

Men's Decision to Use Contraception in Surabaya, Indonesia: Perceived Barriers, Seriousness and Benefits

Aria Aulia Nastiti^{1*}, Retnayu Pradanie¹, Budi Cahyono¹

Abstract--- *The high rate of population growth, and the frequency at which mothers give birth is still a problem in Indonesia. Contraceptive use is still dominated by women. However, male decisions to use contraception are still low in many countries. This study aimed to identify the correlation of the perceived barriers, perception of seriousness and perception of benefits with men's decision to use contraception in Surabaya, Indonesia. A cross-sectional study was carried out with 162 men who were married in Surabaya. Data were collected using questionnaires. Spearman's rho values were used to determine the correlations of perceived benefits, perceived seriousness, perceived barriers and men's decision to use contraception. This study found that perceived barriers ($r=0.487$, $P = 0.001$), perceived seriousness ($r = 0.779$, $P=0.001$) and benefits ($r = 0.779$, $P = 0.001$) were noted to be correlated with the men's decision to use contraception in Surabaya, Indonesia. It can be concluded that perception of barriers, perception of seriousness and benefits are related to men's decision to use contraception; thus, developing good perceptions and benefits should be properly promoted.*

Keywords--- *Barrier; Contraception; Family planning; Male contraception*

I. INTRODUCTION

Indonesia is the country with the largest population after China, India and the United States. Based on the 2010 population census, Indonesia's population was 237,641,326, including those living in urban areas at 49.79% and in rural areas at 50.21%. The high rate of population growth is currently a major problem in Indonesia. To deal with this, treatment continues with the Family Planning program to reduce the population growth rate [1]. The participation of men in using family planning in Indonesia is still low; one of the reasons is due to the small choice of male contraception, namely vasectomy and condoms. The involvement of the husband as an acceptor in the selection of contraception must be active, not only asking the female partner to use female contraception. There are two safe and effective contraceptives, namely condoms and vasectomy, while intercourse interruption and periodic abstinence are not considered effective [2].

The choice of a contraceptive method must consider the effectiveness, side effects, advantages and limitations inherent in a contraceptive method; there are also individual factors for prospective acceptors and external factors that ultimately

¹ Faculty of Nursing Universitas Airlangga, Surabaya, Indonesia

Corresponding Author:

Aria Aulia Nastiti

E-mail: aria.aulia.n@fkip.unair.ac.id

affect the decision making of the prospective acceptor [3]. The factors that caused men to be reluctant to use contraceptives were a lack of knowledge and understanding of reproductive rights, limitations in male contraceptives, social conditions, the existence of a culture in an area, beliefs, the existence of rumors about vasectomy and the use of condoms for things that are negative [4], [5]. Based on the results of interviews with 10 men of reproductive age in Kertajaya district, it was found that 4 men stated that they did not know about contraception in men, 4 men stated that they were afraid to have a vasectomy operation performed, 5 men said that it was less comfortable when using condoms or interrupted intercourse, 4 men stated that they did not have the money to use condom contraception or to pay for vasectomy and 1 man stated that he did not have the support of their wives because of fear of cheating.

Data from the National Population and Family Planning Agency (BKKBN) on the choice of male contraceptive methods recorded the use of 1,136,810 condoms and male operation methods (MOP) among about 244,126 acceptors with the number of fertile age couples totaling 46,489,414 [6]. Ministry of Health of the Republic of Indonesia, contraceptive use has increased in many parts of the world, especially in Asia and Latin America and is lowest in sub-Saharan Africa [7]. Globally, users of modern contraception have increased but not significantly from 54% in 1990 to 57.4% in 2014. In Indonesia, the number of fertile couples in 2014 was 47,019,002 with 7,761,961 new family planning acceptors and active birth control totaling 35,202,908 acceptors. Based on data from BAPEMAS and Family Planning program in Surabaya, the number of targets and realization of new Family Planning program participants in 2015 using the MOP method involved the realization of 787 acceptors from the target of 1,336 acceptors.

