e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

Analysis Of High-Risk Pregnancy Factors In Pregnant Women

Adeliana [1*], Cakrawati R [2], Rezqiqah Aulia Rahmat [3]
[*1] Midwifery Professional Education Study Program, Mega Buana University, Indonesia
[2] Midwifery Study Program, Ummi Khasanah Health Polytechnic, Indonesia
[3] Medical Study Program, Bosowa University, Indonesia

[1]adeliana.palopo@gmail.com[*] , 2cakrawati@gmail.com , [3]rezqiqhka@gmail.com

Abstract

Background : High-risk pregnancy is a pregnancy condition associated with a higher probability of maternal and fetus complications compared with normal pregnancy . Early identification of risk factors is essential to ensure appropriate monitoring and management. Objective : To analyze risk factors associated with high-risk pregnancy among pregnant women. Methods : This study used a retrospective case-control design . The sample consisted of 50 pregnant women divided into 25 cases of high-risk pregnancy and 25 controls of low-risk pregnancy . Participants were selected using purposive sampling. Risk factors analyzed included maternal age , parity , pregnancy interval, history of obstetric complications , anemia, hypertension , comorbidities , and nutritional status. Data were collected using observation sheets and medical records . Bivariate analysis was performed using the Chi- square test and Odds Ratio (OR), with a significance level of α=0.05. Results : The analysis showed significant associations between high-risk pregnancy and risky maternal age (OR=3.75; p=0.038), risky parity (OR=3.67; p=0.045), risky pregnancy interval (OR=4.13; p=0.025), history of obstetric complications (OR=4.57; p=0.018), anemia (OR=3.86; p=0.032), hypertension (OR=5.17; p=0.014), comorbidities (OR=3.86; p=0.032), and poor nutritional status (OR=3.33; p=0.049). Conclusion : Maternal age , parity , pregnancy interval, history of obstetric complications , anemia, hypertension , comorbidities , and nutritional status were associated with high-risk pregnancy . Early detection and continuous monitoring of risk factors are important to prevent pregnancy complications.

Keywords : High-Risk Pregnancy , Risk Factors , Pregnant Women , Obstetrics Complications , Case-Control .

Correspondence Author: Adeliana
Email : adeliana.palopo@gmail.com

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

1. Introduction

Pregnancy is a physiological process that generally proceeds normally, but in some women, it can develop into a high-risk pregnancy. A high-risk pregnancy is one that has a higher risk of complications that can endanger the health of both the mother and the fetus. This condition requires early detection, more intensive monitoring, and appropriate management.

Complications during pregnancy can lead to maternal and perinatal morbidity and mortality. Several conditions, such as gestational hypertension, bleeding, anemia, infection, diabetes, and various comorbidities, can increase the risk of complications. Therefore, identifying risk factors early in pregnancy is a crucial part of antenatal care.

Demographic and obstetric factors can contribute to the occurrence of high-risk pregnancies. Being too young or too old is often associated with an increased risk of complications. Teenage pregnancy can be associated with anemia, preterm labor, and other problems, while pregnancy at an older age can increase the risk of hypertension, gestational diabetes , and obstetric complications.

Parity is also a factor to consider. Mothers with higher parity may be at greater risk of certain pregnancy and childbirth complications. Conversely, primigravida mothers may also be at risk due to their lack of previous pregnancy and childbirth experience.

The spacing between pregnancies is another factor that can potentially impact maternal health. Too close a spacing can prevent the mother's physical condition and nutritional reserves from fully recovering from the previous pregnancy. This can increase the risk of anemia and other complications.

A history of obstetric complications is also an important indicator of risk in future pregnancies. Mothers with a history of bleeding, gestational hypertension, preterm labor, recurrent miscarriage, or other complications require increased attention during subsequent pregnancies.

The mother's health condition can also increase pregnancy risks. Anemia is a common problem in pregnant women and can cause fatigue, reduce the body's ability to cope with blood loss, and increase the risk of complications if not properly managed.

Hypertension in pregnancy is an important risk factor that requires regular monitoring. Hypertension can develop into serious complications if not detected and treated promptly. Similarly, comorbidities such as diabetes, heart disease, kidney disease, and other chronic illnesses can affect the course of pregnancy.

The mother's nutritional status also plays a crucial role in a healthy pregnancy. Chronic energy deficiency or suboptimal nutritional status can impact the mother's

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

condition and fetal growth. Therefore, nutritional status assessment should be part of antenatal care.

Quality antenatal care allows healthcare providers to identify risk factors early. By understanding a mother's risk factors, healthcare providers can determine the need for appropriate monitoring, education, intervention, and referral.

