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Email : editorijhess@gmail.com

The Relationship Between the Knowledge Level of Pregnant Women and The Incidence of High-Risk Pregnancies at BPM Salabiah, Lhokseumawe City

Myrna Lestari[1)], Fatiyani [2)], elvieta[3)], Yenni Fitri Wahyuni[4)]

[1,2,3,4)] Poltekkes Kemenkes Aceh prodi kebidanan Aceh Utara
*Coresponding Author
Email: [1]myrnalestari.abubakar@gmail.com, [2]fatiyani3105@gmail.com, [3]elvieta0610@gmail.com, [4]fitriwahyuni@poltekkesaceh.ac.id

Abstract

This study aims to determine the relationship between pregnant women's knowledge levels and the incidence of high-risk pregnancy at BPM Salabiah, Lhokseumawe City. Pregnancy is a crucial period in a woman's life, and limited knowledge about maternal health often contributes to complications that may lead to high-risk conditions. This research employed a quantitative analytic design with a cross-sectional approach. The sample consisted of 63 pregnant women selected using purposive sampling techniques. Data were collected through structured questionnaires and analyzed using univariate analysis to describe respondent characteristics, while bivariate analysis with the Chi-Square test was used to identify relationships between variables. The findings revealed that most respondents were aged 20–35 years (55.6%), the majority were housewives (79.4%), and most were primigravida (43.8%). Furthermore, it was found that pregnant women with low knowledge levels tended to experience a higher incidence of high-risk pregnancy. The statistical analysis confirmed this relationship, with a significant p-value of 0.000 ($p < 0.05$), indicating that knowledge level plays a vital role in determining maternal health outcomes. These results highlight the importance of providing adequate information and continuous counseling to pregnant women regarding prenatal care, nutrition, and early detection of pregnancy complications. Strengthening health education programs at the community level and encouraging active participation of health workers can help reduce high-risk pregnancies. Therefore, this study recommends an integrated approach involving healthcare providers, families, and communities to improve maternal knowledge and ensure safer pregnancy outcomes.

Keywords: Knowledge, Pregnant Women, High-Risk Pregnancy

INTRODUCTION

Pregnancy is a physiological process experienced by every woman; however, under certain conditions, it can develop into a high-risk pregnancy that endangers both maternal and fetal health. A high-risk pregnancy is defined as one that has the potential to cause complications and therefore requires intensive monitoring (Manuaba, 2018). Such risk factors may be influenced by maternal age, number of pregnancies, health status, and the mother's knowledge in maintaining a healthy pregnancy (Prawirohardjo, 2020).

Maternal knowledge plays an important role in preventing high-risk pregnancies. Adequate knowledge encourages mothers to regularly attend antenatal care (ANC), recognize danger signs during pregnancy, and adopt a healthy lifestyle throughout gestation (Kemenkes RI, 2021). Conversely, a lack of knowledge often leads to delays in decision-making and the management of complications, which may worsen pregnancy outcomes (Fatmawati, 2019). According to the World Health Organization (WHO, 2022), approximately 15% of pregnancies worldwide are considered high-risk and require special care. In Indonesia, the incidence of high-risk pregnancies remains relatively high, particularly among mothers under 20 years old, over 35 years old, or those with multiple pregnancies (BKKBN, 2020). This condition indicates that improving maternal knowledge is a crucial strategy to reduce the incidence of high-risk pregnancies.

Previous studies have also demonstrated a significant relationship between maternal knowledge levels and health behaviors during pregnancy. Mothers with higher knowledge levels are more likely to comply with ANC standards and have lower complication rates compared to mothers with lower knowledge levels (Sari & Lestari, 2021). Other research has also emphasized that health education delivered through counseling, printed media, and electronic media contributes to increasing maternal awareness of pregnancy risks (Rahmawati, 2022).

Based on this phenomenon, there remains a gap between maternal knowledge and the incidence of high-risk pregnancies, particularly in Lhokseumawe City. Therefore, this study aims to examine the relationship between pregnant women's knowledge levels and the incidence of high-risk pregnancies at BPM Salabiah, Lhokseumawe City.

