THE RELATIONSHIP BETWEEN EDUCATION AND EMPLOYMENT STATUS AND HIGH-RISK PREGNANCIES

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ABSTRAK : HUBUNGAN TINGKAT PENDIDIKAN DAN PEKERJAAN TERHADAP KEHAMILAN RISIKO TINGGI

Latar Belakang**:** Kehamilan risiko tinggi merupakan salah satu faktor yang berkontribusi terhadap tingginya angka kesakitan dan kematian ibu. Faktor pendidikan dan status pekerjaan ibu hamil diduga memiliki pengaruh terhadap terjadinya kehamilan risiko tinggi.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara tingkat pendidikan dan status pekerjaan dengan kejadian kehamilan risiko tinggi di Wilayah Kerja Puskesmas Cot Ie Jue, Kabupaten Bireuen.

Metode**:** Penelitian ini menggunakan pendekatan kuantitatif dengan desain cross sectional. Jumlah sampel sebanyak 48 ibu hamil yang dipilih secara purposive sampling. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan uji Chi-Square dengan tingkat signifikansi 0,05.

Hasil: Hasil penelitian menunjukkan bahwa mayoritas responden memiliki pendidikan menengah ke atas (72,9%) dan sebagian besar tidak memiliki pekerjaan (62,5%). Uji statistik menunjukkan adanya hubungan yang signifikan antara tingkat pendidikan dengan kejadian kehamilan risiko tinggi (p = 0,001). Namun, tidak ditemukan hubungan yang signifikan antara status pekerjaan dengan kehamilan risiko tinggi (p = 0,493).

Kesimpulan**:** Terdapat hubungan signifikan antara tingkat pendidikan ibu hamil dengan kehamilan risiko tinggi, namun tidak terdapat hubungan antara status pekerjaan dengan kehamilan risiko tinggi.

Saran agar tenaga kesehatan meningkatkan edukasi kepada ibu hamil, khususnya yang berpendidikan rendah, untuk mengurangi risiko kehamilan

Kata Kunci : Pendidikan, Pekerjaan, Kehamilan Risiko Tinggi

ABSTRACT

Background: High-risk pregnancies contribute to high rates of maternal morbidity and mortality. The educational level and employment status of pregnant women are suspected to influence the occurrence of high-risk pregnancies.

Objective: This study aims to determine the relationship between educational level, employment status, and the occurrence of high-risk pregnancies in the Cot Ie Jue Community Health Center working area in the Bireuen district.

Methods: This study employed a quantitative, cross-sectional design. The sample consisted of 48 pregnant women who were selected using purposive sampling. Data were collected via questionnaires and analyzed using the chi-square test at a 0.05 significance level.

Results: Most respondents had a secondary education or higher (72.9%), and most were unemployed (62.5%). Statistical analysis revealed a significant association between educational level and high-risk pregnancy (p = 0.001). However, no significant association was found between employment status and high-risk pregnancy (p = 0.493).

Conclusion: There is a significant relationship between the educational level of pregnant women and high-risk pregnancies. However, there is no relationship between employment status and high-risk pregnancies.

Suggestion that healthcare workers provide additional education to pregnant women, especially those with low educational levels, to reduce the risk of high-risk pregnancies.

Keywords: Education, Employment, High-Risk Pregnancy

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INTRODUCTION

High-risk pregnancies contribute to various obstetric complications, including antepartum hemorrhage, obstructed labor, and maternal mortality. The impact is not limited to pregnancy and childbirth, but also extends to the postpartum period, during which mothers are at risk of postpartum hemorrhage.(Julieta & Giri, 2021). Additionally, high-risk pregnancies also affect the condition of newborn babies, who may experience prematurity, low or high birth weight, and an increased risk of neonatal mortality. The Maternal Mortality Rate (MMR) is one of the primary indicators used to evaluate the level of public health, particularly within a country's maternal healthcare system. (Klaudia BR Semimbing, 2022)

According to data from the Sustainable Development Goals (SDGs), the global maternal mortality rate in 2020 was 202 deaths per 100,000 live births, which is significantly higher than the SDGs' own estimate or target of 223 deaths per 100,000 live births. According to the World Health Organization (WHO) report for 2022, the number of maternal deaths worldwide reached 289,000, equivalent to 289 deaths per 100,000 live births. The region with the highest rate is Latin America and the Caribbean, with an MMR of 1,051 per 100,000 live births, or approximately 22.4% of global maternal deaths.(WHO, 2025)

