventive behaviors and nutritional practices still require improvement (Sari et al., 2016).

According to the researcher's interpretation, the high proportion of pregnant women with mild anemia indicates that most respondents had experienced a decline in hemoglobin levels, although not yet severe enough to cause significant clinical manifestations. This condition was likely influenced by several factors, including poor dietary patterns, suboptimal adherence to iron supplementation, occupational activities, and increased iron requirements during pregnancy. If mild anemia is not promptly managed through nutritional education, regular consumption of iron supplementation, and routine hemoglobin monitoring during antenatal care, it may progress to moderate or severe anemia with adverse consequences for both the mother and the fetus. Therefore, early detection and prevention of anemia should continue to be strengthened through comprehensive antenatal care services at PMB Midwife Millatin Khusniyati, S.Tr.Keb.

CONCLUSION

Based on the research conducted at the independent midwifery practice (PMB) of Bdn. Millatin Khusniyati, S. Tr. Keb. in February 2025 involving 53 pregnant women with anemia, it can be concluded that the majority of respondents had poor dietary habits (66.0%), were employed (56.6%), and suffered from mild anemia (58.3%). The findings suggest that poor dietary habits and work-related activities are contributing factors to the occurrence of anemia among pregnant women. Therefore, maintaining a balanced diet, adhering to iron supplementation regimens, and undergoing routine health monitoring during pregnancy are crucial for preventing and reducing the incidence of anemia. Pregnant women are encouraged to pay greater attention to balanced nutrition, take iron supplements as recommended, and attend regular prenatal check-ups to prevent anemia. The Nalumsari Jepara Community Health Center (Puskesmas) and healthcare professionals are expected to enhance education regarding anemia prevention, particularly concerning nutritional intake and the importance of adherence to iron supplementation.

ACKNOWLEDGEMENT [OPTIONAL]

The author extends sincere gratitude to the leadership of the educational institution, academic supervisors, examiners, all faculty members and academic staff, and the Head of the New Student Admissions (PMB) unit, Millatin Khusniyati, S. Tr. Keb., for granting permission and providing assistance and facilities throughout the research process. The author also wishes to thank all the respondents who kindly dedicated their time to participate in this study, as well as parents, family members, and everyone else who offered prayers, motivation, encouragement, and support, enabling the successful completion of this thesis.

REFERENCES

Adiputra, I. M. S. (2021). *Statistik Kesehatan: Teori & Aplikasi*. Yayasan Kita Menulis.

Aisyah, S. N. Q., Azka, A., & Margiyati, M. (2024). Status Pekerjaan, Pola Makan, Dan Kepatuhan Mengonsumsi Tablet Besi Terhadap Anemia Pada Ibu Hamil. *Jurnal Gizi Kerja Dan Produktivitas*, *4(2)*, 81–88. https://doi.org/10.52742/jgkp.v4i2.140

Almatsier, S. (2020). *Prinsip Dasar Ilmu Gizi*. PT Gramedia Pustaka Utama.

Arisman. (2021). *Gizi Dalam Daur Kehidupan: Buku Ajar Ilmu Gizi* (1st ed.). Buku Kedokteran EGC.

Aruan, L. Y., Manullang, R., Sinaga, P. N., & Meliyanti, C. (2025). Faktor-faktor yang memengaruhi kejadian anemia pada ibu hamil. *Jurnal Getsempena Health Science*, *4(1)*, 67–77.

Deswati, D. A., Suliska, N., & Maryam, S. (2019). Pola Pengobatan Anemia Pada Ibu Hamil di Salah Satu Rumah Sakit Ibu dan Anak. *Pola Pengobatan Anemia Pada Ibu Hamil Di Salah Satu Rumah Sakit Ibu Dan Anak*, *5*(1), 13–21.

Febriyeni. (2021). *Asuhan Kebidanan Kehamilan Komprehensif*. Yayasan Kita Menulis.

