



RELATIONSHIP OF HEALTH BELIEF MODEL WITH SELECTION OF CONTRACEPTIVE EQUIPMENT IN HIGH-RISK WOMEN OF CHILDBEARING AGE

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ABSTRACT

High-risk fertile age women in the Singosari district who used Non-MKJP was 95.8% and long term contraception method (MKJP) was 42%. The driving factor in the selection of contraceptives is confidence in reducing risk factors for disease. This can be seen using Health Belief Model (HBM) theory. The purpose of this study is to analyze the relationship between HBM and the selection of contraceptives in high-risk fertile-age women. This research design used correlation analysis with a cross-sectional approach. The sampling technique used simple random sampling with a sample of 52 respondents who met the inclusion criteria. The results obtained (51.6%) of respondents with positively perceived susceptibility chose (MKJP), (63%) of respondents with perceived positive severity chose MKJP, all respondents chose those with perceived negative benefits and perceived negative barrier chose short term contraception method (Non-MKJP). Based on the analysis of contingency coefficient test obtained perceived susceptibility ($p = 0.038$), perceived severity ($p = 0.027$), perceived benefit ($p = 0.000$), and perceived barrier ($p = 0.000$), value for each HBM indicator $< \alpha (0.05)$ so H_0 rejected, meaning that there is a relationship between HBM and selection contraceptives. High-risk fertile age women's belief in reducing risk factors for health conditions affects the choice of contraceptive. With the results of the research, it is hoped that health workers can optimize information and counseling about family planning and high-risk fertile age women can choose the right contraceptive method (05) so H_0 was rejected, meaning that there is a relationship between HBM and selection contraceptives. High-risk fertile age women's belief in reducing risk factors for health conditions affects the choice of contraceptive. With the results of the research, it is hoped that health workers can optimize information and counseling about family planning and high-risk fertile age women can choose the right contraceptive method) so H_0 was rejected, meaning that there is a relationship between HBM and selection contraceptives. High-risk fertile age women's belief in reducing risk factors for health conditions affects the choice of contraceptive. With the results of the research, it is hoped that health workers can optimize information and counseling about family planning and high-risk fertile age women can choose the right contraceptive method.

Keywords: Health Belief Model; Contraceptive; High-Risk Women, Childbearing Age

INTRODUCTION

Women of childbearing age (WUS) at high risk are women who are married, not pregnant, and have a risk of 4 T or a history of poor obstetrics or non-obstetric diseases that can affect the reproductive process (Badan Family Planning Malang Regency, 2015). Women of childbearing age (WUS) at high risk should get more attention, because if one day they experience pregnancy and the illness has not had time to get specialist treatment, they will be at risk of complications, such as inhibiting fetal growth, bleeding, easy infection, increased chances of miscarriage, IUFD, pregnancy poisoning, premature delivery, low birth weight, and others, so women of childbearing age at high risk must delay pregnancy by using contraception.

The choice of contraception is very important for women of childbearing age at high risk. Contraceptives used must be appropriate, safe, and to the needs of the couple. Mistakes in the selection of contraceptives for women of childbearing age at high risk can harm them. According to Syafrudin (2011), et al (2011), If the contraceptive chosen by couples of childbearing age (EFA) can harm themselves or worsen the disease they are suffering from, health workers will suggest other methods that may be safer through a reproductive screening process.(Treister-Goltzman, Freud and Peleg, 2021).

IDHS data shows that the population of women who use active family planning in Indonesia is 58%, aged 15-49 years(Triyanto, Luki., Indriani, 2018). In Malang Regency, the highest risk of women of childbearing age (WUS) is found in three sub-districts, including Wajak District, Singosari District, and Tumpang District. In these three sub-districts, Singosari District is the area with the highest use of short-term contraceptive methods at 95.8% (Pill 12.9% and Injections 82.9%) and long-term contraceptive methods at 4.2% (Implant 2.2%, IUD 1.3% and MOW 0.7%) in RW 03 Wonorejo Village, Singosari District, is an area with the highest number of high-risk women of childbearing age (WUS), namely 67 people (Department of Population Control & Family Planning, September 2019). The high risk of women of childbearing age who use short-term contraceptive methods allows the risk of pregnancy to occur before the process of handling high-risk women of reproductive age is completed. This will increase the risk of pregnancy complications due to inappropriate selection of contraception(Guo *et al.*, 2021).

Many high-risk women in childbearing age are not aware of the importance of choosing the right contraceptives. Errors in the selection of contraceptives can be caused by the individual not being able to behave healthily or attempt to get healthy or cure a disease. Various driving factors in the choice of contraceptives need to be studied to find out whether the

selection is based on his own belief in reducing the risk factors for his condition (Bakri, Kundre and Bidjuni, 2019). This attitude can be seen using the Health Belief Model (HBM) theory because HBM can predict the possibilities of an individual to take an action depending on the individual's belief in healthy living behavior (Hall, 2012). Firti's research (2015) states that women of childbearing age who have high perceived susceptibility, perceived severity, perceived benefit, and self-efficacy tend to choose the vasectomy contraceptive method. There was relationship between perceived susceptibility and longterm contraceptive used. (Pitaloka, 2019). The purpose of this study was to analyze the relationship between the health belief model and the choice of contraceptive in high risk women in childbearing age.

