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Pregnant Women's Knowledge About Early Detection of Preeclampsia at The Akbar Medica Clinic Mojokerto Regency

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ABSTRACT

Preeclampsia and eclampsia rank second in the world as a contributor to maternal mortality and morbidity. Preeclampsia is a serious health problem and has a high level of complexity because its impact is not only on the mother during pregnancy and childbirth, but also on the baby. Every pregnancy has a risk of complications, so identifying risk factors for preeclampsia is an important priority. The type of research used is descriptive research. The sample used was 30 pregnant women in the first and second trimesters in the Akbar Medika Clinic working area from January to September 2025. The results showed that of the 30 pregnant women, most of them had insufficient knowledge about early detection of preeclampsia, as many as 50% (15 mothers). This was influenced by the age of mothers aged <20 years as many as (5 mothers) 100%, from those with basic education had insufficient knowledge as many as (7 mothers) 77.8%. Of the 22 mothers, 73.3% were unemployed. Lack of knowledge about preeclampsia among pregnant women can lead to their inability to recognize the early signs and symptoms of this condition. As a result, when they experience symptoms such as swelling, hypertension, or visual disturbances, they may dismiss them as not serious or as normal. This risks delaying treatment and increasing the risk of complications for both mother and fetus..

Keywords: *Knowledge, Early Detection of Pre-Eclampsia*

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INTRODUCTION

Preeclampsia is a high-risk pregnancy complication for both the mother and the fetus. Preeclampsia is a serious and highly complex health problem because it impacts not only the mother during pregnancy and childbirth, but also the baby.

Every pregnancy carries a risk of complications, making it crucial for pregnant women to identify and understand the risk factors for preeclampsia for prevention. Early detection of these risk factors is expected to prevent the disease during pregnancy and reduce long-term health risks.

Preeclampsia and eclampsia rank second worldwide as contributors to maternal mortality and morbidity. Maternal mortality worldwide is a pressing health problem. In

2023, an estimated 260,000 women will lose their lives during or after pregnancy and childbirth. Approximately 92% of these maternal deaths occur in low- and lower-middle-income countries, and most of these cases are preventable (WHO, 2023). In Indonesia, the number of maternal deaths in 2021 reached 7,389. The need for information related to early detection of preeclampsia is crucial for pregnant women, especially those with risk factors that can worsen the pregnancy. One factor influencing delays in recognizing the risk of preeclampsia is the mother's level of knowledge about the symptoms and danger signs during pregnancy. Adequate knowledge of these danger signs is crucial for early detection of preeclampsia, allowing for appropriate and prompt treatment.

Research into one effort to reduce the perinatal mortality rate (MPR) due to preeclampsia is to reduce the incidence of preeclampsia. This can be reduced through prevention efforts, early observation, and therapy. Mortality prevention efforts can be reduced if they are identified quickly. Factors influencing the high maternal mortality rate include general factors, parity, antenatal care, assisting factors, facilities and equipment, referral systems, socioeconomic factors, beliefs, and ignorance.

It should be emphasized that mild preeclampsia syndrome with hypertension, edema, and proteinuria often goes unnoticed or unnoticed by women, so that it can quickly develop into severe preeclampsia or even eclampsia. With this knowledge, it becomes clear that regular antenatal checkups and routinely looking for signs of preeclampsia are crucial in preventing preeclampsia .

Early diagnosis and treatment of preeclampsia, a precursor to eclampsia, are essential to reducing maternal and infant mortality. This knowledge clearly demonstrates the importance of regular antenatal checkups and routinely looking for signs of preeclampsia in preventing severe preeclampsia and eclampsia. More than 50% of deaths in developing countries are preventable with readily available technology at relatively low cost (Sarwono Prawirohardjo, 2023).

Research by Yusri Dwi Lestari et al. (2022) demonstrated a significant correlation between pregnant women's knowledge of preeclampsia and their ability to detect the risk of preeclampsia early in the Sumberasih Community Health Center (Puskesmas Sumberasih) with a p-value of 0.026. These results indicate that increased knowledge positively impacts pregnant women's ability to recognize early symptoms and take preventive measures or seek immediate medical attention.

