

Men's Knowledge About Vasectomy

Ellyda Rizki Wijhati^{1*}, Suesti¹

¹ Midwifery Study Program, Faculty Health Science, Universitas Aisyiyah Yogyakarta, Yogyakarta, Indonesia

*Corresponding author. Email: ewijhati@gmail.com

ABSTRACT

The purpose of the study was to analyse men's knowledge about vasectomy and respondent's characteristics that influenced the level of knowledge. The study applied quantitative descriptive research with a cross-sectional approach. The populations in the study were all men with several criteria such as being married, actively having sex, and living in Meguwo Banguntapan Bantul. Purposive sampling technique was used to select 60 participants from population. The data collection tool used a questionnaire. Analysed using both descriptive and bivariate statistics. The results of the knowledge level of respondents were divided into 3 categories 29 (48.4%) high, 26 (43.3%) moderate, 5 (8.3%) low. A total of 98.3% of respondents knew the definition of vasectomy; 84.2% knew how vasectomy worked, 41.7% effectiveness, 60% profit, 56.7% loss, and 74.8% vasectomy requirements. There is significant correlation between age and knowledge level vasectomy, whereas education level, occupation and social economy didn't have correlation with knowledge about vasectomy. Although many respondents had sufficient knowledge about vasectomy, none the respondents were interested in doing a vasectomy.

Keywords: men, knowledge, vasectomy

1. INTRODUCTION

A prosperous, healthy, independent, advanced, has an ideal number of children, responsible, has an insight to the future, harmonious and devoted to God can be embodied with the existence of Family Planning (FP) [1]. Men's participation in FP programs is very important because men are partners in reproduction, so husbands and wives need to share responsibilities and roles in a balanced manner. Basic Health Survey data in 2013 stated that the participation of men in family planning programs was only 3.91% of the total acceptors, with a total of 3.22% of condom acceptors, and 0.69% of vasectomy acceptors.

Badan Kependudukan dan Keluarga Berencana Nasional (BKKBN) efforts to increase vasectomy acceptors include advocating Majelis Ulama Indonesia (MUI) and the Prelate, providing financial support and operational facilities that support the implementation of sterilization and mobilization activities in the field, conducting doctor training as service providers, inventorying service conditions in various hospitals to anticipate occurring damage or obstacles. [1] The Bantul Regency Government through the Health Department has made a policy to provide rewards for vasectomy participants by giving them money as much as 1 million rupiahs [2]. However, these promotional efforts have not yet produced results. The male involvement in family planning used to adopting vasectomy is still very low.

The low acceptance of vasectomy has also been reported in the developed countries such as Indonesia. The lack of knowledge and misconceptions about the procedure, lack of access, provider bias and patients preferences were the reason of low vasectomy user [3]. The other study report that people's perceptions of reproduction, lack of

information and misunderstandings about vasectomy, the stereotype of male dominance, bias and preference of program and provider, and the impact of a market economy were influencing factors to decline vasectomy among men [4].

Data FP from 5 years ago there were no vasectomy acceptors because so far the FP acceptors were dominated by women. The problems that are often faced include the low participation of men in the use of family planning, this is because there are still many assumptions that family planning is a female responsibility and lack of knowledge about vasectomy. It is in light of this that the researchers sought to assess the knowledge of married men about vasectomy.

2. METHOD

The research design used in this study is quantitative descriptive. The population in the study were men who lived in Meguwo Banguntapan, Bantul, Yogyakarta, totalling 64 respondents. The sampling technique is purposive sampling with the number of 60 voluntary respondents, and 4 dropped out respondents because they were not in the research location. Respondent's knowledge was measured with questionnaires that had previously been tested for the validity and reliability. The univariate analysis is used to analyse the data and bivariate analyse used kendall tau. Research ethics was carried out by submitting an ethical review and obtaining permission to carry out research from the 'Aisyiyah University Ethics Committee, as well as perform an inform consent to the respondents.