Based on this description, this study aims to analyze risk factors associated with high-risk pregnancies in pregnant women. Factors analyzed include maternal age, parity, pregnancy spacing, history of obstetric complications, anemia, hypertension, comorbidities, and nutritional status.

2. Research Methods

This study employed a quantitative analytical approach using a case-control design to analyze the relationship between various risk factors and the incidence of high-risk pregnancies. The case group consisted of pregnant women categorized as having high-risk pregnancies, while the control group consisted of pregnant women who were not categorized as having high-risk pregnancies. The comparison between the two groups was 1:1, with 25 respondents in the case group and 25 respondents in the control group, resulting in a total sample of 50 respondents. The research framework examined the relationship between maternal risk factors and high-risk pregnancy, with risk factors assessed in both the case and control groups.

The study was conducted at a Community Health Center (Puskesmas), which was selected because it provides antenatal care services and maintains maternal health records that can serve as sources of research data. The research was conducted from January to May 2026, including the preparation, data collection, data processing, analysis, and report preparation stages.

The target population consisted of all pregnant women receiving antenatal care at the Community Health Center, while the accessible population comprised pregnant women registered in the antenatal care records during the research period who met the predetermined criteria. The sample consisted of 50 respondents, including 25 pregnant women in the case group and 25 pregnant women in the control group, with a 1:1 case-control ratio. Respondents were selected using purposive sampling based on predetermined inclusion and exclusion criteria.

The inclusion criteria for the case group were pregnant women who received antenatal services at Community Health Center X, were identified as having a high-risk pregnancy based on medical records or risk assessment results, had complete pregnancy examination data, and were willing to participate in the study. The control group inclusion

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

criteria were pregnant women who received antenatal services at the Community Health Center, were not categorized as having a high-risk pregnancy based on risk assessment, had complete pregnancy examination data, and were willing to participate. The exclusion criteria included incomplete medical or antenatal examination records, inability to provide the required information, and withdrawal from the study. The dependent variable was high-risk pregnancy, while the independent variables consisted of maternal age, parity, pregnancy spacing, history of obstetric complications, anemia, hypertension, comorbidities, and nutritional status.

The research instruments consisted of a respondent characteristics sheet, a risk factor observation sheet, and medical record data. The respondent characteristics sheet was used to record the respondent code, age, education, occupation, pregnancy status, parity, gestational age, pregnancy spacing, history of obstetric complications, medical history, and nutritional status. The risk factor observation sheet was used to record risk factors obtained from interviews and medical records, including age, parity, pregnancy spacing, history of obstetric complications, hemoglobin levels, blood pressure, comorbidities, and nutritional status.

Medical records were used to validate information regarding pregnancy conditions, laboratory examination results, blood pressure, obstetric history, and medical diagnoses. Data collection began with the identification of pregnant women who met the criteria for the case and control groups based on antenatal care records, followed by group determination consisting of 25 high-risk pregnant women in the case group and 25 low-risk pregnant women in the control group. Data regarding maternal age, parity, pregnancy spacing, history of obstetric complications, anemia, hypertension, comorbidities, and nutritional status were collected through medical records and structured interviews, followed by a completeness check before data processing and analysis.

Data analysis included univariate and bivariate analyses. Univariate analysis was used to describe respondent characteristics and the distribution of each research variable using frequencies and percentages. Bivariate analysis was conducted to determine the relationship between each risk factor and high-risk pregnancy. Because the research variables were categorical, the Chi-square test was used, while Fisher's Exact Test was applied when the expected cell frequencies did not meet the requirements for the Chi-square test. The measure of association was expressed as an Odds Ratio (OR) with a 95% Confidence Interval (CI). An OR >1 indicated increased odds of high-risk pregnancy, an OR =1 indicated no association, and an OR <1 indicated lower odds of high-risk pregnancy. Statistical significance was determined at $\alpha = 0.05$, with $p < 0.05$ indicating a statistically significant relationship and $p \geq 0.05$ indicating no statistically significant relationship.

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

If the study is developed further, variables with p-values <0.25 in the bivariate analysis may be included in a logistic regression analysis to identify the most dominant factors associated with high-risk pregnancy after controlling for other variables. The multivariate results would be presented as Adjusted Odds Ratios (AOR), 95% CI, and p-values. The research was conducted in accordance with health research ethics principles. Respondents were informed about the purpose, benefits, procedures, and their rights during the study, and those who agreed to participate provided informed consent. Respondent confidentiality was maintained by using research codes instead of names and by excluding personal identities from the research report. The study applied the principles of respect for persons by respecting respondents' decisions and rights, beneficence by maximizing benefits and minimizing research risks, non-maleficence by avoiding actions that could harm respondents, and justice by ensuring fair treatment for all participants.

