

The Effectiveness of Counseling through Vasectomy Module in North Kolaka, Indonesia

Askrening, Hendra Yulita

Department of Midwifery, Polytechnic of Health Kendari, Indonesia

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ABSTRACT

The main problem faced nowadays is the low participation of men in terms of implementation of the Family Planning Program. The figures for family planning in Indonesia only demonstrate a high rate on contraception use in women not in men. The Strategy to improve knowledge by promotion activities of family planning of men with a variety of media and forms are expected to increase knowledge. This study aimed to analyze the effectiveness of media modules to improve knowledge and attitudes and also analyze the factors that lead to low participation of family planning in North Kolaka. This study used Mixed Method design which combines qualitative and quantitative method. The research was conducted in North Kolaka in July and August 2016. The population of this study was all of husbands who classified as a couple reproductive ages in North Kolaka with the total of 19,819 people. Samples were divided into two groups: the experimental group given counseling through modules about vasectomy were 124 people and the control group given counseling without a module were 126 people. The module is more effective to improving knowledge and attitudes than counseling without module. The most reason for rejection vasectomy was they want to have children, fear of surgery and religious issues. Health promotion through modules must be expanded and improved by the district government of North Kolaka. Implementing promotion programs should involve religious leaders.

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Corresponding Author:

Askrening,

Department of Midwifery,

Polytechnic of Health Kendari, Indonesia.

Email: askreningkdi@gmail.com

1. INTRODUCTION

According to the population census of 2010, Indonesia had a population of 237.6 million people, so it is classified as the fourth largest population in the world [1]. It was also reported that the maternal mortality rate in Indonesia reached 228 deaths per 100,000 births. This figure is higher compared to other Asean countries, such as Thailand, Malaysia, Vietnam, Brunei, and Singapore [2]. The Ministry of health of Indonesia in an effort to accelerate the maternal mortality issue policies through the four pillars of safe motherhood, the one is the family planning program. This program is one method to control the population [3].

Reproduction involves both a male and female, but generally, family planning programs just targeting the women [4]-[6]. In developing countries, the service of family planning programs that include targeted information, education and communication in increased knowledge and use of contraception is more focused on women [4],[7]. As a result, the male participation in the implementation of family planning programs to be reduced [8],[9]. The participation of Indonesian married men in family planning programs is still low at 5.5% [10], if compared with other countries such as Bangladesh 19.1%, 10.9% Pakistan, and Nepal 18%, the rate is very low [11].

Family planning participant in Indonesia only show a high rate on contraception use in women not in men. The low participation of men in family planning is caused by a variety of demographic factors (age, number of children, and sex of the child), factor of social structure (education, science, religion, socioeconomic status and welfare), factors spouse (wife's health and support a wife) and the availability of health resources (health insurance, access to information, distance to health facilities and health workers [12].

The major contraception methods at present is vasectomy, and accepted by more than 40 million men as a method of male sterilization in worldwide [13]-[17]. In Indonesia, Generally husband's participation in family planning programs is still low. this is indicated by the opinion of the husband that family planning is a matter for the woman and the woman should sterilized. On the other hand, the low participation of men in to family planning also caused by wives who are less supportive male contraceptive methods, especially on vasectomies. This is due to the fear that the contraceptive vasectomy may be negative consequences that their husbands are cheating and afraid when activities during intercourse is less satisfying [12].

The participation rate of husbands in family planning by using operating method man (vasectomy) in various district in Southeast Sulawesi is still very low. Based on National Family Planning Board (NFPB) Southeast Sulawesi province in 2016, North Kolaka is an area with the lowest attainment of vasectomy than other district in southeast Sulawesi province [18]. Efforts should be made to increase male participation in family planning can be done through the promotion of family planning and the man with the form [19],[20]. This study was aimed to analize the effectiveness of counseling by vasectomy module in North Kolaka district, Southeast Sulawesi Province.

2. RESEARCH METHOD

This study used mixed method design which combines qualitative and quantitative method. qualitative methods depth interviews to evaluate local government policy related to the exercise of male contraceptive methods of operation. While the quantitative method is done by using quasi-experimental research design in the form Nonequivalent Control Group Design [21].

The research was conducted in North Kolaka from September to November 2016. The population was the husband who classified as couple reproductive age in North Kolaka as many as 19, 819 people. Sampling using quality assurance LOT (Lot Quality Assurance-LQAS). The purpose is to ascertain whether the population achieve some standards to follow the health care program, in this case the method of family planning services was operation man method or vasectomy.

