

RESEARCH ARTICLE

The relationship between the level of knowledge and attitudes with the behavior of pregnant women in recognizing the danger signs of pregnancy in the city of Padang in 2021

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Abstract

Introduction: Lack of knowledge of mothers in recognizing danger signs during pregnancy is one of the factors for the high maternal mortality rate. This study aims to determine the relationship between the level of knowledge and attitudes with the behavior of pregnant women in recognizing the danger signs of pregnancy in the city of Padang. **Methods:** This research using a cross sectional approach to 56 pregnant women at 3 Public Health Centers in Padang City from January 2022 to April 2022. To determine that relation, the chi-square test was used with 95% CI (α 0.05). **Results:** The results shows that most of the respondents who use the KIA book have a good knowledge (83%), have a positive attitude (89.3%) and behave appropriately (89.3%) and there is also a relationship between the level of knowledge and behavior. KIA book users in recognizing the danger signs of pregnancy ($P = 0.04$) and the relationship between attitudes and behavior of pregnant women using KIA books in recognizing pregnancy danger signs ($p = 0.001$). The relationship between knowledge and attitudes with the behavior of KIA book users in recognizing the danger signs of pregnancy (p -value 0.001 versus 0.846). **Conclusion:** There is a relation between the level of knowledge and the behavior of KIA book users in recognizing the danger signs of pregnancy, between attitudes and the behavior of pregnant women using KIA books in recognizing the danger signs of pregnancy and attitudes have a more dominant influence than knowledge.

Keywords: pregnancy; knowledge; attitude

INTRODUCTION

Danger signs in pregnancy are unexpected symptoms and have the potential to cause complications in pregnancy and childbirth. There are 6 danger signs of pregnancy from the MCH Handbook that must be known, consisting of bleeding, swelling of the feet, hands and face followed by seizures, high fever, persistent vomiting and refusal to eat, and premature discharge of amniotic fluid.^{1,2}

Lack of knowledge of mothers in recognizing danger signs during pregnancy is one of the factors in the high maternal mortality rate.² Indicators of the degree of health and community welfare are indicated by the number of maternal deaths, the number of infant deaths, and life expectancy. Until now, maternal mortality is still one of the priority problems in the field of maternal and child health in Indonesia. Various programs have been implemented in Indonesia



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with the active involvement of various sectors of government, non-governmental organizations and the community as well as with the support of various international agencies.^{1,2}

The Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) in the world are still relatively high, namely 94% occurring in developing countries with a mortality rate of 415 per 100,000 live births (WHO 2019). In 2015, WHO estimates that worldwide every year more than 585,000 pregnant women die during pregnancy or childbirth.^{1,3,4}

ASEAN countries in 2015, Indonesia was ranked second with a maternal mortality rate of 305 per 100,000 live births, after Laos, which was 357 maternal deaths per 100,000 live births. This figure is still high compared to neighboring Malaysia with only 24 maternal deaths per 100,000 live births and Singapore with 7 maternal deaths per 100,000 live births. The MMR target in Indonesia according to the 2015 MDGs is 102 per 100,000 per live birth, this has not yet reached the target, while the SDGs 2030 targets an MMR of 70 per 100,000 live births.^{5,6}

Based on the 2015 Inter-Census Population Survey (SUPAS), maternal mortality commonly known as the Maternal Mortality Rate (MMR) is 305/100,000 live births/KH.¹ This condition is still far from the target of achieving the 2030 Sustainable Development Goals (SDGs), which is reaching the IMR to 12/100 1000 KH and reach AKI to 70/100,000 KH.²

Based on data from the Central Statistics Agency of West Sumatra Province in the period 2018-2021, maternal / maternal mortality continues to increase. In 2018 there were 113 cases, in 2019 there was an increase to 116 cases, in 2020 there was also an increase of 125 cases, and in 2021 maternal deaths experienced a spike to 196/100,000 KH. ^{3,4}

The maternal mortality rate (MMR) in the city of Padang fluctuated in the period 2016 – 2021. In 2016 there were 20 cases, in 2017 it decreased by 16 cases, in 2018 it became 17 cases, in 2019 it decreased again to 16 cases, in 2020 experienced a spike to 21 cases and in 2021 a significant increase to 30/100,000 KH. ⁴⁻⁶

According to data from the Health Profile of the City of Padang in 2019, it was recorded that out of 16 cases of maternal death, there were 5 cases of maternal death, 10 cases of postpartum maternal death, and 1 case of maternal mortality. The highest cases: Andalas Health Center 3 cases, Pauh Health Center 2 cases, Dadok Tunggul Hitam Health Center 2 cases, while Lubuk Kilangan Health Center, Sebrang Padang Health Center, Alai Health Center, Lubuk Crocodile Health Center and Anak Air Health Center each had 1 case.^{7,8}

This figure is quite high considering that health promotion and services in the city of Padang are quite good. The report on the achievements of the Padang City Health Center in 2018 shows that the achievement rate of the health care program for pregnant women reaches 92.48% and maternal health services reaches 93.23%.⁶