A preliminary study conducted through interviews showed that of the five pregnant women interviewed, three were primigravidas and two were multigravidas, with an average gestational age of three or four months. Four of the five pregnant women were unaware of preeclampsia, its symptoms, or early detection. This prompted the researchers to conduct a study on "pregnant women's knowledge about early preeclampsia detection in the Akbar Medika 25 Clinic Work Area."

METHOD

The type of research used in this study is descriptive research. The research location is in the Akbar Medika Clinic Mojokerto work area. The population in this study were pregnant women in the Akbar Medika Clinic work area from January to September 2025 and the sample in this study were 30 pregnant women in the first and second trimesters who were in the Akbar Medika Clinic work area from January to September 2025. The variables used in this study were pregnant women's knowledge about early detection of preeclampsia based on age, education and occupation.

FINDING AND DISCUSSION

RESEARCH RESULT

1. Pregnant Women's Knowledge of Early Detection of Preeclampsia

Table 1. Frequency Distribution of Pregnant Women's Knowledge of Early Detection of Preeclampsia

No	Knowledge	Frequency	Percentage (%)
1.	Good	5	16,7
2.	Sufficient	10	33,3
3.	Poor	15	50,0
	Amount	30	100

Source : Primary data

Table 1 above shows that of the 30 pregnant women, 50% (15 women) had poor knowledge about early detection of preeclampsia, while a small proportion, 16.7% (5 women), had good knowledge.

2. Maternal Knowledge Based on Age

Table 2. Cross-tabulation of Pregnant Women's Knowledge of Early Detection of Preeclampsia Based on Age.

o	Age	Knowledge							
		Good		Sufficient		Poor			
		Σ	(%)	Σ	(%)	Σ	(%)		
1	under 20 years	0	0	0	0	5	10	5	100
2	20-35 Years	1	5.0	9	45.0	1	0	20	100
3	Over 35 Years	4	80.0	1	20.0	0	50.00	5	100
Amount		5	16.7	10	33.3	15	50.0	30	100

Source : Primary Data

In table 2 it can be explained that 100% of pregnant women aged <20 years (5 mothers) have poor knowledge, half of those aged 20-35 years (50%) have poor knowledge and those aged >35 years (80%) have good knowledge.

3. Mothers' Knowledge Based on Education

Table 3. Cross-Tabulation of Pregnant Women's Knowledge of Early Detection Preeclampsia Based on Education

No	Education	Knowledge						Σ	%
		Good		Sufficient		Poor			
		Σ	(%)	Σ	(%)	Σ	(%)		
1	Basic	0	0	2	22.2	7	77.8	9	100
2	Iermediate	1	6.3	7	43.8	8	50.0	16	100
3	High	4	80.0	1	20.0	0	0	5	100
Amount		5	16.7	10	33.3	15	50.0	30	100

Source : Primary Data

In table 3. 77.8% of pregnant women with basic education (7 mothers) mostly had poor knowledge, 50% of pregnant women with secondary education (8 mothers) mostly had poor knowledge and 80% of pregnant women with higher education (4 mothers) mostly had good knowledge.

4. Mother's Knowledge Based on Occupation

Table 4. Cross Tabulation of Pregnant Women's Knowledge about Early Detection of Preeclampsia Based on Occupation

No	Occupation	Knowledge						Σ	%
		Good		Sufficient		Poor			
		Σ	(%)	Σ	(%)	Σ	(%)		
1	Working	4	50.0	2	25.0	2	25.0	8	100
2	Not Working	1	4.5	8	36.4	13	59.1	22	100
Amount		5	16.7	10	33.3	15	50.0	30	100

Source : Primary data

Table 4 shows that 50% (4 mothers) of pregnant women who work have good knowledge and 59.1% (13 mothers) of pregnant women who do not work have poor knowledge.

DISCUSSION

1. Pregnant Women's Knowledge of Early Detection of Preeclampsia

Research results indicate that the majority of pregnant women (50%) (15%) lack knowledge about early detection of preeclampsia. This is influenced by the mothers' age (5%, 100%) of mothers under 20 years old, and those with primary education (77.8%) who have insufficient knowledge. Regarding occupation, the majority of mothers (22%) are unemployed (73.3%).