3. RESULTS AND DISCUSSION

Table 1 Overview of Respondents' Vasectomy Knowledge Level

Criteria	Total	Percentage
High	29	48.4%
Moderate	26	43.3%
Low	5	8.3%
Total	60	100%

Source: Primary Data, May 2018

Table 2 Analysis of Respondents' Vasectomy Knowledge

No.	Indicators	Correct Answers
1	Definition of Vasectomy	98.3%
2	How it works	84.2%
3	Effectiveness	41.7%
4	Advantage	60%
5	Disadvantage	56.7%
6	General requirements	74.8%
	Average	69.3%

Source: Primary Data, May 2018

Table 3 Overview of Respondent Characteristics

Characteristics	Amount	Percentage	P value
Level of education			
Elementary School	2	3.3%	0.053
Junior High School	7	11.7%	
Senior High School	34	56.7%	
Scholar	17	28.3%	
Total	60	100%	
Age			
<30 years	8	13.3%	0.036
31-40 years	20	33.3%	
Years	13	21.7%	
>50 years	19	31.7%	
Total	60	100%	
Occupation			
Farmer	1	1.7%	0.155
Civil servants	5	8.3%	
Self-employed	51	85%	
Army/Police	1	1.7%	
Pensionary	2	3.3%	
Total			
Socio-economic	60	100%	0.891
Income > Regional	60	100%	
Minimum Wages (RMW)			
Income < RMW	0	0%	
Total	60	100%	

Source: Primary Data, May 2018

Table 2 shows that there are 29 (48.4%) respondents with high level of vasectomy knowledge, 26 (43.3%) respondents with moderate knowledge level and 5 (8.3%) respondents with low knowledge level. Although most respondents have moderate level of knowledge about vasectomy but still there has not been a single respondent participated vasectomy. A study shows that the level of knowledge do not significantly influence the selection of vasectomy as a method of family planning [3].

As many as 98, 3% of respondents know about what a vasectomy is, how it works 84.3%, its advantages 60% and its disadvantages 56.7%. Knowledge about the advantages and disadvantages can affect a person's interest to use the specific contraceptive methods. Previous study said that 70.2% of men know that vasectomy is a permanent contraceptive method, and 45.5% of men do not know if the sexual function can return back to normal after a vasectomy [5].

The knowledge level is a predisposing factor that affects health relationships [6]. Sufficient knowledge of vasectomy contraception is not always the basis for vasectomy. Knowledge and understanding will involve the number of

children, as well as planning assessments in men is one of the factors driving men's participation in family planning programs [7].

The acceptance of vasectomy contraceptive methods in Nigeria is still very low due to lack of knowledge about vasectomy contraception and false information about the vasectomy itself. The number of incorrect assumptions about vasectomy affects the male *mindset* to take part in family planning [8]. The results of in-depth interviews [9] with vasectomy acceptors show that the reason of joining vasectomy program was because the informant had understood and comprehended the benefits of vasectomy for himself as well as for families. On the other hand, other causes of the low involvement of men in family planning programs, one of which is due to the lack of involvement of men in the family planning counselling. Family planning is considered a mandatory thing for women to prevent pregnancy. Cultural constraints are external influences that can reduce men's motivation to get involved in the family planning program [10], [13].

Based on table 3, as many as 22 (33, 3%) respondents aged 31-40 years, the results of analysis test showed p-value =

0.036 this means that there is a significant relationship between the age of respondent with level of knowledge about vasectomy. This case influenced by a person's level of health literacy. The older respondent's age, the less chance to access health information about contraception. The level of one's health knowledge decreases as a person ages [11]. The maturity affects the use of contraception, respondents aged 20-29 years using contraception 39.9%, respondents aged 30-39 years using contraception as much as 37.7%, and respondents aged > 40 years using contraception as much as 23.3% this shows that the older a person is, the less participation in using contraception [12]. The results of previous studies report that age is associated with the acceptance of contraception in male respondents aged 31-45 years is the group that receives the most vasectomy as a contraceptive method that can be adopted [13]. In contrast to previous studies stating that there is no relationship between the age of the respondents with participation in using contraception [14].