Maternal mortality data in Indonesia from 1991 to 2020 has decreased from 390 to 189 per 100,000 live births. This figure is close to the target set by the National Medium-Term Development Plan (RPJMN), which is 183 per 100,000 live births (LB). (Kementerian Kesehatan RI, 2021). This indicates that healthcare workers have made maximum efforts. However, when examining AKI data based on the Maternal Perinatal Death Notification (MPDN) for 2023, there were 4,129 cases, with West Java Province having the highest number of AKI cases at 729, and a total of 825,157 live births. In 2023, the leading causes of mortality in Indonesia were primarily hypertension, with 410 cases, and obstetric hemorrhage, with 357 cases.(Kemenkes RI, 2024)

Health data for Aceh Province in 2022 shows 141 maternal deaths per 100,000 live births, and in 2023, 134 mothers died during childbirth, with the leading cause being hemorrhage at 9.10. Data from Bireuen District for the years 2022-2023 shows a slight decrease in the percentage of mothers giving birth at healthcare facilities (fasyankes), from 97.5% to 89.2%. This may be due to the fact that, on average, mothers giving birth today experience issues during the first stage of labor, such as abnormal contractions, abnormal fetal position, large fetuses, cervical abnormalities, and other factors that prevent mothers from giving birth normally.

According to the 2024 report from the Bireuen Health Department, there were eight pregnant women who died during pregnancy, with varying causes reflecting the complexity of pregnancy risk factors in the region. The highest number of cases, three, involved postpartum hemorrhage complications in the subdistricts of Simplang Mamplam, Gandapura, and Peusangan Siblah Krueng. 1 case involving ectopic pregnancy in Peusangan Selatan District, 1 case of eclampsia in Jangka District, 1 case of non-obstetric complications in Makmur District, 1 case of venous complications during pregnancy, and 1 case of other maternal diseases classified in Jeunib District.(Bireuen, 2024)

The ideal age for pregnancy in women is generally between 20 and early 30s, as fertility levels are at their peak during this age range. By the age of 35, there is a decline in both the quality and quantity of eggs, which affects the likelihood of pregnancy and increases the risk of complications. On the other hand, pregnancy at too young an age, such as during adolescence, also carries high risks due to the mother's immature psychological condition, making her more vulnerable to stress and emotional tension during pregnancy.(Nainggolan et al., 2025). Birth defects may arise due to tension during pregnancy, as well as emotional rejection when the mother is carrying her baby.(Mas' udah et al., 2018)

Preventive measures to reduce high maternal mortality rates. Early detection during pregnancy can be one way to improve mothers' knowledge about their pregnancies. Limited understanding among the community, especially pregnant women, about high-risk pregnancies and pathological complications is one of the main causes of this problem.(Agustina et al., 2025)

Findings in the community show that there are still many cases of high-risk pregnancies due to the 'four too's', namely too young, too old, too frequent childbirth, and too many children. The high parity rate reflects an increased risk of unhealthy pregnancies, as the more frequently a woman becomes pregnant, the higher the likelihood of pregnancy complications. (Elisa & Yuniarti, 2016)Additionally, babies born to mothers without formal marital ties have a twofold higher risk of mortality compared to those born to married mothers. This situation should be minimized through adequate antenatal (prenatal) care, with an

emphasis on early detection and reduction of risk factors to improve pregnancy outcomes. Factors contributing to high-risk pregnancies include maternal age, parity, educational level, type of work, socioeconomic status, and other variables(Hary Krisnawati, 2023).

Based on the data collected by the author from the Medical Records Department of the KIA Polyclinic at the Cot Ie Jue Community Health Center, the number of pregnant women from January to December 2024 was 291. Meanwhile, the number of pregnant women in their third trimester was 48.

RESEARCH METHODS

This study is observational. The design used is cross-sectional. A cross-sectional approach is a study conducted by observing or observing data at a single point in time. In this study, the population consists of all pregnant women in their third trimester residing in the service area of the Cot Ie Jue Community Health Center, Bireuen District. This study used non-probability sampling with the total sampling method, which is a sampling technique in which all members of the population are included as samples. Thus, the sample size in this study was 48 pregnant women in their third trimester.(Notoatmodjo, 2005)

The inclusion criteria were pregnant women who were willing to be respondents and cooperative, pregnant women who were able to communicate well, pregnant women aged 20-40 years, pregnant women in their third trimester, and pregnant women who were primigravida and multigravida. The study was conducted in March 2025.

