Research Article

Relationship Between Pregnant Women's Knowledge of Danger Signs and Compliance with Antenatal Care at Ternate City Health Center

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Abstract: Pregnancy is a critical period that begins with conception and lasts until the birth of the fetus, typically lasting about 280 days. Adequate antenatal care (ANC) is essential to ensure the healthy development of the fetus and to identify potential complications early. One of the most important factors contributing to maternal and fetal health is the level of knowledge pregnant women have regarding pregnancy-related danger signs. This study aims to analyze the relationship between pregnant women's knowledge of pregnancy danger signs and their compliance with attending ANC visits at the Ternate City Health Center. This research employed a qualitative design with a cross-sectional approach to examine the knowledge and compliance of pregnant women within the area. A total sampling technique was used, where the sample size was equivalent to the population size. Data were analyzed using the Chi-square test to determine any significant relationships between the variables. The results of the analysis showed a significant relationship between the pregnant women's knowledge of pregnancy danger signs and their adherence to ANC visits. The statistical analysis indicated a p-value of 0.003 (p < 0.05), demonstrating a strong correlation between the two factors. This finding highlights the importance of educating pregnant women about the danger signs of pregnancy, as better awareness may lead to higher rates of ANC attendance. Furthermore, the study emphasizes the role of healthcare providers in disseminating critical information to expectant mothers, ensuring they recognize the importance of timely ANC visits. In conclusion, increasing knowledge about pregnancy-related danger signs among pregnant women is crucial for improving maternal health outcomes and promoting better compliance with ANC visits, ultimately leading to healthier pregnancies.

Keywords: ANC; Danger Signs; Knowledge

1. Introduction

Pregnancy is the period from conception to the birth of the fetus, lasting approximately 280 days (40 weeks or 9 months and 7 days) calculated from the first day of the last menstrual period. Examinations during pregnancy are very important to ensure that the baby develops healthily and normally, and to detect any abnormalities that may occur (Oktavial, 2019).

The period of pregnancy always carries risks that can cause mild or severe complications, potentially leading to death, illness, or disability in both the mother and the baby. Danger signs in pregnancy refer to indications of threats or dangers that may occur during pregnancy or the antenatal period. Knowledge of these signs is crucial for pregnant women, especially to recognize threats that can endanger the safety of both the mother and the fetus. Some danger signs that need to be known include bleeding, decreased fetal movement, abdominal pain, and severe headaches (Carlos et al., 2020).

According to data from the World Health Organization (WHO) in 2022, 98% of Maternal Mortality Rates (MMR) occur in developing countries. The main causes of maternal deaths worldwide include hypertension in pregnancy (14%), complications due to abortion (8%), hemorrhage (27%), infection (11%), prolonged labor and other factors (9%), and blood

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clots or embolism (3%) (WHO, 2022). Indonesia is among the countries with the highest maternal mortality rates, ranking third among ASEAN member states. The number of maternal deaths recorded was 4,299 cases in 2019, increasing to 4,622 cases in 2016, and reaching 4,712 cases in 2020 (WHO, 2022).

One of the factors influencing the high maternal mortality rate is the mother's attitude and behavior during pregnancy, which is also influenced by her level of knowledge about pregnancy. During pregnancy, monitoring or Antenatal Care (ANC) examinations are required as an essential part of pregnancy care. These routine examinations aim to detect early risk conditions for both the mother and the fetus, both during pregnancy and labor (Fadluni, 2022).

The danger signs of pregnancy include severe headaches, visual disturbances such as blurred vision, swelling in the face and fingers, fluid discharge from the vagina, absence of perceived fetal movement, and severe abdominal pain. Pregnant women's knowledge of these danger signs plays a crucial role in detecting pregnancy problems early. If mothers understand these danger signs, they can immediately take necessary action when experiencing these conditions to reduce the risk of complications and prevent the condition from worsening. Thus, problems can be identified earlier, allowing for faster and more appropriate handling (Sitepu, Andini, & Zahirah, 2019).

