

Knowledge Relation of Pregnant Women About Pregnancy Danger Signs with Antenatal Care Visits in Work Area of Hamparan-Perak's Public Health Center

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Abstract

Background: Maternal Mortality Rate (MMR) is one indicator that can describe the welfare of society in a country. According to data from the World Health Organization (WHO), maternal mortality in Indonesia in 2013 was still dominated by three main causes of death, namely bleeding by 30.13%, hypertension in pregnancy by 27.1%, and infection by 7.3%. one of the causes of maternal mortality in Indonesia whose incidence continues to increase, namely 1% in 2010 1.1% in 2011 and 1.8% in 2012. In monitoring the health service program for pregnant women, it can be assessed using the coverage indicators K1 and K4.

Objective: The purpose of this study was to determine the knowledge relation of Pregnant Women about the danger signs of pregnancy with Antenatal Care (ANC) visits.

Method: This research is an analytic study with a cross-sectional approach using primary and secondary data, primary data using a questionnaire with 20 questions. The sample used is 65 people, the sampling method is by accidental sampling technique

Result: There is a relationship between knowledge of pregnant women about danger signs of pregnancy with antenatal care (ANC) visits where (X^2 count = 64.75) > X^2 table (3.481) at Hamparan-Perak's public Health Center in 2021

Conclusion: There is a relationship between knowledge of pregnant women about danger signs of pregnancy with ANC visits at Hamparan-Perak's public Health Center in 2021

Keywords: Knowledge; Pregnant Women; Danger Signs of Pregnancy; ANC Visits

INTRODUCTION

Maternal Mortality Rate (MMR) is one indicator that can describe the welfare of society in a country. According to data from the World Health Organization (WHO), the maternal mortality rate in the world in 2015 was 216 per 100,000 live births or the estimated number of maternal deaths was 303,000 deaths with the highest number being in developing countries, which was 302,000 deaths. The maternal mortality rate in developing countries is 20 times higher than the maternal mortality rate in developed countries, namely 239 per 100,000 births, while in developed countries it is only 12 per 100,000 live births in 2015 (1).

Maternal mortality in Indonesia in 2013 was still dominated by three main causes of death, namely bleeding 30.13%, hypertension in pregnancy 27.1%, and infection 7.3%. continued to increase, namely 1% in 2010 1.1% in 2011 and 1.8% in 2012 (2).

Efforts to increase maternal mortality are by increasing health services during pregnancy (Riskesdas, 2013). Pregnant women are advised to go to a doctor or midwife as early as possible since they feel pregnant to get antenatal care. The goals of antenatal care include bringing together progress to ensure maternal health and infant development, improving and maintaining the physical, social, and mental health of mother and baby, early identification of any abnormalities or complications that may occur during pregnancy, preparing for term delivery, and safe delivery with minimal trauma (3).

Monitoring the health care program of pregnant women can be assessed using K1 and K4 coverage indicators, K4 coverage in Indonesia in 2012 K4 coverage amounted to 90.18%,

in 2013 K4 coverage was 86.85%, in 2014 K4 coverage was 86.70%, in 2015 K4 coverage was 87.48%, in 2016 K4 coverage was 85.35%, in 2017 K4 coverage was 87.30% and in 2018 K4 coverage was 88.03% (4).

Pregnant women's health services must meet the minimum frequency in each trimester, which is at least once in the first trimester (gestational age 0-12 weeks), at least once in the second trimester (gestational age 12-24 weeks), and at least twice in the third trimester (gestational age 20 weeks until the time of birth). The standard of service time is to ensure protection for pregnant women and fetuses in the form of early detection of risk factors, prevention, and early handling of pregnancy complications (5).

From Aan Hashanah's research entitled relationship of pregnant women's knowledge about the danger signs of third-trimester pregnancy with regular examination of pregnancy in 2017, the results of research that high knowledge of pregnant women about the danger signs of third-trimester pregnancy as many as 26 people (70.2%), pregnant women who conduct regular examinations as many as 30 people (81.0%), research conducted with statistical tests of knowledge with a value of $p\text{-value} = 0.000 < 0.05$ resulting in the relationship of knowledge of pregnant women in the third trimester with regular pregnancy examination (6).

After the initial survey was conducted at Hamparan-Perak Health Center of Deli Serdang Regency in 2021 pregnant women who came to the health center as many as 15 people, where pregnant women 7 people (about 45%) have made Antenatal care visits by minimum standards and 8 people (about 55%) did not make Antenatal care visits by minimum standards.