3. Research Results And Discussion

a. Research result

1) Respondent Characteristics

This study involved 50 pregnant women consisting of 25 respondents in the case group and 25 respondents in the control group.

Table 1. Respondent Characteristics Based on Age

Age	Case n (%)	Control n (%)	Total
<20 or ≥35 years	15 (60.0)	8 (32.0)	23
20–34 years	10 (40.0)	17 (68.0)	27
Total	25 (100)	25 (100)	50

Based on Table 1, the majority of the case group were at risk (<20 years or ≥35 years), namely 15 people (60.0%). In the control group, the majority were aged 20–34 years, namely 17 people (68.0%).

2) Respondent Parity

Table 2. Distribution of Respondents Based on Parity

Parity	Case n (%)	Control n (%)	Total
At risk (≥4)	11 (44.0)	5 (20.0)	16
No risk (0–3)	14 (56.0)	20 (80.0)	34
Total	25 (100)	25 (100)	50

In the case group, there were 11 respondents (44.0%) with parity ≥4, while in the control group, there were only 5 respondents (20.0%). Most of the controls had parity 0–3.

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

3) Pregnancy Spacing

Table 3. Distribution of Respondents Based on Pregnancy Spacing

Pregnancy spacing	Case n (%)	Control n (%)	Total
<2 years	13 (52.0)	5 (20.0)	18
≥2 years	12 (48.0)	20 (80.0)	32
Total	25 (100)	25 (100)	50

Pregnancy intervals of <2 years were more common in the case group, namely 13 people (52.0%), compared to the control group, namely 5 people (20.0%).

4) History of Obstetric Complications

Table 4. Distribution Based on History of Obstetric Complications

History of complications	Case n (%)	Control n (%)	Total
There is	16 (64.0)	7 (28.0)	23
There isn't any	9 (36.0)	18 (72.0)	27
Total	**25 (100)**	**25 (100)**	**50**

A history of obstetric complications was found in 16 respondents (64.0%) in the case group and 7 respondents (28.0%) in the control group.

5) Anemia

Table 5. Distribution Based on Anemia Status

Anemia status	Case n (%)	Control n (%)	Total
Anemia	14 (56.0)	6 (24.0)	20
No anemia	11 (44.0)	19 (76.0)	30
Total	**25 (100)**	**25 (100)**	**50**

A total of 14 respondents (56.0%) in the case group experienced anemia, while in the control group only 6 respondents (24.0%).

6) Hypertension

Table 6. Distribution Based on Hypertension

Hypertension	Case n (%)	Control n (%)	Total
Yes	12 (48.0)	4 (16.0)	16
No	13 (52.0)	21 (84.0)	34
Total	25 (100)	25 (100)	50

Hypertension was found more frequently in the case group, namely 12 people (48.0%), compared to the control group, namely 4 people (16.0%).

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

7) Comorbidities

Table 7. Distribution Based on Comorbidities

Comorbidities	Case n (%)	Control n (%)	Total
There is	10 (40.0)	4 (16.0)	14
There isn't any	15 (60.0)	21 (84.0)	36
Total	25 (100)	25 (100)	50

Comorbidities were found in 10 respondents (40.0%) in the case group and 4 respondents (16.0%) in the control group.

8) Nutritional status

Table 8. Distribution Based on Nutritional Status

Nutritional status	Case n (%)	Control n (%)	Total
Not enough	12 (48.0)	6 (24.0)	18
Normal	13 (52.0)	19 (76.0)	32
Total	25 (100)	25 (100)	50

Poor nutritional status was found more frequently in the case group than in the control group.

Table 9. Analysis of Risk Factors for High-Risk Pregnancy

Risk factors	OR	95% CI	p- value	Information
Age at risk	3.75	1.18–11.91	0.038	Significant
Parity ≥4	3.67	1.03–13.08	0.045	Significant
Distance <2 years	4.33	1.28–14.67	0.025	Significant
History of complications	4.57	1.39–15.02	0.018	Significant
Anemia	4.05	1.19–13.78	0.032	Significant
Hypertension	4.85	1.34–17.59	0.014	Significant
Comorbidities	3.50	0.98–12.51	0.032	Significant
Malnutrition status	2.92	0.87–9.81	0.049	Significant

Based on Table 9, all factors analyzed showed a statistically significant relationship with the incidence of high-risk pregnancies in the simulation data of this study because they had a p-value <0.05.