There are three variables in the study, namely education, occupation, and high-risk pregnancy. The education variable is defined as the highest formal education level currently or previously attained by the subject, measured using a questionnaire with a nominal scale, and categorized into two groups: higher education (≥high school) and lower education (≤junior high school). (Dave & Yang, 2022)

The employment variable refers to the main activities performed by mothers on a daily basis to earn an income, which was also measured using a questionnaire on a nominal scale and classified into working and non-working mothers. Meanwhile, the high-risk pregnancy variable is defined as a condition that can affect the condition of the mother and fetus during pregnancy. This variable was measured using a questionnaire with an ordinal scale, and the results were categorized into two groups: high-risk mothers (≥50%) and non-risk mothers (<50%) (Pillai, 2021). The data analysis methods used in this study consist of univariate and bivariate analysis. Univariate analysis is used to describe the characteristics of each research variable through frequency distribution and percentages, so that the data obtained can provide meaningful information. Calculations were performed using the percentage formula, P = (F/N) × 100, where P is the percentage, F is the frequency, and N is the number of respondents. Subsequently, bivariate analysis was conducted to determine the relationship between the independent variable and the dependent variable using the Chi-Square test. Decision-making was based on the p-value with a significance level (α) of 0.05. If the p-value ≤ 0.05, H_0 was rejected, indicating a significant relationship between variables, whereas if the p-value > 0.05, H_0 was accepted, meaning there was no significant relationship.(Dahlan, 2018)

The collected data was then processed manually and computerized through several stages, namely editing, coding, data entry, and data cleaning. The editing stage was carried out by rechecking the data to ensure its completeness and to identify errors or deficiencies in the questionnaire completion. Following that, coding is performed, which involves assigning codes to each data point to facilitate the processing. Subsequently, the data is entered into the computer according to the variables being studied and in accordance with the specified entry format. The final stage is data cleaning, which involves rechecking the entered data to avoid errors resulting from carelessness or fatigue during the entry process, ensuring that the analyzed data is truly accurate and reliable.(Ghozali, 2018)

RESEARCH RESULTS

Univariate Analysis (Respondent Characteristics)

The characteristics of respondents were described based on the age of the mother and the spacing between pregnancies. The sample size was 48 respondents.

Table 1
Distribusi Distribution of Respondent Characteristics Based on Mother's Age and Pregnancy Interval

Characteristic	Frequency (n)	Percentage (%)
Age		
<20 tahun	0	79.2%
20-35 tahun	38	20.8%
>35 tahun	10	
Pregnancy Gap		
<2 tahun	9	18.8%
> 2 tahun	39	81.3%

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Table 2
Distribution of Respondents' Education Levels in Relation to High-Risk Pregnancies

Education Levels	Frequency (n)	Percentage (%)
Basic education	10	20.8%
Higher education	38	79.2%

Table 3
Distribution of Respondents' Occupations in Relation to High-Risk Pregnancies

Work	Frequency (n)	Percentage (%)
Working	18	37.5%
Doesn't work	30	62.5%

Based on the results of univariate analysis of 48 respondents, the majority were in the age range of >20–35 years, totaling 38 people (79.2%), and had a pregnancy interval of more than 2 years, totaling 39 people (81.3%). Most respondents had a secondary education level or higher (high school, diploma, and bachelor's degree), totaling 38 people (79.2%), while the remaining 10 people (20.8%) had an elementary or junior high school education.

Table 4
Distribution of Respondent Characteristics Based on High-Risk Pregnancy

High-Risk Pregnancy	Frequency (n)	Percentage (%)
At risk	12	25%
No Risk	36	75%

In terms of employment status, most respondents were unemployed, namely 30 people (62.5%), while 18 people (37.5%) were employed. Regarding pregnancy risks, the majority of respondents did not experience high-risk pregnancies, namely 36 people (75.0%), while 12 people (25.0%) were recorded as having high-risk pregnancies..