Based on the background above, the formula of the problem is "Is there a relationship of pregnant women's knowledge about the danger signs of pregnancy with antenatal care visits at at Hamparan-Perak Health Center of Deli Serdang Regency in 2021"

Knowledge is the result of knowing and this occurs after people have sensed a certain object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, and touch. Most human knowledge is obtained through the eyes and ears. Knowledge of cognition is the very important domain in shaping one's actions (over behavior) (7).

Danger signs during pregnancy such as vaginal bleeding, headache, blurred vision, swelling of the face and fingers, vaginal discharge, discontinue fetal movement, and stomach pain. In late pregnancy, abnormal bleeding is red, profuse, and sometimes, but not always accompanied by pain. Bleeding like this can mean placenta previa or placental abruption. Headaches can occur during pregnancy and are often a normal discomfort in pregnancy. A headache that indicates a serious problem is a severe headache that persists and does not go away with rest. Sometimes with these severe headaches, the mother may determine that her vision is blurry or cloudy. Severe headaches are a symptom of pre-eclampsia (2).

Usually due to hormonal influences, the mother's visual acuity changes during pregnancy. Minor changes are normal, but if this vision problem occurs suddenly for example, a vision suddenly becomes blurred or imagined, you need to be careful because it can refer to danger signs of pregnancy. During pregnancy, most women will experience normal swelling of the legs, usually appearing in the afternoon and disappearing after resting or elevating the legs. Swelling usually indicates a serious problem if it appears on the face and hands, does not go away after rest, and is accompanied by other physical complaints. Discharge in the form of water from the vagina in the third trimester. Vaginal fluid in normal pregnancy if it is not in the form of heavy bleeding. Pregnant women can begin to feel their baby's movements at 16-18 weeks of gestation (multigravida, who have given birth previously) and 18-20 weeks (primigravida, pregnant for the first time). Stomach pain is a pain in the abdomen that is severe, persistent, and does not disappear after resting, sometimes it can be accompanied by bleeding through the birth canal (8).

According to Rosmawati Tibu (2017), The results showed that the knowledge of pregnant women about the danger signs in pregnancy was in the poor category. Pregnant women with good knowledge are at the age of 20-35 years, highly educated, multigravida, obtain information about danger signs in pregnancy from health workers. Pregnant women with sufficient knowledge are at the age of 20-35 years, have higher education, secondary, basic, primigravida, and multigravida, obtain information about danger signs in pregnancy from health workers, social and print media, family(9)

Pregnancy visits are visits made by pregnant women for monitoring and supervision of maternal and child welfare at least four times during pregnancy in the following time: 1 time in the first trimester, 1 time in the 2nd trimester, 2 times in the 3rd trimester. If there is a problem or disorder of pregnancy then it can be handled further (8).

Antenatal care visit schedule is I (16 weeks), II (24-28 weeks) and III (32 weeks), and IV (36 weeks) until birth. visit (16 weeks) aims for the following: Screening and treatment of anemia, Maternity planning, and Prevention of complications due to pregnancy and treatment. Visit II (24-28 weeks) and visit III (32 weeks) aim for the following: Introduction to complications, Screening of preeclampsia, gamely, infection of the reproductive organs, and germination ducts, and repeat the delivery plan. visit IV (36 weeks) until birth: Just like visits II and III, recognize any presentation location abnormalities, monitor the delivery plan and recognize the signs of labor.

METHODS

This research is analytical with a cross-sectional approach is a research design by taking measurements or observations at the same time at Hamparan-Perak's health center of Deli Serdang Regency in 2021.

The population in this study is all pregnant women in the 3rd trimester who came to check their pregnancies to Hamparan-Perak's Health Center of Deli Serdang Regency in the last 3 months of 2021 with a total of 186 people. The sample in this study used the formula Slovin, namely. The sample amounted to 65 people and the way of sampling using accidental sampling techniques, namely mothers-pregnant women in the 3rd trimester who immediately came to visit to check their pregnancy to Hamparan-Perak's Health Center.

Data collection with direct interview techniques to respondents using questionnaire instruments that have been prepared. The questionnaire about pregnant women's knowledge of the danger signs of pregnancy with pregnancy visits consisted of 20 questions. Each correct statement item will be given a score of 1 and each incorrect statement will be given a score of 0 with the highest value of 20. To determine the category of knowledge of pregnant women is good and bad, researchers determine the following standards: Good category if the statement is answered correctly by respondents > 10 statements and Categories are not good if statements are answered correctly by respondents < 10 statements.

According to Budiman and Riyanto (2013) the level of knowledge is grouped into two groups if the respondents are the general public, namely: the level of knowledge in the Good category is > 50%, and the level of knowledge in the Poor category is 50% (10)

This research has carried out an ethical test from the Research Ethics Committee of the College of Health Sciences Senior with a statement of ethical feasibility no:023/STIKES-SENIOR/II/2021.