METHOD

Correlational analytic research design with the cross-sectional approach. The population in this study were all women of high risk of reproductive age who became family planning acceptors in January 2020 at RW 03 Wonorejo Village, Singosari District, Malang Regency with a total of 60 people. The sampling technique used is simple random sampling by lottery. The number of samples was taken using the Slovin formula, so that the results obtained were 52 respondents ((Notoatmodjo, 2015). The research instruments were Questionnaire compiled by researchers consisting of indicators perceived susceptibility a total of 8 question, s perceived severity 10 questions, perceived benefits 10 questions, and perceived barriers 8 questions and family planning cards used to determine the type of contraception. The questionnaire was compiled by the researcher and has been tested for validity and reliability. Contingency coefficient analysis technique data analysis.... The research carried out has met ethical principles and has been approved for implementation by the Health Polytechnic Ethics Commission of the Ministry of Health Malang in April 2021 based on the Certificate of Passing the Ethics Test Registration Number 753/KEPK-Polkesma/2020

RESULTS

Table 1. Relationship between Perceived Susceptibility and Selection of Contraceptive Devices in RW 03 Wonorejo Village, Singosari District, Malang Regency in 2020

Vulnerability Perception	Types of Contraceptives				Total		<i>P-value</i>	C
	MKJP		Non-MKJP		f	%		
	F	%	F	%				
Positive	16	51.6	15	48.4	31	100	0.038	0.489
Negative	3	14.3	18	85.7	21	100		

Table 1 shows that respondents with a positively perceived susceptibility to the choice of contraceptives mostly chose the longterm contraceptive method (Implant, IUD, MOW) as many as 16 (51.6%) respondents. Meanwhile, respondents with a negatively perceived susceptibility to the choice of contraceptives mostly chose short term contraception method contraceptive methods (injections, pills) as many as 18 (85.7%) respondents.

The results of the statistical test (contingency coefficient) obtained = 0.038, meaning (0.05), so it can be concluded that H0 is rejected. This proves that there is a relationship between perceived susceptibility and the choice of contraception. With a C value of 0.489, the perceived susceptibility to the selection of contraceptives has a fairly close relationship.

Table 2. Relationship between Perceived Severity and Selection of Contraceptive Devices in Wonorejo Village, Singosari District, Malang Regency in 2020

Perception Severity	Types of Contraceptives				Total		<i>P-value</i>	OR
	MKJP		MKJP		f	%		
	F()	%	F	%				
Positive	17	63	10	37	27	100	0.027	0.576
Negative	2	8	23	92	25	100		

Table 2 shows that respondents with a positively perceived severity of the choice of contraception mostly chose the longterm contraceptive method (Implant, IUD, MOW) as many as 17 (63%) respondents, while respondents with a negatively perceived severity of the choice of device Most of the respondents chose short term contraceptive method methods (injections, pills) as many as 23 (92%) respondents.

The results of the statistical test (contingency coefficient) obtained = 0.027, meaning (0.05), so it can be concluded that H0 is rejected. This proves that there is a relationship between perceived severity and the choice of contraception. With p value of 0.576, the perceived severity with the choice of contraception has a strong relationship.

Table 3. Correlation between Perceived Benefits and Selection of Contraceptive Devices in RW 03 Wonorejo Village, Singosari District, Malang Regency in 2020

Perception Benefit	Types of Contraceptives				Total		<i>P-value</i>	OR
	MKJP		MKJP		F	%		
	F	%	F	%				
Positive	19	86.4	3	13.6	22	100	0.000	0.700
Negative	0	0	30	100	30	100		

Table 3 shows that among respondents with positive perceived benefits on the choice of contraceptives, the majority chose the MKJP contraceptive method (Implant, IUD, MOW) as many as 19 (86.4%) respondents. Meanwhile, respondents with negatively perceived benefits on the selection of contraceptives all chose the short term contraceptive method (injections, pills) as many as 30 (100%) respondents.

The results of the statistical test (contingency coefficient) obtained = 0.000, meaning (0.05), so it can be concluded that H0 is rejected. This proves that there is a relationship between perceived benefits and the choice of contraceptives. With a C value of 0.700, the perceived benefit of the selection of contraceptives has a strong relationship.