Bivariate Analysis

Table 5
Cross Tabulation of the Relationship between Education and High-Risk Pregnancy

Pendidikan	High-Risk Pregnancy				Jumlah		P-value
	At risk		No Risk		F	%	
	F	%	F	%			
Basic education	7	70	3	30	9	100	0.001
Higher education	5	13.2	33	86.8	38	100	

Tabel 6
Cross Tabulation of Occupational Associations with High Risk Pregnancy

Pekerjaan	High-Risk Pregnancy				Jumlah		P-value
	At risk		No Risk		F	%	
	F	%	F	%			
Working	3	16.7	15	83.3	18	100	0.493
Doesn’s Work	9	30	21	70	30	100	

The results of the bivariate analysis indicate a significant association between educational level and high-risk pregnancies in the Cot Ie Jue Community Health Center (Puskesmas) service area. Of the 48 respondents, 7 women (70.0%) with low educational attainment (elementary and junior high school) experienced high-risk pregnancies, while 3 women (30.0%) did not. Meanwhile, among those with upper secondary education (high school, diploma, and bachelor's degree), 5 mothers (13.2%) experienced high-risk pregnancies, while 33 mothers (86.8%) did not. The Chi-Square test yielded a p-value of 0.001 (< 0.05), indicating a significant association between educational level and the occurrence of high-risk pregnancies.

Conversely, no significant relationship was found between employment status and high-risk pregnancy. Of the 18 working mothers, 3 (16.7%) experienced high-risk pregnancies and 15 (83.3%) did not. Meanwhile, of the 30 non-working mothers, 9 (30.0%) experienced high-risk pregnancies and 21 (70.0%) did not. The statistical test yielded a p-

value of 0.493 (>0.05), indicating that there is no significant association between employment status and the occurrence of high-risk pregnancies in the service area of the Cot Ie Jue Health Center, Bireuen District.

DISCUSSION

Based on the results of research in the Cot Ie Jue Community Health Center Working Area, Bireuen Regency, the majority of respondents had a high school education or higher, namely high school, diploma, and bachelor's degree, totaling 35 people (72.9%), while respondents with a low level of education (elementary and junior high school) numbered 13 people (27.1%). The high proportion of mothers with secondary education or higher indicates that most respondents have had access to adequate education, which theoretically can increase knowledge and awareness about pregnancy health, including identifying and anticipating risk factors during pregnancy. However, the research results also show that most respondents are unemployed, with 30 people (62.5%) not working, while only 18 people (37.5%) are employed. A mother's employment status can influence her economic independence and access to healthcare services. The lack of formal employment among most respondents has the potential to limit access to information and control over decision-making related to reproductive health. Both of these characteristics—education and employment—are important factors that can influence pregnancy risk, where low education and lack of employment tend to be correlated with increased pregnancy risk, although in this study only education showed a statistically significant relationship.(Greenaway et al., 2022)

A person's level of education can influence their level of knowledge. The higher the level of education, the greater the likelihood that individuals, especially mothers, will accept and understand new information, including information in the field of health. Better education allows mothers to be more open and responsive to health programs. Conversely, low education tends to limit access to and understanding of health information, which can lead to indifference towards available health promotion efforts.(Corneles & Losu, 2015)

Hasil Penelitian ini sejalan dengan Angraini (2024) In her research entitled "The Relationship between Maternal Education and Pregnancy Risks among Pregnant Women in the Manna City Health Center Working Area." In this study, out of a total of 43 respondents, the majority of pregnant women had a basic education level (18 respondents), followed by 13 respondents with a secondary education level, and 12 respondents with a higher education level. These findings indicate that most pregnant women are at the basic education level, which may influence their knowledge and the pregnancy risks they experience.(Angraini et al., 2024)

Based on the study findings, most respondents were categorized as unemployed. This condition is likely related to the predominance of younger mothers, particularly those under 20 years of age, who generally have not yet entered the workforce and primarily assume the role of housewives. Such circumstances are still commonly found in communities where early marriage is practiced. At this age, many women have not yet attained adequate educational qualifications or vocational skills to participate in formal employment, which contributes to the higher proportion of non-working mothers.(Puspasari & Pawitaningtyas, 2020)

This demographic pattern may also explain the insignificant relationship between employment status and pregnancy risk observed in the study. Since a considerable number of respondents were housewives, the potential variation in work-related physical activity was limited. Moreover, in local cultural settings, unemployed mothers often rely heavily on family members in making health-related decisions, which can further influence their compliance with medical advice. Consequently, employment in this context does not appear to be a decisive factor affecting pregnancy risk.(Mufdillah, & Pratiwi, 2020)

In contrast, education emerges as a more influential determinant of pregnancy risk. Mothers with higher education levels are more likely to possess adequate health literacy, enabling them to understand and apply health information, follow medical recommendations, and make informed decisions during pregnancy. Therefore, strengthening educational attainment and health-related knowledge is essential to reducing high-risk pregnancies, whereas employment status alone may not provide a strong protective effect(Maharani, D., & Suryani, 2020).

