



## **THE RELATIONSHIP OF KNOWLEDGE ABOUT THE DANGER SIGNS OF PREGNANCY WITH CARE BEHAVIOR PREGNANCY IN TRIMESTER III PREGNANT WOMEN**

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### **ABSTRACT**

High maternal and infant mortality rates are still a major problem in developing countries. According to the SDKI, MMR in Indonesia is 228/100,000 live births. From the MDGs (Millennium Development Goals) target of 102/100,000 live births (KH), in 2007 the MMR has decreased from 228/100,000 to 118/100,000 KH. The IMR target for the MDGs was 23/100 KH, in the same year it was recorded to have decreased from 34/1000 to 24/1000 KH. Purpose This study aims to analyze the relationship between knowledge about danger signs of pregnancy and pregnancy care behavior in third trimester pregnant women. This type of research is analytic with a cross sectional research design. The sampling method in this study was by using a purposive sampling technique with a total sample of 83 people. Data collection was obtained through questionnaires in the form of closed questionnaires. Based on the level of knowledge of mothers who have good knowledge about danger signs of pregnancy as many as 11 people (13.3%) who carry out pregnancy care behavior, the level of knowledge of mothers who have sufficient knowledge about danger signs of pregnancy are 58 people (69.9%) who do behavior pregnancy care, and the level of knowledge of mothers who had less knowledge about the danger signs of pregnancy as many as 14 people (16.9%) who carried out pregnancy care behavior. Based on the behavior of mothers who had positive behavior in carrying out pregnancy care, there were 31 people (37.3%), and those who had negative behavior in carrying out pregnancy care were 52 people (62.7%). And the statistical test value is obtained =  $0.678 > 0,05$  which means there is no significant relationship between the two variables. There is no relationship between knowledge of pregnancy danger signs and pregnancy care behavior in third trimester pregnant women at, Bogor City Hospital. From the results of this study it is hoped that it can be used as a scientific reference that is useful for third trimester pregnant women to recognize or know the behavior of pregnancy care, in order to prevent the occurrence of danger signs of pregnancy.

**Keywords: Knowledge, danger signs of pregnancy, behavior**

### **INTRODUCTION**

High maternal and infant mortality rates are still a major problem in developing countries. Based on data from the World Health Organization (WHO), the maternal mortality rate has decreased compared to 1990, namely 450/100,000 live births to 300/100,000 live births. the infant mortality rate has increased from 51/1000 live births to 35/1000 live births, although it turns out that in developing countries the mortality rate for mothers and babies is still quite serious, one of which is in Indonesia. 2007 stated that the MMR (Maternal Mortality Rate) and IMR (Infant Mortality Rate) in Indonesia were still the highest in Southeast Asia.(1)

According to the SDKI, MMR in Indonesia is 228/100,000 live births. From the MDGs



(Millennium Development Goals) target of 102/100,000 live births (KH), in 2007 the MMR has decreased from 228/100,000 to 118/100,000 KH. The IMR target in the MDGs was 23/100 KH, in the same year it was recorded to have decreased from 34/1000 to 24/1000 KH.(1)

The maternal mortality rate in West Java Province in 2009 was a temporary figure for MMR of 708 cases out of 553,000 per live birth. While the temporary infant mortality rate in 2009 was 4083 cases. (1)

The maternal mortality rate at Bogor City Hospital in 2018 is a temporary rate of 2 cases of AKI per 1000 live births. While the temporary infant mortality rate in 2018 there were only no cases.

Danger signs in pregnancy are symptoms that indicate that the mother and baby are in danger. Various danger signs of pregnancy are vaginal bleeding, severe headaches, vision problems, swelling of the face or hands, severe abdominal pain, and the baby not moving as usual.(2)

Maternal and child health determines the achievement of a good quality of life in the family and society. The health of pregnant women is an important aspect because during pregnancy unwanted complications can occur. Pregnancy and childbirth pose great health risks, including for women who are not pregnant. had health problems before becoming pregnant. In general, pregnancy develops normally, but sometimes it doesn't turn out as expected, it's difficult to know beforehand, it will be a problem.(2)

The attention of pregnant women usually leads to the safety of themselves and their children. Fear of pain, mutilation, and concerns about her behavior and the possibility that she might lose control during labor are important issues.(3)

The bond between parents and fetus develops in the third trimester. Parents' worries focus on the child's possible defects in mental and physical abilities mixed with fantasies about the baby to be born. Physical discomfort and fetal movements often interfere with the mother's rest. Dyspnea, increased urination, back pain, constipation, and varicose veins are experienced by most women in the late stages of pregnancy. The increase in abdominal size and clumsiness affects the ability to carry out daily activities. Pregnant women are becoming more and more impatient waiting for the moments to pass..(3)