Table 4. Correlation between Perceived Barriers and Selection of Contraceptive Devices in RW 03 Wonorejo Village, Singosari District, Malang Regency in 2020

Perception Obstacle	Types of Contraceptives				Total		<i>P-value</i>	OR
	MKJP		MKJP		f	%		
	F	%	F	%				
Positive	19	86.4	3	13.6	22	100	0.000	0.665
Negative	0	0	30	100	30	100		

Table 4 shows that respondents with a positively perceived barrier to the choice of contraceptives mostly chose the longterm contraceptive method (Implant, IUD, MOW) as many as 19 (86.4%) respondents. Meanwhile, respondents with negatively perceived barriers to the choice of contraceptives all chose the short term contraceptive method (injections, pills) as many as 30 (100%) respondents.

The results of the statistical test (contingency coefficient) obtained = 0.000, meaning (0.05), so it can be concluded that H0 is rejected. This proves that there is a relationship between perceived barriers and the choice of contraceptives. With a C value of 0.665, the perceived barrier to the choice of contraception has a strong relationship.

DISCUSSION

Women in childbearing age perceptions related to the choice of contraceptives believe that they are still in their fertile period so they have a great chance of getting pregnant. They choose long term contraceptive method (Implant, IUD, MOW) because it is more effective, efficient, and safe for their health condition. Similarly, respondents who have a risk of hypertension. They chose long term contraceptive method (Implant, IUD, MOW) because they realized that if they became pregnant shortly, they would potentially experience pregnancy complications. One of the reasons for choosing that contraceptive by women in childbearing age is due to counseling by midwives, a positive understanding of the acceptors influences the decision to use long term contraceptive method (Rusady and Zulaikha, 2021). According to the results of research by Septalia and Puspitasari (2017), the cost of installing longterm contraceptive services appears to be much more expensive. However, if the family planning acceptors look at the period of use, of course, the costs that must be incurred for the use of longterm contraceptives will be cheaper than those of short term contraceptive. For one installation, longterm contraceptive can be effective for 3-8 years. While the effectiveness of short term contraceptive is only 1-3 months. The cost of using contraception can affect the choice of short term contraceptive, this can be due to the lack of knowledge about the cost of using contraception in terms of effectiveness, efficiency, and long-term.

Not a few woman of childbearing age also choose short term contraceptive, one of the factors that cause it is not because they know about contraceptives in general, but because they follow their closest friends or relatives. (Wulandari, Muhammad and Ridha, 2016). This happens because of the limited knowledge of respondents about contraception so they imitate the inappropriate behavior of their friends or relatives. This is following Amalia's research (2017) which states that the lack of knowledge possessed by women childbearing age is caused by a lack of curiosity and public awareness of the choice of contraception, even though health workers have provided family planning counseling. Septalia and Puspitasari (2017) stated that one of the factors causing family planning acceptors to like the use of short term contraceptive, because of the attitude of family planning acceptors who tend to not care and feel suitable, practical, and cheap. Several factors influence the confidence of high-risk women childbearing age in choosing contraceptives. One of these factors is the lack of a husband's support. Most of them only take them to health services and provide finance. According to the results of Amalia's research (2017), it is stated that many husbands do not provide support in choosing contraceptives. They assume that their husbands do not care about contraceptives. The husband

felt it was none of his business. However, they think that it is only the wife's business, even though the husband's support plays a very important role in choosing contraceptives.

Women of childbearing age realize that choosing the wrong contraceptive method can lead to pregnancy so it will have a bad impact on them. In addition, women who have high blood pressure, heart disease, asthma, and diabetes have the potential to experience complications in their pregnancy (Pangaribuan and Lolong, 2015). In contrast, women childbearing age chooses to use short term contraceptive because they do not understand that pregnancy has the potential to experience complications such as bleeding, miscarriage, and pregnancy poisoning. This happens because the majority of high-risk women childbearing age has a low level of education (Widyarni, 2018).

Education will affect a person's knowledge and perception of the importance of something, including its role in the family planning program (Indahwati, 2017). According to Amalia (2017), low knowledge and attitudes toward women childbearing age can be influenced by the lack of community participation in counseling held by health workers. Most people think that counseling is not important, as evidenced by the fact that new people will come if they are given gifts.

WUS who use long-term contraceptives feel calmer if they use them because it is more effective, efficient, and safe to prevent pregnancy. They also feel the benefits of choosing long term contraceptive (Implant, IUD, MOW), such as helping to reduce the risk of pregnancy complications and not needing frequent visits to health workers for repeat visits. (Mosher, Moreau and Lantos, 2016).

CONCLUSION

There is a relationship between HBM and the choice of contraception in WUS. With the results of this study, it is hoped that health workers can optimize information and counseling about family planning for high-risk WUS so that they can choose the right contraceptive method.

ABBREVIATIONS

HBM: Health Believe Model

COMPETING INTEREST

Authors declare that we have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

AUTHORS' CONTRIBUTION

The corresponding author conceptualized, designed, and prepared the initial draft and framework and also interpreted the data under the advice supervisor from the Midwifery Department of Health Polytechnic, Ministry of Health Malang.

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