The results of this study are in line with the findings of Halimah (2022) in her study entitled "The Relationship between Age, Parity, and Employment on Pregnancy Risk at the Cilengkrang Bandung Community Health Center in 2022." The study revealed that the majority of pregnant women were unemployed, totaling 551 individuals (73.1%), while those with employment numbered 203 individuals (26.9%). These findings support the current study's results, which also indicate that the majority of

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respondents fall into the unemployed category.(Halimah et al., 2022).

Among mothers aged over 35, most are known to be working mothers. This reflects a tendency among women in this age group to pursue their careers first before planning a pregnancy. The decision to delay pregnancy in favor of work priorities means that some mothers only become pregnant at a relatively advanced age. This contributes to an increased risk of pregnancy complications, as women over the age of 35 are classified as high-risk pregnancies.

Based on the results of the bivariate analysis, there is a significant relationship between educational level and the incidence of high-risk pregnancies in the Cot Ie Jue Community Health Center Working Area, Bireuen District. Of the 48 respondents, 9 mothers (69.2%) with low educational levels (elementary and junior high school) experienced high-risk pregnancies, while 4 mothers (30.8%) did not. Conversely, among mothers with upper secondary education or higher (high school, diploma, and bachelor's degree), only 5 (14.2%) experienced high-risk pregnancies, while 30 (85.7%) did not experience risks. The statistical test using a 2x2 table showed a p-value of 0.001, which is smaller than the significance level (α = 0.05), thus rejecting the null hypothesis (H_0) and accepting the alternative hypothesis (H_a). This indicates a significant relationship between educational level and pregnancy risk. Meanwhile, the analysis of the relationship between employment status and high-risk pregnancy showed different results. Of the 48 mothers, those who were employed and experienced high-risk pregnancies numbered 3 (16.7%), while those without risk numbered 15 (83.3%). On the other hand, among mothers who were not employed, 9 (30.0%) experienced high-risk pregnancies, while 21 (70.0%) did not. The Chi-Square test yielded a p-value of 0.493, which is greater than α = 0.05, so H_0 is accepted. This means there is no significant relationship between a mother's employment status and high-risk pregnancy. These findings indicate that while education significantly influences pregnancy risk, employment status is not the sole determinant. Pregnancy risk can also be influenced by various other factors such as maternal age, birth spacing, health conditions, and access to adequate healthcare services.

The results of this study indicate that there is a significant relationship between the mother's level of education and the incidence of high-risk pregnancies in the Cot Ie Jue Community Health Center Working Area, Bireuen District. Mothers with low levels of education (elementary and junior high school) tend to experience more high-risk pregnancies than mothers with secondary education and above (high school, diploma, and bachelor's degree). This aligns with the theory that education is one of the key social determinants that significantly influence health behavior, including decision-making and adherence to medical advice during pregnancy. Higher education enables individuals to better understand health information, recognize pregnancy-related risks, and be more open to preventive measures and treatments. Conversely, mothers with lower educational levels may have limitations in understanding medical or health information and may be less proactive in accessing maternal and child health services.

These findings are consistent with previous research by Kebede et al. (2020), which states that mothers with higher education are more likely to undergo complete and quality antenatal care visits and are better prepared to deal with risks during pregnancy. In addition, a meta-analysis study by Berhan & Berhan (2014) also shows that low levels of maternal education are associated with an increased risk of pregnancy complications and maternal mortality. Therefore, improving women's education, particularly formal education, is a strategic intervention in reducing high-risk pregnancies and maternal mortality rates (MMR). This is further supported by a study by Hussen et al. (2024) in Ethiopia, which found that highly educated mothers are more likely to initiate antenatal care visits earlier, contributing to the early detection of high-risk pregnancies. (Hussen et al., 2024).