Procurement of MCH Handbooks is one of the government's efforts to reduce maternal mortality and morbidity from pregnancy to childbirth.⁹ Based on data from the West Sumatra Provincial Health Office in 2018, the distribution of MCH Handbooks in West Sumatra has reached a distribution level in the city of Padang reaching 86.81%. ¹¹

Masrul (2019) regarding the ownership profile and level of knowledge of mothers about the



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MCH Handbook in Padang Pariaman Regency shows that 72.5% of mothers do not know information about the danger signs of pregnancy in the MCH Handbook, while the level of MCH Handbook ownership in the area is quite high, namely 83,3%. Lack of interest in reading books is not influenced by educational background. This study shows that 62.7% of mothers have a high educational background.¹²

Research by Ferry, f (2011) in Pariaman regarding the evaluation of data completeness, knowledge and maternity mothers based on the MCH Handbook with the results, The use of MCH books has a relationship with maternal knowledge about the danger signs of pregnancy and the mother's attitude to seek medical help. Mothers who use MCH books have the opportunity to increase their knowledge by 4.8 times compared to mothers who do not use MCH books.¹³

Research by Pratiwi, H (2020) Relationship between knowledge and attitudes of pregnant women with Antenatal Care visit behavior in Padang City, with the results that there is a relationship between knowledge level of pregnant women and Antenatal Care (ANC) visit behavior in Padang City. Knowledge and Attitude have a relationship with Antenatal Care Behavior (ANC) but not meaningful.¹⁴

Research by Fadillah, R, Syahredi, (2021) Relationship of knowledge, attitudes and behavior of pregnant women with the risk of pregnancy in the city of Padang 2021 with the results: there is a relationship between knowledge of pregnant women and risk of pregnancy, mothers who have good knowledge are more likely to have a low risk of pregnancy. There is a relationship between the attitude of pregnant women with the risk of pregnancy, mothers who have a good attitude are more likely to have a low risk of pregnancy. There is no relationship between the behavior of pregnant women and the risk of pregnancy. Attitude factors have the most significant influence on the level of risk of pregnancy and behavioral factors have no significant effect on the risk of pregnancy.¹⁵

According to behavioral theory, a person's behavior can be influenced by several factors including knowledge and attitudes. The results of research conducted by Dewi F et al (2017) show that almost half of pregnant women still have a negative attitude towards danger signs in pregnancy, namely 41.7%. Different results were found in Sumarni's (2014) study, in which it was found that there was no relationship between the attitudes of pregnant women about the danger signs of pregnancy, childbirth, and postpartum.¹⁷

Based on the data above, it appears that the MMR in Indonesia and West Sumatra has not yet reached the target even though the distribution of MCH books is quite high for the city of Padang. The results of various studies encourage researchers to further examine the relationship between the level of knowledge and attitudes with the behavior of pregnant women who use MCH books in recognizing the danger signs of pregnancy. This research is almost the same as previous research, the difference is that this research was conducted in the city of Padang, which has different social lives. Researchers conducted research in 3 health centers in the city of Padang with a fairly high mortality rate. This study uses a questionnaire that has been tested valid and reliable and can be used for this study.



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METHOD

This research is analytic with a cross sectional approach to 56 pregnant women conducted at the Maternal and Child Health Polyclinic at 3 Puskesmas in Padang City from January 2022 to April 2022. To determine the relationship between the independent variable and the dependent variable, the chi-square test was used with 95% CI (α 0.05).

RESULTS

The mean age of pregnant women was 27.25 ± 5.21 years. More than half of respondents with high school education are 34 (60.7%) respondents. Most of the respondents are housewives, namely 48 (85.7%) respondents. In general, the second and first pregnant respondents were 24 (42.9%) and 22 (39.3%) respondents. More than half of the respondents were multipara, namely 32 (57.1%) respondents. All research respondents know the danger signs, have MCH books, know the benefits of MCH books, and do not experience depression (100%). Most of the respondents, namely 47 (83.9%) respondents with a good level of knowledge, most of the respondents, namely 50 (89.3%) respondents had a positive attitude, most of the respondents behaved according to the use of MCH books in recognizing the danger signs of pregnancy, namely 50 (89.3%) of respondents.

The percentage of inappropriate behavior from respondents was higher at the level of knowledge that was not good than good, namely 33.3% compared to 6.4%. Statistically, it shows that there is a relationship between the level of knowledge and the behavior of MCH book users ($p < 0.05$). the percentage of respondents with behavior that is not in accordance with negative attitudes is higher than positive, namely 66.7% compared to 4%. The results of statistical tests showed that there was a relationship between attitudes and behavior of MCH book users ($p < 0.05$).

Attitude variable has a more dominant influence than knowledge (p -value 0.001 versus 0.846), statistically the attitude variable with the behavior of pregnant women using MCH books is significant.

