



THE DETERMINANTS OF USING VASECTOMY CONTRACEPTION IN SOMBA OPU DISTRICT, INDONESIA

Sitti Raodhah^{1*}, Kasriana¹

¹Public Health Study Program, Faculty of Medicine and Health Sciences, Alauddin State Islamic University Makassar, Indonesia

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CORRESPONDENCE

Phone : +62811339020
Email : le_judah@yahoo.com

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ABSTRACT

Background: MOP (Male Operation Method) is an alternative family planning method for men who have decided they don't want to have more children by undergoing minor surgery on the sperm duct by blocking or blocking the way for the sperm to prevent fertilization.

Objective: The purpose of this study was to determine the determinants of the use of MOP (Male Operation Method) / Vasectomy contraception in Somba Opu District, Gowa Regency.

Method: This research is quantitative research with analytics method by using cross sectional study, The sampling technique used was proportional random sampling with a sample size of 99 respondents. The data collection employed was a questionnaire, and the data was analyzed using the chi-square test.

Result: The results showed that there was an influence between income ($p = 0.002$), knowledge ($p = 0.003$), attitude ($p = 0.004$), wife's support ($p = 0.004$) with the use of MOP contraception and there was no influence between age ($p = 0.082$), education ($p = 0.465$), the number of children ($p = 0.204$), the number of children wanted ($p = 0.876$), PLKB ($p = 0.267$) with the use of MOP contraception.

Conclusion: This study is expected to gain a clear understanding of contraceptives and can easily determine their choice of family planning, especially male FP (Male Operation Method).

INTRODUCTION

The projection of Indonesia's population in 2010-2035 shows that Indonesia's population for the next twenty-five years will continue to increase from 238.5 million in 2010 to 305.6 million in 2035 (BPS, 2013).

Total Indonesia's fertility rate (TFR) is still at the figure of 2.6 in 2012. The TFR condition is still high and causes growth population becomes high, this results in increasing birth rate. If numbers uncontrolled birth then the population will be the greater it is. (Risa, 2017). To suppress the growth rate population and increase health of both mother and child. Program family planning nationwide and internationally recognized as one capable program reduce fertility rates. (Rosa, 2014)

One of the efforts carried out in the family planning program is through the use of contraceptives. Based on data from the *World Health Organization* (WHO), when compared to other ASEAN countries, the use of contraceptives in Indonesia is 61%. This data already exceeds the ASEAN average (58.1%). However, it is still lower than in Vietnam (78%), Cambodia (79%), Thailand (80%) (Kementrian Kesehatan, 2013).

The SDGs (decision has the 3rd (third *sustainable Development Goals*)) goal of ensuring a healthy life and encouraging welfare for all people of all ages. With a target by 2030, guarantee universal access to family planning (KB) health services,

information, and education, as well as the integration of reproductive health into national strategies and programs (BKKBN, 2017).

The Male Operation Method (MOP), or more commonly known as a vasectomy, is one of the long-term contraceptive methods (MKJP). Vasectomy / MOP (Male Operation Method) is an alternative family planning method for men who have decided they don't want to have more children by undergoing minor surgery on the sperm duct by blocking or blocking the way for the sperm to prevent fertilization. And vasectomy is not the same as castration (castration). Until now, the wrong view of most people still thinks that MOP/vasectomy is the same as castration (castration), so it is feared that it can cause obesity and lose potential as a man.

In South Sulawesi, in 2017 the number of family planning acceptors reached 764,005 participants, for contraceptive use the most widely used injection method was 429,295 (56.9%) of the total family planning acceptors. Meanwhile, the use of pills was 152,968 (20.02%) participants, 69,553 (9.10%) participants used implants, 15,823 (2.07%) participants used condoms, 25,078 (3.28%) IUD use participants, 35,288 (4.62%) participants, and 12,132 (1.59%) MOP users (Kementrian Kesehatan RI, 2018).

Based on data from the 2018 DPPKB Gowa Regency, 83,416 active family planning participants used 11,396 pills, 56,210 injections, 11,600 implants, 341

condoms, 2,420 IUD participants, 1,394 MOW participants, and 55 MOP participants.