Most of the respondents are 34 (56,7%) high school graduates, and only 7 (11,7%) junior high school graduates, and 2 (3,3%) elementary School graduates. This indicates that most respondents are elementary education graduates. The higher a person's education is, the easier they will digest the information given to them. As a result, it can influence their decision in family health and family planning is one of them. Although only 85% of the respondents completed primary [3] education but there is no man participate the vasectomy program. The analysis showed that there was no significant relationship between education level with vasectomy knowledge $p\text{-value} > 0.05$. This is not in accordance with the theory behaviour which states that a person's education level is a predisposing factors that directly influence the knowledge and behaviours [6].

Education level is a predictor that influences one's knowledge [15] married men who complete secondary education (95% CI 2,48 - 6,75) 4,10 times more likely to have a better knowledge about vasectomy compared to those who are not educated. Similarly, for the respondents graduated from high level education that is 6 times (95% CI 4.43-28.47) more likely to have higher knowledge about vasectomy compared to those who did not attend a formal education. According to the previous studies which reported that educational level influences contraceptive use, men who get reproductive health information influence better knowledge about contraception [12].

Previous research states that there is no significant relationship between men's education level and awareness of doing vasectomy [5] and vasectomy participation [3]. Other studies mention that [16] respondents who graduated from medical education has a high knowledge about vasectomy, but was reluctant to do a vasectomy. It is proved that one's level of education is not immediately guarantee that one will adopt the behaviour. The states that low participation of vasectomy is also due to the existence of gender bias, i.e. assumption that it is women's obligation to do the family planning [5].

Most of respondents, 85% (51), are self-employed and the number those who work as farmer and Army/ Police is 1.7% (1) retrospectively. The data analysis showed that there was no significant relationship between respondent occupation with the level of knowledge about vasectomy ($p\text{-value} >$

0.05). Research [16] conducted to doctors in Nigeria shows that the doctors are reluctant to do vasectomy. Respondents with supportive occupation to get sufficient information about vasectomy, have not been able to adopt vasectomy as a method of family planning. This allows other more factors dominant that influence men to do vasectomy. The assumption that men are not worthy to join family planning is one reason for the low men's participation family planning program [5]. In contrast to a research [15] which mentioned that the respondents' occupation significantly affect the knowledge about vasectomy. It is not in accordance with the theory of behaviour Green and Kreuter [17] which States that a person's job is a predisposing factor for someone to do a health behaviour.

All respondents in the study have income (social economic) above the Regional Minimum Wages in Bantul regency. Data analysis showed that there was no significant relationship between socioeconomic respondents and the level of knowledge about vasectomy ($p\text{-value} > 0.05$). One of the considerations in socio-economic level is from the family income level which can describe a person's economic level. Family income can directly affect a person's decision to choose a contraceptive method, given the availability of several types of contraceptives at different prices. The Bantul Regency Government itself states that vasectomy is served for free [18].

In contrast to the results of the study [19] in poor families in Makassar that family economic conditions were a significant factor influencing vasectomy application, with limited economic conditions that cause the couple to consider having many children. According to [20], the respondents' social economic level do not significantly affect the vasectomy acceptance in men. Other study states that the socio-economic level does not affect the men's awareness to join the vasectomy program [5].

4. CONCLUSION

The level of respondents' knowledge about vasectomy is divided into 3 categories: 29 (48.4%) high, 26 (43.3%) moderate, 5 (8.3%) low. There is significant correlation between age and knowledge level vasectomy, whereas education level, occupation and socioeconomic didn't have correlation with knowledge about vasectomy.

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AUTHOR CONTRIBUTIONS

Conceptualization (E.R.W, S.S); Material research preparation (E.R.W, S.S); Methodology (E.R.W, S.S); Data collecting (S.T); Data analysis and visualization (E.R.W, S.S; Writing—original draft (E.R.W); Presentation (E.R.W).

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