Based on a sample size table for sampling in the Lot Quality Assurance (LQAS), if no case is acceptable (if no participant of husband receive vasectomy) with 95% confidence in prevalence to 1.25% to 20,000 and population husband as couple reproductive age, then obtained a sample size of 238 husband as couple reproductive age [22]. These samples were divided into 2 groups: the experimental group were given counseling through modules vasectomy with the total of 119 people and a control group that were counseling without module with the total of 119 people. This research is a survey by means of sampling using cluster random sampling is random sampling of a group of individuals based on geographic areas, where the sampling plan using a framework that consists of a cluster of clusters [22].

The research intervention is counseling services through vasectomy module, where the final stage of this study is to measure attitudes change. The indicator of attitudes change is acceptance of vasectomy by husband who classified couple reproductive age. This study involve two groups: the experimental group was given counseling and a control group was not given counseling. Both experimental group and control group will be measured before and after intervention (pretest and posttest).

Analysis univariable is used to describe all the variables (knowledge, education and attitude) in the frequency distribution table. Bivariable analysis is used to know the effectiveness of interventions using counseling through vasectomy module towards enhancement of male participation in family planning. Data analysis techniques in this study using the statistical test Paired T.Test. This test is used to compare two sets of data, both experimental group and control group by measurement scale interval and ratio.

3. RESULTS AND ANALYSIS

3.1. Results

3.1.1. Characteristics of respondents based education and occupation

Table 1 shows characteritics of respondents based educational level. It is indicated the majority proportion of respondent for education level is Senior high school with the total of 46.4%.

Table 1. The characteristics of Respondents Based on Education Level

Education Level	Counseling without Module		Counseling by Module		Total	
	n	(%)	n	%	n	%
Elementary school	19	15.1	8	6.5	27	10.8
Junior high school	34	27.0	15	12.1	49	19.6
Senior high school	56	44.4	60	48.4	116	46.4
University	17	13.5	41	33.1	58	23.2
Total	126	100.0	124	100.0	250	100.0

3.1.2. The respondents reason did not use vasectomy

Table 2 shows respondent reason did not use vasectomy. Based on Table 2, there are three reasons that cause the majority of respondents did not use vasectomy, which still wants to have children (34%), reasons related to religion by 18.4%, and 16.8% are afraid surgery.

Table 2. Reason of Not Use Vasectomy

Reason Did Not Use Vasectomy	Counseling without Module		Counseling by Module		Total	
	n	(%)	n	%	n	%
Want to have children	42	33.3	43	34.7	85	34.0
Scared toward surgery	23	18.3	19	15.3	42	16.8
Have not a children	2	1.6	1	.8	3	1.2
Costs	0	0	2	1.6	2	.8
Afraid toward vasectomy risk	3	2.4	0	0	3	1.2
Does not know	2	1.6	3	2.4	5	2.0
Not ready	5	4.0	2	1.6	7	2.8
Unmanly	13	10.3	12	9.7	25	10.0
Religion	23	18.3	23	18.5	46	18.4
alternative	0	0	7	5.6	7	2.8
Permanent contraception	2	1.6	1	.8	3	1.2
Family planning is wife concern	6	4.8	7	5.6	13	5.2
Can not ejaculate	3	2.4	2	1.6	5	2.0
Sterile	2	1.6	2	1.6	4	1.6
Total	126	100.0	124	100.0	250	100.0

3.1.3. Differences of knowledge and attitudes with counseling

Based on Table 3, average knowledge of respondent after counseled is 4.6, while respondents were given a module is 6.9. The average value of the respondents' attitudes that got counseling without is 4.6, while the attitude of respondents who have received the counseling by module average score is 5.3.

Table 3. Differences of Knowledge and Attitudes with Counseling

	Group	n	Mean	t-test	p
Knowledge score	Counseling with modul	124	6.9032	10.741	0.000
	Counseling without module	126	4.5794		
Attitude score	Counseling with modul	124	5.2661	3.060	0.002
	Counseling without module	126	4.6349		

3.1.4. Results of indepth interviews

Interviews were conducted in four participants from local government, health authorities, and National Family Planning Board (NFPB). The main question is how attitudes toward vasectomy. Various answers in writing showed on Table 4.

Table 4. Answer of Respondent Indepth Interviews

Participant	Answer
Informan 1	Male contraceptives and vasectomies I disagree, because family planning women's concern, vasectomy is the same in the gelding
Informan 2	Disagree vasectomy because it is not in accordance with the teachings of Islam, Family Planning quite wife do
Informan 3	Disagree, although i work at NFPB, because vasectomy provide opportunities to cheating of husband.
Informan 4	This father did not have children, and he is disagree with vasectomy because not accordance with moslem way of life.