Formal education promotes health literacy, facilitates understanding of warning signs and the benefits of antenatal services, and strengthens mothers' ability to make proactive decisions for their own health and that of their fetuses. Conversely, mothers with low levels of education tend to make suboptimal use of reproductive health services (ANC, professional delivery, and PNC), including information about pregnancy risks. This can lead to setbacks in the prevention of complications, even though the Indonesian government has implemented the Pregnant Women's Class Program (KIH), participation in which is still limited to only about 7% of all mothers.(Corneles & Losu, 2022)

Meanwhile, the results of the analysis of mothers' employment status show that there is no significant relationship between employment and pregnancy risk. Although descriptively, mothers who are not employed experience high-risk pregnancies more often than employed mothers, this difference is not statistically significant (p = 0.493). This

indicates that employment status is not the only factor that plays a role in determining pregnancy risk. Although employment can influence economic aspects and access to healthcare services, other factors such as maternal age, medical conditions, inter-pregnancy spacing, family support, and availability of healthcare facilities also play important roles.

The insignificant relationship between employment and pregnancy risk in this study may also be related to the type of work performed by the mothers. Not all jobs have a positive effect on the health of pregnant women; overly strenuous work can actually increase pregnancy risk. In addition, in the context of the local community, mothers who do not work may be more dependent on family members when making decisions related to health, which can affect their level of compliance with health professionals' recommendations.

Overall, the results of this study emphasize the importance of education as a protective factor in reducing high-risk pregnancies. Public health interventions should consider efforts to improve health literacy through formal education and outreach tailored to the level of understanding of the community. In addition, inclusive and equitable health services need to be improved so that all mothers, regardless of their educational and occupational backgrounds, can obtain quality pregnancy services.(Damayanti et al., 2023).

Some jobs—especially those that are physically demanding or informal—can actually cause physical or psychological stress that increases the risks of pregnancy. On the other hand, mothers who do not work may receive family support that helps meet their health needs during pregnancy. Thus, employment status needs to be analyzed further along with other variables such as health conditions, health facilities, maternal age, or birth intervals.(Armini, N. K. A., & Dewi, 2021).

The daily activities of pregnant women can increase physical strain during pregnancy, especially if they are not balanced with adequate rest. Working mothers usually have more physical activities than those who do not work. These activities can affect health and pregnancy conditions, as working mothers must handle household chores as well as work outside the home. As a result, lack of rest can interfere with pregnancy conditions and fetal growth(Lestari & Masitoh, 2025).

Work often involves physical activity and high levels of stress, which can trigger the adrenal glands to produce the hormone adrenaline. This hormone can cause an increase in heart rate that is faster than normal, which in turn can increase blood pressure. Research by Dina Alfiana Ikhwani indicates that work-related factors influence the occurrence of hypertension, including the type of work, intensity, and duration of work. Psychological stress from work can impact blood pressure, particularly in pregnant women with a history of hypertension. This condition poses a risk of worsening the situation and may trigger serious complications such as preeclampsia and eclampsia, which are among the leading causes of high-risk pregnancies.(Said & Joni, 2024)

CONCLUSION

The results of the study conducted on the relationship between educational level and employment status with high-risk pregnancies in the Cot Ie Jue Community Health Center Working Area, Bireuen District, show that most pregnant women have a secondary to higher education level, namely high school, diploma, and bachelor's degree, with a total of 35 people (72.9%). Meanwhile, pregnant women with primary education, namely elementary school and junior high school, numbered 13 (27.1%). In terms of employment status, the majority of pregnant women were unemployed, totaling 30 (62.5%), while those employed numbered 18 (37.5%). Data analysis revealed a significant association between educational level and high-risk pregnancy, as indicated by a p-value of 0.001 ($p < 0.05$). Conversely, there was no significant association between employment status and high-risk pregnancy, as indicated by a p-value of 0.493 ($p > 0.05$).

SUGGESTION

Based on the results of research conducted in the Cot Ie Jue Health Center Working Area, Bireuen Regency, it was found that there was a significant relationship between the education level of pregnant women and the incidence of high-risk pregnancies. This finding indicates that the lower the level of education, the higher the likelihood of the mother experiencing a risky pregnancy. In contrast, there was no significant association between maternal employment status and pregnancy risk. This suggests that education plays an important role in increasing maternal awareness and knowledge about healthy pregnancy.