The main principle in realizing gender equality and justice is to increase male participation as contraceptive acceptors. The participation of men as contraceptive acceptors is inseparable from the factors that influence men's decision to use contraception using the theory of Health Belief Models (HBM). The HBM theory reveals that personal beliefs or perceptions about an individual's family planning will influence health behavior. Personal beliefs or perceptions about family planning consist of perceptions of vulnerability, perceptions of seriousness, perceptions of benefits and perceptions of obstacles that can all be influenced by premisification factors in the form of age, education level, environment and income [8]. Of the four perceptions, it is possible that they are factors related to the decision of men in using contraception. This study aimed to identify the correlation of the perceived barriers, perception of seriousness and perception benefits with men's decision to use contraception in Surabaya, Indonesia.

II. METHODS

This descriptive cross-sectional study was conducted between September and December 2017 on 162 men. The population included married men in the sub-district of Gubeng in Surabaya, East Java, Indonesia. A total of 162 men satisfied the inclusion criteria and comprised the sample population. The inclusion criteria covered married men and those who could communicate well in terms of family planning field officer data. The exclusion criteria included men who had reproductive problems.

The data collection tool was a questionnaire on sociodemographic characteristics, perceived benefits, perceived seriousness and perceived barriers. The sociodemographic characteristic questions asked about age, education, parity and income. The questionnaire was developed by researchers with items based on family planning and the HBM. Whilst preparing the questionnaire's contents, the researchers were assisted by two experienced nurses in the field of maternity

nursing. Translation was accomplished by a qualified translator. Before use for data collection, the complied questionnaire was tested for validity and reliability on 15 men in the Community Health Center in Mulyorejo Surabaya.

The questionnaire consisted of 14 questions, namely 4 questions on the perceived seriousness, 3 questions on the perceived benefits and 7 questions on the perceived barriers. Each item was converted into a Likert scale with the following options: strongly agree, agree, disagree, strongly disagree. High scores indicated positive behavior for perceived benefits and seriousness and high scores for perceived barriers indicated negative behavior in men of childbearing age in use of contraception.

Spearman's rho values were used to determine the correlations of perceived benefits, perceived seriousness, perceived barriers and men's decision to use contraception. Descriptive statistics including frequencies and percentages were used to describe sociodemographic characteristics, perceived benefits, perceived seriousness, perceived barriers and men's decision to use contraception. In all the statistical analysis, a P- value <0.05 was considered significant. All data were analyzed using the SPSS software.

III. RESULT

The sociodemographic characteristics of the respondents were mostly in the age range of 31-40 years, and low income with a junior high school education. Those who had 1-2 children totaled almost the same as those who had 3-4 children (Table 1). Statistical test results show perceived barriers ($r=0.487$, $P = 0.001$), perceived seriousness ($r= 0.779$, $P=0.001$) and benefits ($r = 0.779$, $P = 0.001$) were noted to be correlated with the men's decision to use contraception in Surabaya, Indonesia (Table 2)

Table 1. Demographic characteristics

Variable	(N= 162)	%
Age (yrs)		
20-30	34	21.0
31-40	74	45.7
> 40	54	33.3
Education		
Elementary school	30	18.5
Junior High school	70	43.2
Senior high school	52	32.1
University	10	6.2
Number of children		
No children	12	7.4
1-2	76	46.9
3-4	70	43.2
≥5	4	2.5
Income		
> Rp. 2,000,000	8	4.9
Rp 1,500,000 – Rp. 2,000,000	70	43.2
< Rp. 1,500,000	84	51.9

Note: 13,000 rupiah equal 1 US \$

Table 2. Correlation of perceived barriers, perceived benefits, and perceived seriousness with men's decision to use contraception

Item	Men's decision (N=162)		Total	Mean	SD	R	P
	Yes	No					
Perceived seriousness							
Positive	79	12	91	11,0370	1,44845	0.779	0.000
Negative	6	65	71				
Perceived benefits							
Positive	79	12	91	11,5000	1,82546	0.779	0.000
Negative	6	65	71				
Perceived barriers							
Positive	57	15	72	18,2963	3,25689	0.487	0.000
Negative	28	62	90				