3.2. Discussion

The Vasectomy module is tested to 124 respondents, then measured effectiveness by comparing with respondents who have received counseling without module. The results showed there were differences in the value of knowledge and attitudes, where the average knowledge of respondents who have received the module are higher than respondents who have received counseling. Average knowledge of respondents who got a module is 6.9, while respondents who received counseling is 4.6. This difference statistically was significant ($p = 0.000$). There is no difference in attitude measurement results, respondents who got a counseling by module having a score higher than the attitude of respondents who have received counseling without module. The average score of the attitude of respondents who got a counseling by module is 5.3, while respondents who received counseling without module is 4.6. The attitude score difference statistically was significant ($p=0.002$).

The results above show the methods of health promotion with the media module is more effective in improving knowledge of the respondent. Selection methods in health promotion should pay attention to the factors that influence the success of health promotion, including the ability of the promoter, the state of the target group [23]. The module is one of the media health promotion in the form of reading material. In substance modules that emphasize the independence (self-learning). Modules can be formulated as a complete unit and stand-alone unit and consists of a series of activities organized help participants achieve a number of objectives that were defined specifically and clearly. Media module spur creativity and provide opportunities for participants to master the material in accordance with the circumstances of each. The module fits perfectly with the state of society in the study because flexibility is used. Counseling module is one of the effective methods to disseminate audiovisual vasectomies. According to Bhandari and Shrestha [24], audiovisual media exposure is important for men in determining the behavior associated with contraception.

Various studies regarding the use of media to promote the active participation of men in family planning programs shows that the media is very important as a means to promote family planning program [25]-[29]. Research conducted by Musafaah [30] showed that the respondents were exposed to the mass media more in the program of family planning than those not exposed to the mass media. There is a significant relationship between the mass media access to the contraceptive method in males [25]. Effectiveness research conducted by media modules have Sutanto, et al [31] which examined the effectiveness of nutrition counseling modules, where the modules are effective in improving posture but is not effective for knowledge and behavior.

Knowledge and Attitudes is a predictor of a person's behavior. The use of modules in health promotion is expected to change the behavior of people to use a vasectomy. The findings of this study describes the various constraints affecting the successful use of vasectomy as a male contraceptive in North Kolaka. Various obstacles can be seen from the results of research on the reasons for refusal vasectomy and from interviews with health authorities, local governments, and employees at NFPB. The results of the study describes the views of men about vasectomy drawn from answering questions reason not to use the largest such vasectomy because they want to have children, fear of surgery, religion (moslem perception), and lost virility. In this study did not find an association between vasectomy disapproval reasons to education. Research conducted by Biestch [27] found that people who are highly educated more receive family planning program.

The results of in-depth interviews ranks of government and related agencies illustrates how a vasectomy rejection associated with ignorance of which is based on the answers that family planning is a woman's problem, as well as vasectomies in the gelding. Another significant reason is related to religion. The results show 46% of respondents claim to reject family planning because of religion (majority religion of society in North Kolaka is a moslem). It also strengthened the results of in-depth interviews, where some respondents answered vasectomy is contrary to the teachings of the religion (Islam perception). Research conducted by Biestch [27] reported that among muslims is lower in receiving family planning program compared Christians society. Another reason respondents do not approve of vasectomy is their worriers if his wife have perception that vasectomy make husband aesy to cheating.

In contrast to research conducted by Khalifa [32] reported that 91% of men in sudan receive family planning programs if their wives are in poor health, while 57% of men in Sudan using family planning programs because of economic limitations. Pakistan reported that more men are receiving contraceptive use than women [33]. The results of in-depth interviews to provide input regarding further intervention which may be made by the NFPB in order to increase the participation of men in family planning programs, especially vasectomies. In line with research conducted by Buzy and Smith [34] reported that the interview with Focus groups can increase the male role in providing input for the success of the intervention program on male contraception.

The success of vasectomy contraceptive method also requires the support of religion leaders or religion institutions to accelerate the success of vasectomy. Advocacy of religions institutions of Indonesia should be conducted related to family planning program. The module is more effective to improving knowledge and attitudes than counseling without module. The most reason for rejection vasectomy was they want to have children, fear of surgery and religious issues.

4. CONCLUSION

The results of this study showed that vasectomy module can be used as an effective method to increase acceptability of male sterilization among men in North Kolaka, Southeast Sulawesi. Besides that, the success of vasectomy module also requires the support of religion leaders in North Kolaka.

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