This lack of knowledge about preeclampsia among pregnant women can lead to them not realizing the importance of recognizing the early signs and symptoms of this condition. As a result, when they experience symptoms such as swelling, hypertension, or visual disturbances, they may dismiss them as not serious or normal. This risks delaying treatment and increasing the risk of complications for both mother and fetus.

According to Notoatmodjo (2018), knowledge is the result of "knowing," and this occurs after a person senses a particular object. Sensing occurs through the five human senses: sight, hearing, smell, taste, and touch. Most human knowledge is acquired through the eyes and ears. Therefore, knowledge is a crucial domain for shaping one's actions (overt behavior), because experience and research have shown that behavior based on knowledge is more sustainable than behavior not based on knowledge. (Notoatmodjo, 2018)

Pregnant women who have good knowledge about early detection of preeclampsia receive explanations from health professionals. A person's age determines their level of knowledge. The older a person is, the better their knowledge. Conversely, the younger a person is, the lower their knowledge. Mothers can acquire knowledge from anywhere, including mass media and electronic media. Knowledge can also be gained from experience, colleagues, and education

2 Mothers' Knowledge Based on Age

Based on age, 100% (5 mothers) had insufficient knowledge. This aligns with Nursalam's (2020) theory, stating that the older a person is, the more mature they are in their thinking and working. According to Notoatmodjo's (2018) theory, the older a person is, the better their knowledge is because they gain more experience.

Pregnant women with a lower age tend to have less knowledge. This lack of knowledge stems from their immature thinking and lack of experience compared to those older than them. Therefore, the older a person is, the better their knowledge will be, and vice versa, the younger they are, the less their knowledge will be.Pengetahuan Ibu Berdasarkan Umur

3 Maternal Knowledge Based on Education

Research results indicate that 77.8% of mothers with a primary education (7 mothers) have insufficient knowledge.

According to Nursalam (2020), the higher a person's education level, the easier it is to receive information, thus increasing their knowledge.

Pregnant women who understand the danger signs of pregnancy, including preeclampsia symptoms such as high blood pressure, edema, and headaches, will be more alert and more likely to seek medical attention promptly. Adequate knowledge also influences a mother's ability to receive, understand, and process health information, enabling them to make appropriate decisions regarding preventive and curative measures during pregnancy (Yusri Dwi Lestari et al., 2022). Therefore, increasing maternal knowledge through ongoing education is an important strategy in preventing

preeclampsia and reducing the risk of pregnancy complications. According to Koentjaraningrat, as quoted by Nursalam (2008), the higher a person's education level, the easier it is for them to receive information. Conversely, a lower level of education will hinder the development of knowledge and attitudes toward newly introduced values.

Pregnant women with higher education are more receptive to information provided by health workers about early detection of preeclampsia due to their greater knowledge and access to information. This is supported by the availability of information from both mass and electronic media. Therefore, the higher a person's education, the greater their knowledge, and conversely, the lower their education, the lower their knowledge.

4. Mothers' Knowledge Based on Occupation

Research results indicate that 73.3% (22 mothers) of unemployed mothers have insufficient knowledge about early detection of preeclampsia.

According to Notoatmodjo (2018), by working, a person can do something valuable and useful, and gain various experiences. A person who works will have a broader knowledge base than someone who doesn't work because they have access to a wealth of information.

Working pregnant women have good knowledge about early detection of preeclampsia. Those who work receive information from their work environment, colleagues, and the mass media, and they also have broader insights. Therefore, working pregnant women have good knowledge, while unemployed pregnant women have less.

CONCLUSION

Most pregnant women have insufficient knowledge about early detection of preeclampsia as many as 50% (15 pregnant women). This is influenced by the age of the mother who is <20 years old as many as (5 mothers) 100%, from education who have basic education have insufficient knowledge as many as (7 mothers) 77.8%. From the occupation of the majority of mothers are not working as many as (22 mothers) 73.3% of mothers.

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