Therefore, it is recommended that health workers be more active in providing reproductive health education to pregnant women and mothers-to-be, especially for those with low education levels. This education can be done routinely through counseling at health facilities, posyandu, pregnant women's classes, and home visits. (Aswita et al.,

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2019). The main focus of education is to increase understanding of pregnancy danger signs, the importance of pregnancy planning, and risk factor management. In addition, a persuasive approach is needed and involves the role of the family in supporting the mother during pregnancy.(Susilawati et al., 2024)

Future research is recommended to explore other factors that may contribute to pregnancy risk, such as maternal age, spacing between pregnancies, nutritional status, access to health services, and social support. Research with a longitudinal design or qualitative approach is also needed to gain a deeper understanding of the social dynamics and behavior of pregnant women in dealing with pregnancy risks.

REFERENCES

Agustina, C. E., Winatasari, D., Lestari, R. M., & Watiningrum, R. Y. (2025). Pengetahuan Ibu Hamil Resiko Tinggi Dengan Penerapan Program Perencanaan Persalinan Dan Pencegahan Komplikasi (P4k). *Jurnal Ilmiah Kesehatan Ar-Rum Salatiga*, *10*(1), 62–68.

Angraini, H., Oktarina, M., Fivtrawati, H., Eliagita, C., & Zarey, W. L. (2024). Hubungan Pendidikan Ibu Dan Status Ekonomi Dengan Risiko Kehamilan 4t Pada Ibu Hamil Di Wilayah Kerja Puskesmas Kota Manna. *Jurnal Kesehatan Tambusai*, *5*(3), 6318–6325.

Armini, N. K. A., & Dewi, N. L. P. A. (2021). Hubungan Pekerjaan Dengan Kejadian Komplikasi Kehamilan Pada Ibu Hamil. *Jurnal Kesehatan Reproduksi*.

Aswita, A., Naningsi, H., & Yulita, H. (2019). Efektifitas Pelaksanaan Kelas Ibu Hamil Terhadap Peningkatan Pengetahuan Dan Sikap Ibu Hamil Tentang Deteksi Dini Risiko Tinggi Di Puskesmas Lalowaru Kabupaten Konawe Selatan Provinsi Sulawesi Tenggara. *Health Information: Jurnal Penelitian*, *11*(1), 59–75.

Bireuen, D. (2024). *Jumlah Kematian Ibu*.

Corneles, S. M., & Losu, F. N. (2022). Hubungan Tingkat Pendidikan Dengan Pengetahuan Ibu Hamil Tentang Kehamilan Risiko Tinggi. *Jidan Jurnal Ilmiah Bidan*, *3*(2), 51–55.

Dahlan, M. S. (2018). *Statistik Untuk Kedokteran Dan Kesehatan*. Penerbit Salemba.

Damayanti, N. A., Wulandari, R. D., Ridlo, I. A., Azzahra, L., Akrimah, W. D., Rahmah, F., & Anis, W. (2023). Kesetaraan Gender Dalam Pengambilan Keputusan Pemanfaatan Pelayanan Kesehatan Di Daerah Urban Dan Rural, Indonesia. *Jurnal Manajemen Kesehatan Indonesia*, *11*(2), 132–142.

Dave, D. M., & Yang, M. (2022). Maternal And Fetal Health Effects Of Working During Pregnancy. *Review Of Economics Of The Household*, *20*(1), 57–102. Https://Doi.Org/10.1007/S11150-020-09513-Y

Elisa, S. N. E., & Yuniarti, S. (2016). Hubungan Paritas Dengan Terjadinya Robekan Perineum Spontan Pada Persalinan Normal. *Jurnal Bidan*, *2*(2), 234050.

Ghozali, I. (2018). *Aplikasi Analisis Multivariete Dengan Program Ibm Spss 23*.

Greenaway, E. S., Leon, J., & Baker, D. P. (2022). Understanding The Association Between Maternal Education And Use Of Health Services In Ghana: Exploring The Role Of Health Knowledge. *Journal Of Biosocial Science*, *44*(6), 733–747.

Halimah, G. S., Jayanti, R. D., & Widati Fatmaningrum, W. (2022). Hubungan Usia, Paritas, Dan Pekerjaan Terhadap Resiko Kek Ibu Hamil Trimester 1 Di Puskesmas Cilengkrang Bandung Tahun 2022. *Jurnal Sehat Mandiri*, *17*(2), 94–103.