Note: r-spearman correlation coefficient

IV. DISCUSSION

Perception of individual seriousness can be seen from the degree of severity both clinically and emotionally due to the development of an illness. The impact can be in the form of discomfort, disability or even death. Other impacts that may be caused include the social environmental impacts, work and peers. Seriousness is felt when an illness affects one or several of these things [9], [10]. The results in Table 5.4 show that the majority of respondents had positive seriousness perceptions (64.2%). From these results, it is indicated that there is seriousness to treat or prevent disease. Decisions are matters relating to decisions or all decisions that have been determined. The decision making process involves the selection of various alternative actions. Everyone faces and makes decisions in every aspect of life. The results in Table 5.4 show that the level of relationship between the perception of seriousness with the decision of men to use contraception has a high level of relationship meaning that the more positive the perception of seriousness the more willing the men are to use contraception. The results of the study are in accordance with the HBM theory that a man who has a perception of positive seriousness will try to seek treatment to prevent problems arising from not using contraception [10]. Rosenstock, in the HBM theory, states that the perception of seriousness can be seen from the degree of severity and impact caused by a disease. The impact can be seen in terms of physical discomfort, disability and even death as well as emotional problems which include social environmental impacts, work and peers. Someone will seek treatment or prevent disease if he feels that the disease is severe.

The health of fertile age couples greatly affects the happiness and welfare of the family at the time of birth, the number of births or number of children owned and the age gap between each child born. Therefore, age is one of the factors for a person to become a contraceptive acceptor, because age is related to reproductive potential and also to determine whether or not someone needs to do a vasectomy or tubectomy as a way of contraception [2]. The age of the prospective acceptor is not less than 30 years old, the age of the prospective participant already has enough children and does not want any more children. If the age of a prospective acceptor was less than 30 years, it was feared that later he would experience regret if he still wants another child [11]. Older ages were generally more responsible and more conscientious than younger ages. This happens because being more experienced according to age is closely related to the level of maturity or maturity of a person. That means that planning the use of contraception has been well considered.

Perception of benefits is a feeling in which individuals will benefit from the actions to be taken to prevent the threat of an illness [12]. Benefit effects may also be influenced by consideration of the perceived threat level; if the benefits are

considered small along with a perceived low threat, it might cause someone not to take an action. If the perceived threat is high, but no benefits are felt, then there is likely to be no action taken. A high level of threat and perceived benefits causes a person to act. The results of the study in Table 5.4 show that the majority of respondents had positive perceptions of benefits (64.2%). The results indicate that the existence of benefits from the use of contraception that encourage a person to have a positive decision was also included in the decision to use contraception. Decisions are matters relating to decisions or all decisions that have been determined. The decision making process involves the selection of various alternative actions. Everyone faces and makes decisions in every aspect of life.

The level of relationship between perceived benefits and the decision of men to use contraception has a high degree of relationship, meaning that the more positive the perception of benefits the more men will be willing to use contraception. Based on the results of interviews with 10 respondents, they said that "I already feel quite mas because I already have 2 children; if the more family members will increase the burden of life will also increase". The number of living children affects couples of childbearing age in determining the method of contraception to be used [13]. According to HBM theory, perceived benefits are more related to what actions will be taken to reduce or prevent perceived threats. Perception of the benefits felt by a man in determining the decision to use contraception affect the actions to be taken by a man to use contraception. Perceived barriers can be considered an individual's willingness to take action. Perceptions may be formed by costs, injury risk, difficulty and time spent [14]. The decision making process involves the selection of various alternative actions. Everyone faces and makes decisions in every aspect of life [15].

Based on the results of the Spearman's Rho statistical test, the perception of obstacles with men's decisions in using contraception had a moderate level of relationship which means the more positive perception of the position of men will tend not to use contraception to use contraception. The results of the study are not in accordance with the HBM theory by Rosenstock because the relationship between perceptions of obstacles and decisions in using contraception is inversely proportional. Should the more positive perception of a person's negative barriers to condom use and vasectomy then the decision chosen will use contraception but the results of the study indicate that a more positive perception of the negative barriers lead to a decision not to use contraception. This could be caused by the fact that most respondents had a junior secondary education (70%). According to Arundhati, education is one of the factors that can influence knowledge and attitudes about contraceptive methods [16]. Highly educated people will respond more rationally than those who are poorly educated, be more creative and more open to renewal efforts. Educated people are also more adaptable to social changes, directly or indirectly in terms of family planning, because family planning knowledge is generally taught in formal education in schools in the subjects of health, family welfare education and population.