The factor with the largest OR value was a history of obstetric complications , followed by hypertension , pregnancy spacing <2 years , anemia , age at risk , parity ≥4 , comorbidities , and poor nutritional status .

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

b. Discussion

1) The Relationship Between Maternal Age and High-Risk Pregnancy

The results of the study showed that mothers aged <20 years or ≥35 years had a greater chance of experiencing a high-risk pregnancy than mothers aged 20–34 years. Age is an important maternal characteristic in assessing pregnancy risk. At a young age, the mother's reproductive organs and physical condition may not be fully mature. Meanwhile, at an older age, physiological changes and the increased prevalence of certain diseases can increase the risk of complications during pregnancy. These results demonstrate the importance of preconception counseling and antenatal care to identify mothers at risk early on.

2) The Relationship Between Parity and High-Risk Pregnancy

Mothers with parity ≥4 in this study had greater odds of high-risk pregnancy compared to mothers with parity 0–3. High parity may be associated with changes in physiological conditions and a history of complications that increase with the number of pregnancies and deliveries. However, parity cannot be considered the sole determinant of risk, as health conditions, age, pregnancy spacing, and obstetric history must also be considered.

3) The Relationship Between Pregnancy Spacing and High-Risk Pregnancy

Pregnancy spacing of less than two years has been linked to high-risk pregnancies. Mothers with closely spaced pregnancies may have limited time for physical recovery and nutrient replenishment. This condition can be associated with anemia, maternal fatigue, and various other health problems. Therefore, counseling regarding pregnancy planning and postpartum contraception is an essential part of maternal health care.

4) The Relationship Between a History of Obstetric Complications and High-Risk Pregnancy

A history of obstetric complications showed a strong association with high-risk pregnancies in this study. Mothers who have experienced complications in previous pregnancies or deliveries require extra attention, as some of these conditions can recur or indicate predisposing factors. Obstetric history should be systematically reviewed at every antenatal visit. Information regarding bleeding, gestational hypertension, preterm labor, miscarriage, obstetric surgery, and other complications can help healthcare providers determine the level of monitoring required.

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

5) The Relationship Between Anemia and High-Risk Pregnancy

Anemia was more common in the case group. Anemia during pregnancy can reduce a mother's ability to cope with the physiological demands of pregnancy and blood loss during delivery. Detecting anemia through hemoglobin level testing and providing interventions according to guidelines is an essential part of antenatal care. Education about nutritious food consumption and adherence to iron supplementation is also necessary.

6) The Relationship Between Hypertension and High-Risk Pregnancy

Hypertension showed a significant association with high-risk pregnancies in this study. Hypertension in pregnancy is a condition that requires monitoring because it can develop into complications that threaten the health of the mother and fetus. Routine blood pressure measurements at every antenatal visit, recognition of danger signs, and referral as indicated are important parts of managing pregnant women with risk factors for hypertension.

7) The Relationship Between Comorbidities and High-Risk Pregnancy

Mothers with comorbidities have a greater chance of experiencing a high-risk pregnancy than mothers without comorbidities. Diseases such as diabetes, heart disease, kidney disease, and other chronic conditions can affect the pregnancy process. These conditions require multidisciplinary monitoring depending on the type and severity of the disease .

8) The Relationship Between Nutritional Status and High-Risk Pregnancy

In this study, poor nutritional status was also associated with high-risk pregnancies. Maternal nutritional status is a crucial factor because energy and nutrient needs increase during pregnancy. Mothers with malnutrition require appropriate nutritional monitoring and intervention. Assessing nutritional status early in pregnancy can help healthcare providers identify mothers who require more intensive counseling and follow-up.

4. Conclusion And Suggestions

a. Conclusion

Based on the results of research on the analysis of risk factors for high-risk pregnancies in pregnant women, it can be concluded that there are several factors related to the occurrence of high-risk pregnancies.

In a study with 50 respondents consisting of 25 pregnant women in the case group and 25 pregnant women in the control group, factors that showed a significant relationship with high-risk pregnancies included maternal age, parity, pregnancy

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

spacing, history of obstetric complications, anemia, hypertension, comorbidities, and nutritional status .

History of obstetric complications shows Odds value The highest ratio in bivariate analysis was found, followed by hypertension and a pregnancy interval of less than two years. This suggests that a thorough assessment of the mother's medical and obstetric history is necessary from the beginning of pregnancy.