Knowledge of pregnant women about the signs and dangers of pregnancy plays a very important role in reducing the maternal mortality rate (MMR), because with knowledge of the signs and dangers of pregnancy, a pregnant woman will more quickly seek health services so that the risks that occur in pregnancy can be detected early. (2)

To maintain their own health the need for care during pregnancy is very important. Comprehensive pregnancy care has the potential to help women reduce risks, encourage healthy lifestyles, and increase readiness for pregnancy. (3) Because the third trimester of pregnancy is a pregnancy where the gestational age is from 7-9 months. This pregnancy is a time of preparing for birth and position as a parent, such as focusing attention on the arrival of the baby, so it is also known as the waiting period.

Based on the results of a preliminary study conducted by researchers at Bogor City Hospital on 10 pregnant women, the researchers conducted interviews about danger signs of pregnancy and found that 7 out of 10 pregnant women did not understand the danger signs of pregnancy. And 7 out of 10 mothers did not Pregnancy care for pregnancies that are already in the last trimester



From the background above, the researchers were interested in conducting research "Relationship of Knowledge about Danger Signs of Pregnancy with Pregnancy Care Behavior in Trimester III Pregnant Women at Bogor City Hospital, Bogor City".

## **RESEARCH METHODS**

The research design is descriptive correlational. With a cross-sectional approach. In this study, the population was 104 third trimester pregnant women at Bogor City Hospital. From the size of the existing population, namely 104 pregnant women in their third trimester, researchers used the Slovin formula to obtain a sample size. And the sample size obtained in this study was 83 respondents. The sampling technique used is purposive sampling. The tool used in this research is a questionnaire. Data analysis used univariate and bivariate tests (Chi Square).

## **RESEARCH RESULT**

### Univariate Analysis Results

Table 1 Knowledge Frequency Distribution of Pregnancy Danger Signs

Knowledge of Danger Signs of Pregnancy	Frequency	Percentage (%)
Good	11	13,2
Enough	58	69,9
Not enough	14	16,9
Total	83	100

Based on table 1, it can be seen that of the 83 respondents in the third trimester of pregnancy, the majority had adequate knowledge of the danger signs of pregnancy, as many as 58 people (69.9%).

Table 2. Behavior of Pregnancy Care in Trimester III Pregnant Women at Bogor City Hospital, Bogor City

Pregnancy Care Behavior	Frequency	Percentage (%)
Positive	31	37,3
Negative	52	62,7
Total	83	100

Based on table 2, it can be seen that of the 83 respondents in the third trimester of pregnancy, the majority had negative pregnancy care behaviors, 52 (62.7%).

Table 3. Relationship between Knowledge of Danger Signs of Pregnancy and Pregnancy Care Behavior in Third Trimester Pregnant Women

Pengetahuan Tanda Bahaya Kehamilan	Perilaku Perawatan Kehamilan				Total	P Value
	Positif		Negatif			
	f	%	f	%	f	%
Baik	5	15,3	6	4,1	11	19,4
Cukup	22	23,1	36	33,3	58	56,4
Kurang	4	7,6	10	16,6	14	24,2
Total	31	46	52	54	83	100
						0,678

Based on table 3, the results of the analysis of the relationship between knowledge of pregnancy danger signs and pregnancy care behavior in third trimester pregnant women with a total of 83 respondents, bivariate analysis with the Chi Square test, it was known from 11 respondents that knowledge of pregnancy danger signs was good with positive pregnancy care behavior in 5 pregnant women third trimester (15.3%) and negative pregnancy care behavior of 6 third trimester pregnant women (4.1%). Furthermore, from 58 respondents, knowledge of danger signs of pregnancy was sufficient with positive pregnancy care behavior, 22 third trimester pregnant women (23.1%) and negative pregnancy care behavior, 36 third trimester pregnant women (33.3%). Meanwhile, from 14 respondents, knowledge of danger signs of pregnancy was lacking with positive pregnancy care behavior, 4 third trimester pregnant women (7,

A significant relationship was obtained with a P value of  $0.678 > 0.05$ , meaning that  $H_a$  was rejected or  $H_o$  was accepted, from this value, the results of the study were that there was no relationship between Knowledge of Danger Signs of Pregnancy and Pregnancy Care Behavior in Third Trimester Pregnant Women at RSUD Bogor City, Bogor City.

## DISCUSSIONS

### a. Knowledge of Danger Signs of Pregnancy

Based on table 1, it can be seen that of the 83 respondents in the third trimester of pregnancy, 11 people (13.3%) had good knowledge of danger signs in pregnancy, 58 people (69.9%) had sufficient knowledge of danger signs in pregnancy, and those who had Knowledge of danger signs of pregnancy is lacking as many as 14 people (16.9%).