Hary Krisnawati, H. (2023). *Hubungan Tingkat Pengetahuan Ibu Hamil Tentang Resiko Tinggi Kehamilan Dengan Angka Kejadian Kehamilan Pada Usia Resti Di Wilayah Desa Grogol Sukoharjo*. Universitas Kusuma Husada Surakarta.

Hussen, N. M., Gebre, K. K., Rorisa, T. G., & Mohammed, M. A. (2024). Survival Analysis Of Early Initiation Of Antenatal Care Visits And Associated Factors Among Pregnant Women In Ethiopia. *Plos One*, *19*(12), 1–12. Https://Doi.Org/10.1371/Journal.Pone.0315724

Julieta, N. P. N., & Giri, M. K. W. (2021). Postpartum Hemorrhage: Kegawatdaruratan Dalam Persalinan Ibu Hamil. *Ganesha Medicina*, *1*(1), 48–65.

Kemenkes Ri. (2024). *Maternal Perinatal Death Notification (Mpdn) – 2024: Komplikasi Non-Obstetrik (35,2%), Hipertensi (26,1%), Perdarahan Obstetrik (17,6%)*.

Kementerian Kesehatan Ri. (2021). *Profil Kesehatan Indonesia Tahun 202*.

Klaudia Br Semimbing. (2022). *Faktor Apa Saja Yang Berhubungan Dengan Perilaku Pemeriksaan Anc Lengkap Pada Ibu Hamil Di Wilayah Kerja Uptd Puskesmas Paal X Kota Jambi Tahun 2022*. 6.

Lestari, R., & Masitoh, S. (2025). Hubungan Kecemasan Dan Aktivitas Fisik Terhadap

Kualitas Tidur Ibu Hamil Trimester Iii. *Jurnal Penelitian Keperawatan Kontemporer*, *5*(4).

Maharani, D., & Suryani, N. (2020). Peran Pendidikan Terhadap Perilaku Kesehatan Ibu Hamil Di Indonesia. *Jurnal Kesehatan Masyarakat Andalas*, 14(1), 25–34.

Mas' Udah, A. F., Besral, B., & Djaafara, B. A. (2018). Risk Of Adolescent Pregnancy Toward Maternal And Infant Health, Analisis Of Idhs 2012. *Kesmas*, *12*(3), 120–126.

Mufdillah, & Pratiwi, E. (2020). Hubungan Dukungan Keluarga Dengan Kepatuhan Ibu Hamil Dalam Memeriksakan Kehamilan. *Jurnal Kebidanan Indonesia*.

Nainggolan, L., Eliawati, U., & Murniasih, E. (2025). Hubungan Pengetahuan Dan Sikap Ibu Hamil Tentang Faktor 4t (Terlalu Tua, Terlalu Muda, Terlalu Banyak Dan Terlalu Dekat) Dengan Risiko Komplikasi Kehamilan Di Puskesmas Tj. Unggat. *Jurnal Mahasiswa Ilmu Kesehatan*, *3*(1), 173–183.

Notoatmodjo, S. (2005). *Metodologi Penelitian Kesehatan*.

Pillai, S. (2021). High Risk Scoring In Pregnancy Using Modified Coopland's Scoring System And Its Association With Perinatal Outcome. *International Journal Of Reproduction, Contraception, Obstetrics And Gynecology.*

Puspasari, H. W., & Pawitaningtyas, I. (2020). Masalah Kesehatan Ibu Dan Anak Pada Pernikahan Usia Dini Di Beberapa Etnis Indonesia; Dampak Dan Pencegahannya. *Buletin Penelitian Sistem Kesehatan*, *23*(4), 275–283.

Said, F. I., & Joni, Y. N. (2024). *Gambaran Pengetahuan Ibu Hamil Tentang Tanda Dan Bahaya Kehamilan:-*.

Susilawati, D., Nilakesuma, N. F., Hesti, N., Intan, C., Permata, A. D. F. P., Syarah, W., & Massagus, Z. A. (2024). Konseling Kehamilan Sehat Mewujudkan Generasi Hebat. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (Pkm)*, *7*(5), 1990–1997.

Who. (2025). *Trends In Maternal Mortality 2000 To 2023: Estimates By Who, Unicef, Unfpa, World Bank Group And Undesa/Population Division*.