Hardinsyah, and I. N. D. S. (2021). *Ilmu Gizi Teori & Aplikasi*. EGC.

Izatil Afifah, Istiqamah, Iwan Yuwindry, S. S. (2026). Studi Deskriptif Jenis Anemia Berdasarkan Mean Corpuscular Haemoglobin (Mch) Pada Ibu Hamil di RSUD KH. Mansyur Kintap Kabupaten Tanah Laut. *Health Research Journal of Indonesia (HRJI)*, *4 (3)*, 127–134.

Kemenkes RI. (2025). *Hasil Survei Status Gizi Indonesia (SSGI) Tahun 2024.* Kemekkes RI.

Kusmiyati, Y. (2021). *Penuntun Praktikum Asuhan Kehamilan*. Fitramaya.

Maarif, A. S., Safitri, A., Harahap, M. W., Bamahry, A. R., & Dewi, A. S. (2026). Korelasi Antara Status Gizi Dengan Kejadian Anemia Pada Ibu Hamil Di Puskesmas Minasa Upa Kota Makassar. *Syifa' MEDIKA, 16 (No.2)*, 142–155.

Mantasia, S. (2021). Hubungan riwayat anemia kehamilan dengan kejadian stunting pada batita di wilayah kerja puskesmas Galesong kabupaten Takalar tahun 2021. *J Med*, *8 (2)*, 1–10. http://www.journal.stikespemkabjombang.ac.id/

Marmi. (2019). *Gizi Dalam Kesehatan Reproduksi*. Gramedia.

Naibaho, F., Dias, R. H., dan Naifatin, M. D. (2024). Faktor-Faktor Penyebab Terjadinya Anemia Pada Kehamilan Di Puskesmas Maubesi. *Jurnal Kesehatan Komunitas Santa Elisabeth*, *1(1)*, 1–23.

Proverawati, A. (2020). *Anemia dan Anemia kehamilan*. Nuha Medika.

Sari, G. R., Haniyah, S., Triana, N. Y., & Ningrum, E. W. (2016). Gambaran Kejadian Anemia pada Ibu Hamil di Puskesmas Kembaran 1. *Klinik: Jurnal Ilmiah Kedokteran Dan Kesehatan*, *5 (2)*, 328–336. https://doi.org/10.55606/klinik.v5i2.6535

Sarwono. (2019). *Ilmu kebidanan*. Yayasan Bina Pustaka.

Sirait, A. T. P., Rifki, M., & Risandi, A. C. (2026). Determinan anemia pada ibu hamil berdasarkan peran status sosial dan kepatuhan mengonsumsi suplementasi zat besi di Puskesmas Sei Panas kota batam. *Zona Kedokteran*, *16 (2)*.

Sjahriani, T., & Faridah, V. (2019). Faktor-faktor yang berhubungan dengan kejadian anemia. *Health Science Journal of Indonesia*, *5*(2).

Sugiono. (2020). *Metodologi Penelitian Kesehatan*. Mitra Cendikia.

Sumantri, A. W. (2024). Hubungan Pengetahuan dan Pendidikan Ibu Hamil dengan Anemia di RT 10 RW 8 Wilayah Kerja Puskesmas Kemalaraja Baturaja. *Urnal Kesehatan Saelmakers PERDANA (JKSP)*, *4(1)*, 51–56.

Susilowati. (2021). *Gizi Dalam Daur Kehidupan*. Refika Aditama.

World Health Organization. (2012). *WHA Global Nutrition Targets 2025: Anaemia Policy Brief*. WHO.

Zahra, L., Aramico, B., & Andria, D. (2026). Hubungan Antara Pola Makan, Aktivitas Fisik, Kualitas Tidur, Pengetahuan dan Pemberian Tablet Fe dengan Kejadian Anemia pada Remaja Putri di SMPN Baitussalam Aceh Besar. *SEHATMAS (Jurnal Ilmiah Kesehatan Masyarakat)*, *5(2)*, 411–421.