Knowledge of the danger signs of pregnancy in this study was measured using a questionnaire with a score of 76% -100% which means that the respondent's knowledge was good, 56% -75% had sufficient knowledge, and <55% had insufficient knowledge.

According to the researcher's analysis, knowledge of the danger signs of pregnancy at Bogor City Hospital in third trimester pregnant women there were 11 third trimester pregnant women or 13.3% of third trimester pregnant women had knowledge of the danger signs of good pregnancy,

then 58 third trimester pregnant women or 69.9 % of third trimester pregnant women had sufficient knowledge about danger signs of pregnancy and 14 third trimester pregnant women or 16.9% of third trimester pregnant women had insufficient knowledge about danger signs of pregnancy.

Most of them had enough knowledge about the danger signs of pregnancy as many as 58 people (69.9%). Based on table 4.1 regarding the frequency distribution of respondents based on education at Bogor City Hospital in third trimester pregnant women, most of the 33 (39.8%) respondents had high school education from 83 respondents. According to the researcher's analysis, this means that the level of education has an effect on knowledge of the danger signs of pregnancy in third trimester pregnant women. Because education is needed to obtain information, for example things that support health so that it can improve the quality of life. In general, the higher a person's education, the easier it is to receive information.

The results of this study are in line with research conducted by Maria Ayu Triningtyas (2016) which shows that based on the level of knowledge, the most common is the sufficient category with 50% of 15 respondents who are able to know about the danger signs of pregnancy. And judging from the 30 respondents based on the level of education, the most education is in the low category with 70% of 21 respondents. (4)

Danger signs in pregnancy are signs that indicate a danger that occurs during pregnancy/antenatal period, which if not reported or not detected can lead to maternal death.(8)

Knowledge of danger signs of pregnancy is assessed through several components including the concept of danger signs of pregnancy, vaginal bleeding, edema, severe headaches, blurred vision, vaginal discharge, fetal movements not felt, and severe abdominal pain. Pregnant women need to know the danger signs of pregnancy because the appearance of danger signs can be an indication of possible dangers in pregnancy which can have a negative impact on the health of pregnant women and the fetus.(8)

The results showed that almost all of the respondents had sufficient knowledge about the concept of danger signs in pregnancy. If related to the age characteristics in table 4.3, out of the 83 respondents, the majority were aged less than 30 years, as many as 59 people (71.1%). At the age of less than 30 years, mothers still want to find out about the danger signs of pregnancy and are still in the stage of finding out so that the knowledge gained is still not as mature as the experience of more than 30 years of age.

#### b. Pregnancy Care Behavior in Third Trimester Pregnant Women

Based on table 2, it can be seen that of the 83 respondents in the third trimester of pregnancy, 31 people (37.3%) had positive pregnancy care behaviors and 52 had negative pregnancy care behaviors (62.7%).

Pregnancy care behavior in this study was measured using a questionnaire with a score > mean T indicating positive behavior and a score < mean T indicating negative behavior.

According to the researcher's analysis, the behavior of pregnancy care at RSUD Bogor City in third trimester pregnant women was 31 third trimester pregnant women or 37.3% of third trimester pregnant women had positive pregnancy care behavior and 52 third trimester pregnant women or 62.7% of third trimester pregnant women III has negative pregnancy care behavior.

Most of them had negative pregnancy care behavior as many as 52 people (62.7%). Based on the results of the characteristics of respondents based on their education, most of them had high school education as many as 33 people. And it can be concluded that education can affect a person, including one's behavior towards lifestyle, especially in motivating attitudes to participate in development

The results of this study are in line with the research of Nadia Gusman (2010) where the results showed that out of a total of 30 respondents, 16 respondents (53.3%) had low knowledge about danger signs during pregnancy and 12 of them had irregular ANC. And 14 respondents (46.7%) who had high knowledge, 1 of them did not regularly carry out ANC.(6)

Self-care is defined as a way of human self-care to maintain their own health. Self-care during pregnancy helps women reduce risks, encourage healthy lifestyles, and increase readiness for pregnancy. There are several opinions about the types of self-care in pregnant women. According to Prawirohardjo (2008), nutrition in pregnant women and breast care need attention in pregnant women. According to Potter (2005), self-care includes body hygiene (bathing, hair care, dental care, and clothing).