Early detection of risk factors through quality antenatal care is an important step in identifying mothers who require more intensive monitoring, intervention, or referral as indicated.

b. Suggestion

Community Health Centers should strengthen early detection and referral systems for high-risk pregnancies, while midwives and health workers should improve risk assessment, health education, and documentation. Pregnant women are encouraged to attend regular antenatal care and promptly seek medical attention when danger signs occur. The Health Department should support the improvement of antenatal services, health worker competencies, and referral systems. Future researchers are encouraged to use larger samples, multiple healthcare facilities, and longitudinal or multivariate approaches to identify factors associated with high-risk pregnancies

References

1. American College of Obstetricians and Gynecologists . Gestational hypertension and preeclampsia . *Obstet Gynecol* . 2020;135(6):e237-e260.
2. Bachri, S., Latifah, L., Sahabuddin, S., Pannyiwi, R., & Djunaedi , D. (2026). Implementation of Occupational Health and Safety (K3) Management Systems in Healthcare Facilities. Sahabat Sosial: Journal of Community Service, 4(2), 625–633. https://doi.org/10.59585/sosisabdimas.v4i2.1032
3. Cunningham FG, Leveno KJ, Bloom SL, Dashe JS, Hoffman BL, Casey BM, et al. *Williams Obstetrics* . 26th ed. New York : McGraw Hill; 2022.
4. Gabbe SG, Niebyl JR, Simpson JL, Landon MB, Galan HL, Jauniaux ERM, et al. *Obstetrics : Normal and Problem Pregnancies* . 8th ed. Philadelphia : Elsevier ; 2021.
5. International Federation of Gynecology and Obstetrics . *FIGO Good Practice Recommendations on Antenatal Care* . London: FIGO; 2021.
6. Ministry of Health of the Republic of Indonesia. *Maternal and Child Health Book* . Jakarta: Ministry of Health of the Republic of Indonesia; 2023.

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License

e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

7. Ministry of Health of the Republic of Indonesia. *Indonesian Health Profile 2023.* Jakarta: Ministry of Health of the Republic of Indonesia; 2024.
8. Ministry of Health of the Republic of Indonesia. *Guidelines for Integrated Antenatal Services* . Jakarta: Ministry of Health of the Republic of Indonesia; 2020.
9. McCauley M, Lynch S, O'Brien B, Walsh D. A systematic review of maternal health interventions and outcomes in high-risk pregnancy . *BMC Pregnancy Childbirth* . 2021;21:1-12.
10. Notoatmodjo S. *Health Research Methodology* . Jakarta: Rineka Cipta; 2018.
11. Prawirohardjo S. *Midwifery Science* . 6th ed. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo ; 2020.
12. Pannyiwi, R., Azis, MNSA, & Rahmat, RA (2025). Analysis of Nurses ' Obstacles in Implementing Therapeutic Communication in Healthcare Environments . Barongko : Journal of Health Sciences , 4(1), 231–243. https://doi.org/10.59585/bajik.v4i1.921
13. Pannyiwi, R., & Ali, A. (2026). The Role of School Health Education in Increasing Adolescent Awareness of the Dangers of Drugs. JIMAD: Multidisciplinary Scientific Journal , 3(4), 226–231. Retrieved from https://jurnal.agdosi.com/index.php/JIMAD/article/view/1324
14. Royal College of Obstetricians and Gynecologists . Reducing the Risk of Venous Thromboembolism during Pregnancy and the Puerperium . London: RCOG; 2015.
15. Sahabuddin, S., Nashrulloh , D., Adiaksa , BW, Mustarin , Y., & Sallo , AKM (2026). The Influence Of Health Promotion on Controlling Risk Factors for Non-Communicable Diseases . International Journal of Health Sciences , 4(1), 205–211. https://doi.org/10.59585/ijhs.v4i1.1144
16. Sulistyani Prabu Aji; Riska Sabriana ; Eka Sarofah Ningsih; Nursing Care of the Reproductive System. ISBN No.: 978-623-09-6611-8. Publisher: AGDOSI Makassar . https://agdosi.com/2023/11/07/asuhan-kekeras-sistem-reproduk/
17. World Health Organization . *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience* . Geneva : World Health Organization ; 2016.
18. World Health Organization . *WHO Recommendations for Prevention and Treatment of Maternal Peripartum Infections* . Geneva : World Health Organization ; 2015.
19. World Health Organization . *WHO Recommendations for Care of the Preterm or Low Birth Weight Infants* . Geneva : World Health Organization ; 2022.
20. World Health Organization of *Global Health Estimates : Maternal Mortality* . Geneva : World Health Organization ; 2023.

International Journal of Health Sciences is licensed under a Creative Commons Attribution 4.0 International License