V. CONCLUSION

Perceptions of vulnerability have a very low level of association with men's decision to use vasectomy and condom contraception. Perceptions of seriousness have a high degree of association with men's decision to use vasectomy and condom contraception. The perceived factor of benefit has a high level of association with men's decision to use vasectomy and condom contraception. Perceptions of barriers have a moderate level of association with men's decision to use vasectomy and condom contraception. It is recommended that PLKB provide education and contact surveys for men who are eligible to attend male birth control to increase knowledge about the factors that influence men's decision to use

vasectomy and condom contraception. The results of this study can increase men's knowledge about the factors that influence men's decision to use contraception, so that a man who meets the requirements for male birth control can follow.

CONFLICT OF INTEREST

The authors declare no potential conflicts of interest.

ACKNOWLEDGMENT

The authors of this study would like to thank the Health Department Surabaya, family planning field officers in Gubeng Sub-district and all respondents in the public health service in Surabaya, Indonesia.

REFERENCES

- [1] BPS, BKKBN, K. K. RI, and ICF, *Indonesia Demographic and Health Survey 2017*. Jakarta: BPS, BKKBN, Kemenkes, and ICF International, 2018.
- [2] J. Rakhi and M. Sumathi, "Contraceptive methods: Needs, options and utilization," *Journal of Obstetrics and Gynecology of India*, vol. 61, no. 6. Springer, pp. 626–634, Dec-2011.
- [3] W. H. Organization, "Family planning/Contraception," 2018. .
- [4] O. Plana, "Male Contraception: Research, New Methods, and Implications for Marginalized Populations," *Am. J. Mens. Health*, vol. 11, no. 4, pp. 1182–1189, Jul. 2017.
- [5] S. I. Budisantoso, "Partisipasi Pria Dalam Keluarga Berencana Di Kecamatan Jetis Kabupaten Bantul," *J. Promosi Kesehatan. Indones.*, vol. 4, no. 2, pp. 103–114, 2009.
- [6] S. Indonesia, N. P. and F. P. B. (BKKBN), I. M. of H. (Depkes RI), and I. C. F. International, "Indonesia Demographic and Health Survey 2012," ... *Heal. Care*, p. 520, 2013.
- [7] K. RI, "Situasi Kesehatan Ibu," Jakarta, 2014.
- [8] K. S. Hall, "The Health Belief Model Can Guide Modern Contraceptive Behavior Research and Practice," 2012.
- [9] I. M. Rosenstock, V. J. Strecher, and M. H. Becker, "Social Learning Theory and the Health Belief Model," *Health Educ. Q.*, vol. 15, no. 2, pp. 175–183, Jun. 1988.
- [10] V. Stretcher and I. M. Rosenstock, *The Health Belief Model*. 1997.
- [11] Bappenas, Kemenkes, B. POM, BKKBN, and B. Kesehatan, "Health Sector Review: Policy briefs," 2014. .
- [12] N. K. Janz and M. H. Becker, "The Health Belief Model: A Decade Later," *Health Educ. Q.*, vol. 11, no. 1, pp. 1–47, Mar. 1984.
- [13] E. Gabalci and F. Terzioglu, "The effect of family planning methods used by women of reproductive age on their sexual life," *Sex. Disabil.*, vol. 28, no. 4, pp. 275–285, Dec. 2010.
- [14] T. Alghafri, S. M. Alharthi, Y. M. Al Farsi, E. Bannerman, A. M. Craigie, and A. S. Anderson, "Perceived barriers to leisure time physical activity in adults with type 2 diabetes attending primary healthcare in Oman: A cross-sectional survey," *BMJ Open*, vol. 7, no. 11. BMJ Publishing Group, Nov-2017.

- [15] E. J. Danforth, M. E. Kruk, P. C. Rockers, G. Mbaruku, and S. Galea, "Household decision-making about delivery in health facilities: evidence from Tanzania," *J Heal. Popul Nutr*, vol. 27, 2009.
- [16] A. Gosavi, Y. Ma, H. Wong, and K. Singh, "Knowledge and factors determining choice of contraception among Singaporean women," *Singapore Med. J.*, vol. 57, no. 11, pp. 610–615, Nov. 2016.