

# Relationship of Knowledge and Attitudes with Male Participation in Vasectomy in Indonesia

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## Abstract

Family planning is an effort to control the birth of children, the ideal space and age for childbirth, pregnancy control, through promotion, protection, and assistance in accordance with reproductive rights to form a quality family. Vasectomy, or vas occlusion, is considered to be the most effective and very popular form of contraception. This study aims to analyze the relationship between knowledge and attitudes with vasectomy participation in men. This study used a cross-sectional approach. The research location is in Madiun City, East Java, Indonesia. The total sample in this study was 323 respondents. The variables in the study were knowledge, attitudes, and participation in vasectomy family planning. There is a relationship between knowledge and attitudes about vasectomy with male participation in vasectomy.

**Keywords:** Attitude, family planning, knowledge, vasectomy.

## Introduction

In 2020-2030 Indonesia has the opportunity to experience a demographic bonus. The country of Indonesia will have around 180 million people of productive age, while those who are not productive will reduce to 60 million people. This means that 10 people of productive age will bear 3-4 people of non-productive age<sup>(1)</sup>. One of the efforts to control the population growth rate is by using a family planning program. Family planning is a government program to improve the quality of life in Indonesia. KB is an effort to control the birth of a child, the ideal space and age for childbirth, control of pregnancy, through promotion, protection, and assistance in accordance with reproductive rights to form a quality family<sup>(2)</sup>.

The male participation rate in using contraceptives in Indonesia is still very low, namely, only 2.1% of male family planning participants, and they generally use condoms. This percentage is lower when compared to other countries, such as Iran (12%), Tunisia (16%), Malaysia (9-11%), even in the United States it reached 32%. Very few men want to use contraceptives, either condoms or vasectomy. Of the total number of family planning acceptors in Indonesia, around 97% are women. Therefore, the socialization of family planning programs among men must be increased<sup>(3)</sup>.

Vasectomy, or vas occlusion, is considered to be the most effective form of contraception and is very popular in many developed and developing countries. For men who don't want more children, a vasectomy offers several benefits: effectiveness, quick and simple procedure, permanent protection, convenience, low risk of complications, no long-term effects on his health or sexual performance, and no health risks to his wife<sup>(4)</sup>. One of the important evaluations in the application of the family planning method is the knowledge, attitudes, motivation, and behavior of the community. This study aims to analyze the relationship between knowledge and attitudes with vasectomy participation in men.

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## Method

This study used a cross-sectional approach. The research location is in Madiun City, East Java, Indonesia. The sampling method used for the case group and the control group was fixed disease sampling, which is a sampling scheme based on the subject's disease status, that is, diseased or not having the disease under study, while the subject's exposure status varies according to the subject's disease status. The number of estimates for the case group and the control group used a ratio of 1: 3 in each case. The case group in this study were

husbands who were willing to accept vasectomy as many as 85 respondents, while for the control group were taken from husbands who did not use vasectomy as many as 238 respondents. The total sample in this study was 323 respondents. The variables in the study were knowledge, attitudes, and participation in vasectomy family planning. The data was tabulated in terms of the frequency distribution of different variables. A Chi-square test of significance was employed for testing associations.  $P < 0.005$  was considered for statistical significance. The study was approved by the Institutional Ethics Committee.

## Results

**Table 1: Respondent characteristics**

Respondent characteristics	Vasectomy (n=85)	Non-Vasectomy (n=238)
<b>Religion</b>		
Islam	83 (98%)	229 (96%)
Christian	2 (2%)	9 (4%)
Age (mean)	49 Tahun	42 Tahun
Age of married husband (mean)	26 Tahun	27 Tahun
Wife's age (mean)	42 Tahun	39 Tahun
<b>Education Level</b>		
No school	0 (0%)	2 (1%)
Primary school	7 (8%)	12 (5%)
Junior high school	25 (29%)	32 (13%)
High school	46 (55%)	166 (70%)
Higher education	7 (8%)	26 (11%)
<b>Employment</b>		
Civil servants	5 (6%)	16 (7%)
Private employees	32 (38%)	64 (27%)
Labor	27 (32%)	50 (21%)
Farmer	3 (4%)	5 (2%)
Driver	2 (2%)	11 (5%)
Etc	16 (19%)	92 (39%)
<b>Source of information related to family planning</b>		
Family planning volunteer	49 (58%)	105 (44%)
Health workers	35 (41%)	126 (53%)
Family member	1 (1%)	5 (2%)
Print media	0 (0%)	2 (1%)