Based on the research results at the Ternate City Public Health Center, it was found that many still do not understand the danger signs during pregnancy. This prompted the author to conduct research with the title **"The Relationship Between Pregnant Women's Knowledge of Danger Signs and Their Compliance in Performing Antenatal Care (ANC) at the Ternate City Public Health Center."

2. Research Methods

This research uses a qualitative design with a cross-sectional approach to analyze the relationship between pregnant women's knowledge levels regarding pregnancy danger signs and their actions in preventing complications. Data was collected at the Ternate City Public Health Center during October-November 2024 using a structured questionnaire. The research population was pregnant women visiting the public health center, totaling 56 people. Since this research used a total sampling technique, the number of samples was equal to the number of the population. Data analysis was conducted using univariate and bivariate methods employing the Chi-Square test to examine the relationship between variables using SPSS 2024 software.

3. Results and Discussion

The Chi-Square test results obtained showed a p-value of 0.003. Since the p-value is less than 0.05, this indicates a significant relationship between pregnant women's knowledge of pregnancy danger signs and their compliance in performing Antenatal Care (ANC). This

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means that pregnant women's knowledge of pregnancy danger signs influences their level of compliance in following ANC examination programs. The better the mother's knowledge, the higher their likelihood of complying with regular pregnancy examinations, which can contribute to the health of both the mother and baby during pregnancy.

Discussion: Based on the research findings, there is a significant relationship between pregnant women's knowledge of pregnancy danger signs and their compliance in following the ANC (Antenatal Care) program. From the frequency distribution, it was found that the majority of pregnant women had sufficient (44.7%) and good (35.7%) knowledge of pregnancy danger signs, while a small portion (19.6%) had poor knowledge. This indicates that the majority of pregnant women already possess sufficient or good knowledge, which is an important factor in encouraging their compliance with routine pregnancy examinations. Regarding ANC compliance, 62.5% of pregnant women were compliant with examinations, while 37.5% were non-compliant. The Chi-Square test results showed a p-value of 0.003, meaning there is a significant relationship between pregnant women's knowledge level and their compliance in performing ANC.

Kurniasih (2019) states that the level of a mother's knowledge regarding pregnancy danger signs is very important because if someone is based on good knowledge of these matters, the mother will know all the risks that will occur during pregnancy and will make the mother more concerned and motivated to be compliant. Pregnant women who have better knowledge of pregnancy danger signs tend to be more compliant in following ANC examinations, which has a positive impact on the health of both mother and baby. Conversely, pregnant women with less knowledge tend to be less compliant in following pregnancy examinations. Therefore, increasing pregnant women's knowledge about pregnancy danger signs through more intensive health education is crucial for improving compliance with ANC and reducing the risk of complications during pregnancy.

These findings are consistent with Noviatia, S.'s (2021) findings, which state that a higher level of maternal knowledge leads to greater compliance among pregnant women in performing ANC examinations. A lack of maternal knowledge about pregnancy danger signs leads to insufficient information regarding maternal and fetal health, as well as the risks that will occur if ANC visits are not routine.

Therefore, it is hoped that increasing knowledge about pregnancy danger signs can improve pregnant women's compliance with ANC visits (Yolanda, 2023).

4. Conclusions

Based on the research findings, a p-value of 0.003 (<0.05) leads to the conclusion that there is a significant relationship between pregnant women's knowledge of pregnancy danger signs and their compliance in attending ANC visits. Pregnant women with good knowledge of pregnancy danger signs are more likely to comply with routine ANC examinations, which positively impacts the health of both the mother and the fetus. Conversely, pregnant women

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with less knowledge show a lower level of compliance with ANC visits. Therefore, it's crucial to enhance pregnant women's knowledge through more intensive education and health promotion, so they become more aware of pregnancy danger signs and more motivated to participate in the ANC program to ensure health and safety during pregnancy.

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