According to the researchers, the results showed that most of the 83 pregnant women in the third trimester, 52 (62.7%) had negative pregnancy care behaviors. If related to the characteristics of respondents based on education in table 4.1, most of the third trimester pregnant women in Bogor City Hospital have high school education as many as 33 people (39.8%). Because a person's level of education influences his lifestyle behavior, especially in third trimester pregnant women who need motivation to carry out pregnancy care and detect early danger signs of pregnancy.

c. Relationship between Knowledge of Danger Signs of Pregnancy and Pregnancy Care Behavior in Third Trimester Pregnant Women

The results showed that there was no significant relationship between knowledge about the danger signs of pregnancy and pregnancy care behavior, with a P value of  $0.678 > 0.05$ . This means that  $H_a$  is rejected and  $H_o$  is accepted.

The results of this study are not in line with the research conducted by Nadia Gusman (2010) entitled The Relationship between the Level of Knowledge of Third Trimester Pregnant Women about Danger Signs During Pregnancy and the Regularity of ANCd at Pagaruyung Health Center in 2010. The results showed the results of a chi-square analysis ( $p < 0, 05$ ). Then  $H_o$  is rejected,  $H_a$  is accepted, which means that there is a significant relationship between the level of knowledge of third trimester pregnant women about danger signs during pregnancy and the regularity of ANC at Pagaruyung Health Center in 2010. (6)

According to the analysis of the researchers in this study, knowledge of pregnancy danger signs is not always related to pregnancy care behavior because there are other factors that can influence the emergence of pregnancy care behavior in third trimester pregnant women, namely age, education, occupation, parity/gravidity, social support, and culture value. This can be strengthened from the results of data collection through a questionnaire based on the characteristics of respondents based on education in table 4.1, namely 33 people (39.8%) have high school education. And on the characteristics of respondents based on work in table 4.2, namely 73 people

(88.0%) housewives.

The education and occupation of pregnant women have an influence on the practice of maternity care, especially the use of maternal health services. Pregnant women with a higher level of education are more able to utilize antenatal care services than pregnant women with a low level of education. Meanwhile, work makes a woman more aware of reproductive status and pregnancy health so that it will form good behavior during pregnancy through their interactions outside the home and society. Meanwhile, based on the characteristics of the respondents at their age, there were more than 30 years of age, namely 59 third trimester pregnant women with a percentage of 71.1% and more than 30 years of age, there were 24 third trimester pregnant women with a percentage of 28.9%.

If pregnancy care behavior is related to the characteristics of respondents based on age, it will have an effect. Because those under 30 years of age do not have much experience or much knowledge about pregnancy, so those under 30 years of age use more health services than third trimester pregnant women who are over 30 years old. Because pregnant women who are more than 30 years old feel they have a lot of experience so they use health services less.

The results of the analysis in this study are supported by the theory put forward by Kristina (2009) who stated in her research that there is a tendency for pregnant women who are teenagers (15-19 years old) and those aged over 40 years to use health services less. Pregnant women who are still teenagers still have little knowledge about how to care for pregnancy. Meanwhile, pregnant women who are over 40 years old feel they have a lot of experience, so they use health services less.

The researcher concluded that knowledge about the danger signs of pregnancy is a very important domain for the formation of one's actions towards pregnancy care behavior. From experience and research it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. The results of bivariate analysis were obtained, namely that of 83 respondents in the third trimester of pregnant women at Bogor City Hospital, most of them had adequate knowledge of the danger signs of pregnancy with negative pregnancy care behaviors, as many as 36 people (33.3%).

Where to adopt certain behaviors, a person needs to go through several stages. A person who already knows and is aware of the existence of a stimulus for danger signs of pregnancy will not necessarily behave correctly until he goes through several stages and finally adopts a good behavior, in this case the behavior of caring for pregnancy.

## **CONCLUSIONS**

1. The results of the study on the independent variables showed that out of 83 respondents in the third trimester of pregnancy, 58 (69.9%) had adequate knowledge of danger signs of pregnancy.
2. From the results of the study on the dependent variable, it can be seen that of the 83 respondents in the third trimester of pregnancy, 52 (62.7%) had negative pregnancy care behaviors.
3. There is no relationship between knowledge about danger signs of pregnancy and pregnancy care behavior in third trimester pregnant women with a P value of  $0.678 > 0.05$ .



## SUGGESTIONS

### 1. For Educational Institutions

This research is expected to be able to multiply and complete references and books about danger signs of pregnancy in third trimester pregnant women, and pregnancy care behavior in order to make it easier for students to obtain information and theories related to danger signs of pregnancy and pregnancy care in third trimester pregnant women.

### 2. For research sites

From the results of this study it is hoped that it can be used as a scientific reference that is useful for third trimester pregnant women to recognize or know the behavior of pregnancy care, in order to prevent the occurrence of danger signs of pregnancy. And so that the puskesmas can motivate mothers to take better care of their pregnancies.

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