Table 1 describes the characteristics of the research respondents divided into 2 (two) groups, namely respondents who used vasectomy and did not use vasectomy. The mean age of vasectomy respondents was 49 years and 42 years of non-vasectomy. The mean age of the respondents at marriage was 26 years (vasectomy) and 27 years (non-vasectomy). The mean age of the respondents' wives was 42 years (vasectomy) and 39 years (non-vasectomy). Half of the vasectomy

(55%) and non-vasectomy (70%) respondents had a high school education level. Nearly half of vasectomy (38%) and non-vasectomy (39%) respondents have jobs as private employees and others such as: having their own business. Most of the vasectomy (58%) and non-vasectomy (53%) respondents received information related to family planning from family planning cadres and health workers.

**Table 2 Relationship of knowledge and attitude with vasectomy participation**

Variable Characteristics	Vasectomy (n=85)	Non- Vasectomy (n=238)	P
Knowledge about vasectomy			
Less	53 (62%)	127 (53%)	0.01
Enough	26 (31%)	58 (24%)	
Well	6 (7%)	53 (22%)	
Attitudes towards vasectomy family planning			
Positive	0 (0%)	5 (2%)	0.00
Negative	85 (100%)	233 (98%)	

Table 2 shows 62% of men with vasectomy have insufficient knowledge of vasectomy, only 7% of men with vasectomy have good knowledge. The same thing was also found in non-vasectomy men, 53% had less knowledge about vasectomy and 22% had good knowledge. 100% of men with vasectomy and 98% of men without vasectomy have a negative attitude towards vasectomy. Knowledge about vasectomy and attitudes towards vasectomy have a relationship with male participation in vasectomy.

## Discussion

The study found that respondents' level of knowledge about vasectomy is at a low level. This may be due to a large number of respondents with junior and senior high school education. The vasectomy method is usually used by men who have a good level of education<sup>(5)</sup>. The results of a study in Taiwan showed that men who chose vasectomy had higher education (68.5% had a bachelor's degree)<sup>(6)</sup>.

A person with higher education means that information is easier to transfer and receive, and ultimately more knowledge is acquired. Conversely, if the level of education is low, it will hinder the

development of one's attitude in receiving information and the newly introduced values. However, the number of non-vasectomy respondents was more than the respondents who actively participated using vasectomy and there were still some respondents who had good knowledge but did not participate in vasectomy. This means that the level of knowledge does not guarantee that someone will take an action or show any kind of healthy behavior.

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The results of the research on the frequency distribution of attitudes towards the choice of vasectomy

show that more respondents are negative than positive. Attitude towards vasectomy is determined by the respondent's voice for the vasectomy itself. Negative attitudes arise from negative beliefs. Respondents who have negative attitudes use non-vasectomy more than a vasectomy. Attitude is a reaction or response that is still closed from a stimulus or object. The components that are built into attitudes are 1) beliefs (beliefs), ideas and concepts, towards an object; 2) emotional life or evaluation of an object; 3) propensity to act. Thus, a person's belief or belief about an object affects the action to be performed<sup>(7)</sup>.

The attitude analysis related to the choice of vasectomy shows that there are respondents who have a positive attitude but do not use vasectomy, and there are respondents who have a negative attitude but participate actively in vasectomy. There are two kinds of community participation method, namely participation in a coercive way to force the community to contribute to the program (through laws and regulations, regulations, or oral orders), then second, participation through persuasion and education. Positive beliefs will form a positive attitude. Furthermore, a positive attitude develops a person's tendency to act positively as well. If someone has negative beliefs or negative concepts, it will form a negative attitude which then makes it difficult to act positively<sup>(7)</sup>.

### Conclusion

There is a relationship between knowledge and attitudes about vasectomy with male participation in vasectomy.

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