Univariate data analysis is used to describe each independent variable and dependent variable by using a frequency distribution table. Bivariate analysis is intended to determine the relationship of independent variables with the dependent variable, which is the relationship of pregnant women's knowledge of the danger signs of pregnancy with antenatal care (ANC) visits, using the Chi-Square test with $\alpha = 0.05$. From the results of statistical tests, it will be

known that there is no significant relationship between the variables that are examined by looking at the value of χ^2 . If the statistical test results of the value χ^2 calculate the $> \chi^2$ table means that there is a meaningful relationship between the knowledge of pregnant women about the danger signs of pregnancy and antenatal care visits. If the value χ^2 calculates $< \chi^2$ the table means there is no meaningful relationship between the pregnant woman's knowledge of the danger signs of pregnancy and the antenatal care visit.

RESULT

From the results of the study entitled "Relationship of Knowledge of Pregnant Women about Signs of Pregnancy With Antenatal Care Visit at Hamparan-Perak's public Health Center in 2021.

Table 1. Frequency Distribution of Pregnant Women's Knowledge About Signs Pregnancy Danger Signs at Hamparan-Perak's public health center in 2021

No	Knowledge	Score	Percentage (%)
1	Good	57	87.7 %
2	Bad	8	12.3 %
	Sum	65	100 %

From the table above, it can be seen that the knowledge of pregnant women about the danger signs of pregnancy. The majority have good knowledge, as many as 57 people (87.7%)

Table 2. Antenatal Care Visit Frequency Distribution (ANC) at Hamparan-Perak's public Health Center in 2021.

No	ANC visit	Score	Percentage (%)
1	Standard	60	92.3 %
2	No standard	5	7.7 %
	Sum	65	100 %

From the table above, it can be seen that the majority of pregnant women who perform standardized Antenatal Care are 60 people (92.3%)

Bivariate analysis is intended to determine the relationship between the independent variables and the dependent variable, namely the relationship between knowledge of pregnant women about the danger signs of pregnancy with ANC visits at the Hamparan-Perak's Health Center in 2021 by using the Chi-Square test

Table 3. Cross-tabulation of Pregnant Women's Knowledge Relationships About Signs Dangers of Pregnancy With Antenatal Care (ANC) Visits at Hamparan-Perak's public Health Center in 2021.

No	Knowledge	ANC visit				Score	Percentage (%)
		Standard		No standard			
		N	%	N	%		
1	Good	56	98.2%	1	1.8 %	57	100 %
2	Good	4	50%	4	50 %	8	100 %
		60	92.3%	5	7.7 %	65	100 %
X ² count = 64,57		df = 1		X ² Table = 3,841			

From the above research, it can be known that of 57 well-informed respondents the majority who make standardized Antenatal Care are 56 people (98.2%) while from 8 well-informed respondents who make standardized antenatal care (ANC) visits are 4 people (50%) and unkindly knowledgeable pregnant women who do antenatal care visits that do not meet the standards are 4 people (50%). Statistics test results with chi-square showed that the X² count

(64.57) $>X^2$ table (3,841) meant that there was a relationship between a pregnant woman's knowledge of pregnancy danger signs and antenatal care visits.

DISCUSSION

There is a relationship between the knowledge of pregnant women about the danger signs of pregnancy with Antenatal Care visits and in this study, there were more, pregnant women with good knowledge who made Antenatal Care visits according to standards, while those with poor knowledge were less likely to do it. Antenatal Care visits according to standards.

Antenatal Visits are visits made by pregnant women to monitor and supervise the welfare of mothers and children at least four times during pregnancy as follows: 1 time in the first trimester, 1 time in the second trimester, and 2 times in the third trimester. If there are problems or pregnancy disorders, they can be handled further (11).

According to Susi Suharti (2017), entitled *Primigravida Mother's Knowledge Relationship About Signs Dangers Of Pregnancy With Antenatal Care Visits Integrated at Harapan Raya Pekanbaru Public Health Center*. The result of the univariate analysis is the majority of respondents with enough knowledge category that is 78 people (63,9%), a minority of respondents with good knowledge that is 12 people (9.8%), majority of respondents with incomplete antenatal care visits counted 68 people (55,7% %) and the minority with the complete category made antenatal care visit as many as 54 people (44.3%). The result of bivariate analysis obtained $\alpha (0,05) > p$ -value (0,03). This means that there is a relationship between primigravida mothers' knowledge about the danger sign of pregnancy with a visit of ANC integrated at Harapan Raya Pekanbaru Public Health Center. Research sites should continue to improve the special services for pregnant women and carry out well-integrated antenatal care (12).