DISCUSSION

Based on the results of the study, it is known that the average age of the respondents is 27 years. Most of the respondents have high school education and are housewives. More than half of the respondents are multipara, and all respondents know the danger signs in pregnancy, have a MCH handbook, and know the benefits of the MCH book. None of the respondents experienced depression. The results of this study are in line with research conducted by Alfiana et al (2021) that more than half of the respondents are housewives who are in the age range of 20-35 years, most of them have high school education, and are multipara.³¹ Based on the results of a survey by the Ministry of Health, it is known that mothers who have MCH books are more likely to give birth in health facilities than mothers who do not use MCH books. According to Mintarsih (2018), the use of the MCH handbook has a role in increasing public awareness, one



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of which is to be aware of the danger signs of pregnancy. Knowledge of danger signs in pregnancy can overcome delays in recognizing and overcoming complications that occur during pregnancy, childbirth, and postpartum.³³

Based on the results of the study, most of the respondents had good knowledge regarding the danger signs of pregnancy. Statistically, it shows that there is a relationship between the level of knowledge and the behavior of KIA book users. The results of this study are in line with the research conducted by Alfiana et al (2021) in their research that more than half of the respondents have good knowledge about the danger signs of pregnancy. A person's knowledge is influenced by the level of education. The higher the education of the mother, the greater the ability to seek and find out more information.

The mother's level of knowledge can affect the mother's ability to absorb information and understand the danger signs of pregnancy.³¹

The results of the study regarding the attitudes of pregnant women about the danger signs of pregnancy, that most of the respondents who used the MCH book had a positive attitude regarding the danger signs of pregnancy. Based on the theory and the results of previous research, the researcher concluded that most respondents who had a positive attitude related to the danger signs of pregnancy had an effect on their acceptance of the danger signs of pregnancy.

Based on the results of the study, it was found that most of the respondents behaved according to the use of the MCH handbook in recognizing the danger signs of pregnancy. This is in line with Sulistyaningsih's research (2019), where it is known that most of the research respondents used the MCH book well.³⁷ Based on the theory and the results of previous studies, the researcher concluded that most of the respondents who had appropriate behavior related to the danger signs of pregnancy had an effect on their acceptance of the signs of pregnancy. dangers of pregnancy.

The results of this study indicate that there is a relationship between the level of knowledge and the behavior of KIA book users. Inappropriate behavior from respondents was higher at the level of poor knowledge while the appropriate behavior was mostly in respondents with good knowledge level. Green's theory, which is explained by Notoatmodjo (2012), also explains that education and knowledge are one of the behavioral changing factors, namely predisposing factors. Good knowledge or mindset will determine good actions.²⁶ Based on the results of the author's research, supporting theories and the results of previous studies, the authors can conclude that the better the knowledge of pregnant women about the danger signs of pregnancy, the pregnant women are alert and will carry out pregnancy checks/ ANC regularly.

Based on the results of this study, it is known that there is a relationship between attitudes and behavior of KIA book users. In simple terms, this theory explains that a person will perform an action if he views the action positively and if he believes that other people want him to do it. Likewise, the positive attitude of pregnant women towards the danger signs of pregnancy will tend to carry out regular pregnancy checks.

Based on the results of the study, it is known that between knowledge and attitudes that influence the behavior of pregnant women using MCH Handbooks about the danger signs of



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pregnancy, attitudes have a more dominant influence than knowledge, statistically the relationship between attitudes and behavior of MCH book users in recognizing pregnancy danger signs is significant.³⁴ Based on the theory and the results of previous studies, the researcher concludes that in an effort to recognize the danger signs of pregnancy, it is not only influenced by the level of knowledge and attitudes, but there are other factors, both predisposing factors, reinforcing factors, and enabling factors.

CONCLUSIONS AND SUGGESTIONS

1. The average age of the research respondents was 27 years, more than half of the respondents were housewives and 2nd pregnant, most were multiparous, all respondents knew the danger signs of pregnancy, had MCH books, knew the benefits of MCH books, and none had depression.
2. Most of the respondents who use the MCH handbook have good knowledge.
Most respondents who use the MCH Handbook have a positive attitude
3. Most of the respondents who use the MCH Handbook behave accordingly
4. There is a relationship between the level of knowledge and the behavior of MCH book users in recognizing the danger signs of pregnancy.
5. There is a relationship between attitudes and the behavior of pregnant women who use MCH books in recognizing the danger signs of pregnancy.
6. Attitude has a more dominant influence than knowledge, statistically the relationship between attitude variables and the behavior of pregnant women using MCH books is significant.

SUGGESTION

1. Health workers at the Puskesmas are expected to improve health promotion and add more reference sources regarding the knowledge of pregnant women about the danger signs of pregnancy.
2. Mothers are expected to increase their interest in reading and make effective use of the current digital information system to better recognize the danger signs of pregnancy.
3. For further researchers, it is hoped that
This research can be useful for other researchers, as a reference for further research.

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