RESEARCH METHODS

This study employed a quantitative approach with an analytic design using a cross-sectional method, in which both independent and dependent variables were measured simultaneously. This approach was chosen because it is appropriate for identifying the relationship between pregnant women's knowledge levels and the incidence of high-risk pregnancies. The study population consisted of all pregnant women who attended antenatal care at BPM Salabiah, Lhokseumawe City. A total of 63 respondents were recruited using a purposive sampling technique, which involves selecting participants based on predetermined criteria established by the researcher.

The research instrument used was a structured questionnaire that had been tested for validity and reliability. The questionnaire included items related to respondents' characteristics (age, occupation, and number of pregnancies) as well as their knowledge regarding healthy pregnancy and pregnancy risks. Data were collected through guided interviews using the questionnaire, which was administered directly to the respondents. Prior to completion, the researcher provided explanations to ensure respondents' understanding of each question.

Data analysis was conducted in two stages: univariate and bivariate analysis. The univariate analysis was used to describe the frequency distribution and percentage of each research variable, while the bivariate analysis was carried out using the Chi-Square test to determine the relationship between pregnant women's knowledge levels and the incidence of high-risk pregnancies. A significance level of $\alpha = 0.05$ was applied, such that a p-value < 0.05 indicated a statistically significant relationship between the two variables studied.

RESULTS AND DISCUSSION

1. Univariate Analysis

Univariate analysis was conducted to describe or explain the characteristics of each variable studied. In this analysis, categorical data is presented in the form of frequency distributions and percentages for each category, to provide a general overview of the respondents' characteristics.

a. Age of pregnant women

Table 1.
Frequency distribution of respondents by maternal age

Characteristics	Frequesncy	Percent
Maternal age		

<20 age	3	4,8%
20 – 35 age	35	55,6%
>35 age	25	39,6%
Total	**63**	**100%**

Based on Table 1, it is known that the majority of pregnant women were in the 20–35 age group, amounting to 35 women (55.6%).

b. Mother's Occupation

Table 2.
Frequency Distribution of Respondents Based on Mother's Occupation

Characteristics	Frequesncy	Percent
Mother's occupation		
Housewife	50	79,4%
Office worker	9	14,3%
Trader	4	6,3%
Total	**63**	**100%**

Based on Table 2, it is known that the majority of pregnant women work as housewives, namely 50 women (79.4%).

c. Number of maternal pregnancies

Table 3.
Frequency distribution of respondents based on number of maternal pregnancies

Characteristics	Frequesncy	Percent
Number of pregnancies		
Primigravida	28	43,8%
Multigravida	22	34,4%
Grande multigravida	13	21,8%
Total	**63**	**100%**

Based on Table 3, it is known that most pregnant women are in their first pregnancy (Primigravida), namely 28 people (43.8%).

2. Bivariate analysis

Risk of pregnancy	Knowledge of pregnant women						Total	p-value
	High		Medium		Low			
	F	%	F	%	F	%	F%	
High Risk	4	20%	11	47,8%	17	85%	32(50,7%)	0,000
No Risk	16	80%	12	52,2%	3	15%	31(49,3%)	
Total	20	100%	23	100%	20	100%	63(100%)	

Based on the results of a study of 63 pregnant women at Cut Meutia General Hospital, a significant correlation was found between maternal knowledge and the incidence of high-risk pregnancies, with a p-value of 0.000 ($p < 0.05$). These results indicate that maternal knowledge is associated with the likelihood of experiencing a high-risk pregnancy.

CONCLUSION

Based on the results of this study involving 63 pregnant women at BPM Salabiah, Lhokseumawe City, it can be concluded that there is a significant relationship between pregnant women's knowledge levels and the incidence of high-risk pregnancies. The Chi-Square test revealed a *p-value* of 0.000 ($p < 0.05$), indicating that lower knowledge levels are associated with a higher risk of high-risk pregnancy. Therefore, enhancing maternal knowledge through health education, counseling, and regular antenatal care is crucial in preventing pregnancy complications and reducing the prevalence of high-risk pregnancies within the community.

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