This is to research conducted by Vivi Budiarti (2018), there is a relationship between the history of maternal ANC visits with the level of knowledge about the danger signs of pregnancy. During the ANC visit, there is counseling, so it can be used to provide information about danger signs of pregnancy at each visit ANC. More and more pregnant women get information then will increase their knowledge, pregnant women, about the danger signs of pregnancy (13)

Based on the research of Ni Ketut Citrawati (2021), from 30 respondents 25 (83.3%) respondents had good knowledge of conducting regular antenatal care visits, while 5 (16.7%) respondents had less knowledge about conducting irregular antenatal care visits. The results of the statistical test can be seen that the p-value is 0.00, which means that the p-value < 0.05 , then there is a statistically significant relationship between the level of knowledge of pregnant women about antenatal care and antenatal care visits at Puskesmas Tampak siring II (14).

According to the research results of Erlina Puspitaloka Mahadew (2016), entitled the relationship of knowledge about the danger signs of pregnancy and family support with the obedience of ANC visit of third-trimester pregnant mother in Ciruas Health Center. The results of this study indicate that there are relationships significantly of pregnant mothers between knowledge about the danger signs of pregnancy and the obedience to ANC visits ($\rho = 0,028$) and there are relationships significantly between family support and the obedience to ANC visits ($\rho = 0,010$). This study concludes that there is a relationship significantly between knowledge about the danger sign of pregnancy and family support with obedience to ANC visits of third-trimester pregnant mothers in Ciruas Health Center (15).

This research is following the research of Ninik Azizah (2015). Entitled *Knowledge of Pregnant Women About Danger Signs of Pregnancy with Active Antenatal Care Visits*. Data obtained from primary data and secondary data were analyzed using the Mann-Whitney test. The results of the study based on the analysis with the Mann-Whitney test obtained a significant

value of 0.011 & lt; 0.05 so it can be concluded that there is a relationship between the level of knowledge of pregnant women about the danger signs of pregnancy with the activity of ANC visits at BPM Yuni Widaryanti Sumber Mulyo, Jombang Regency (16).

Knowledge is the result of knowledge from humans who just answer the questions "What". Knowledge is the result of knowing, and this occurs after people have sensed a certain object. Sensing, smelling, tasting, and touching. Knowledge of cognition is a very important domain in shaping one's actions (Overt Behaviour). According to Bloom and Skinner, knowledge is a person's ability to re-express what he knows in the form of evidence, an answer either verbally or in writing, the evidence or writing is a reaction to a stimulation in the form of a question, either spoken or written (17).

Antenatal care visits can affect the incidence of low birth weight according to research conducted by Sri Ratna Ningsih (2020), entitled The Carrelationof Antenatal Care Visits With Low Birth Weight (LBW) in Wonosari Hospital Yogyakarta. The result of the research showed that ANC visit influenced the occurrence of babies with Low Birth Weight (LBW) doing ANC visits could early detect the incidence of LBW (18)

From the analysis of the research above, it can be seen that pregnant women who visited Antenatal Care which was determined according to the standard were 60 people (92.3%). According to the opinion of Notoatmodjo, knowledge is the application of pregnant women in applying the knowledge they have gained about the danger signs in pregnancy.

Antenatal Care is care or care given to pregnant women before birth. Knowledge of pregnant women about ANC is important for the implementation of ANC. Knowledge of pregnant women about ANC will motivate pregnant women to make regular ANC visits. the lack of knowledge of pregnant women about the danger signs in pregnancy makes pregnant women not care to check their pregnancy because they think their pregnancy is in good condition without abnormalities.

CONCLUSION

Based on the results of the research and a description of the discussion regarding the relationship between knowledge of pregnant women about the danger signs of pregnancy with antenatal care visits, the following conclusions can be drawn: Knowledge of pregnant women about the danger signs of pregnancy The majority of them have good knowledge as many as 57 people (87.7%). The majority of pregnant women who perform standardized Antenatal Care are 60 people (92.3%). There is a relationship between knowledge of pregnant women about danger signs of pregnancy with antenatal care visits.

RECOMMENDATION

With this research, it is hoped that midwives can provide a thorough explanation of the danger signs in pregnancy, so that it can increase the knowledge of pregnant women to be aware of health problems that occur during pregnancy. this will make pregnant women comply with antenatal care visits that have been set by the government. so that it can reduce morbidity and mortality in pregnant women. Other researchers can carry out qualitative methods or other research methods that can provide research results from different points of view.

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