Somba Opu District, which is one of the areas in Gowa Regency with the largest population, namely 168,021 people with an area of 28.09 km². From the preliminary data that the researchers got at the DPPKB Gowa district, the largest number of participants were husband and wife couples of childbearing age, namely 1,9257 people and active family planning participants as many as 1,3079, only 12 participants in the Male Operation Method. The highest number of family planning participants was the injection method, namely 8,176 participants. From this data, it can be seen that the participation of men or husbands in family planning is very low in Somba Opu District, Gowa Regency.

Based on the background above, it shows that there is still a very lack of male or husband participation in family planning, especially in the use of male contraceptive methods (MOP) / vasectomy, so the researchers are interested in researching the determinants of the use of male contraceptive methods (MOP) / vasectomy in Somba Opu District, Gowa Regency.

METHODS

This research is a type of quantitative research, the method used in this research is analytic with a design *cross-sectional*. This research was conducted in the Somba Opu Subdistrict, Gowa Regency which consists of 18 districts. The

population in this study were all male reproductive age couples (PUS) who used family planning who resided in Somba Opu District, Gowa Regency, as many as 13079 people. Sampling in each village was carried out by *proportional random sampling* and obtained 99 respondents. Data analysis was carried out in two stages, namely univariate analysis and bivariate analysis.

RESULTS

Table 1. Characteristics of respondents

Characteristics of respondents	Total	
	n (99)	%
Age		
25-35 years	48	48.5
35 years	51	51.5
Higher education		
(SMA-Peguruan Tinggi)	74	74.7
Low (not in school-SMPA)	25	25.3
Income		
<2,860,382	64	64.6
> 2,860,382	35	35.4
Total Children		
≤ 2	58	58.6
> 2	41	42.4
Total desired children		
≤ 2	35	35.4
> 2	64	64.6

Source: primary data, 2019

Based on table 1, it shows that the frequency distribution of Respondents' characteristics is as follows, the highest age of respondents is >35 years old as many as 51 (51.5%), the highest education level of respondents is in the high category (high school and university) as much as 74 (74.7%), income The highest respondent was <2,860,382 as many as 64 (64.6%), the highest

number of children of the respondent was ≤ 2 as many as 58 (58.6%), and the number of children wanted by the highest respondent was > 2 as many as 64 (64.6%) (Primary Data, 2019).

Table 2. Determinants Of MOP Contraceptive Use

Variable	Total	
	n(99)	%
Contraceptive use MOP		
MOP	12	12.1
No MOP	87	87.9
Knowledge		
Good	43	43.4
Less	56	56.6
Attitudes		
Supporting	44	44.4
Not Supporting	55	55.6
KB Field Officers		
Supporting	56	56.6
Less Support	43	43.4
Support wife		
Supports	44	44.4
Less Support	55	55.6

Source: primary data, 2019

Based on table 2, showed that contraceptive use MOP highest in the category of not MOP by 87 (87.9%), respondents' knowledge high in the less category of 56 (56.6%), the highest respondent's attitude was in the less supportive category of 55 (55.6%), the

highest family planning field officer was in the supportive category of 56 (56.6%) and the highest respondent's wife's support was in the less supportive category of 55 (55.6%) (Primary Data, 2019).

Based on table 3, the results show that there is an influence between income ($p = 0.002$), knowledge ($p = 0.003$), attitude ($p = 0.004$), wife's support ($p = 0.004$) with the use of MOP contraception and there is no influence between age ($p = 0.082$), education ($p = 0.465$), number of children ($p = 0.204$), number of children wanted ($p = 0.876$), PLKB ($p = 0.267$) with the use of MOP contraception (Primary data, 2019).

DISCUSSION

The Effect of Age on the Use of MOP Contraception

Age has a positive and significant effect on contributions in decision making, the older the age, the higher the contribution in making decisions because age affects one's emotions and thought patterns. (Ni putu, 2018). Age is very important in determining to use contraceptives because at certain phases of age determine the rate of reproduction someone. (Muh.Irwan, 2013)

Table 3. Distribution of Effects of MOP Contraceptive Use (Male Operation Method)

Variable	Use of MOP				Total		P-Value
	No MOP		MOP		N(99)	%	
	n(87)	%	n(12)	%			
Age							
25-35 years	45	51.7	3	25	48	48.5	0.82
> 35 years	42	48.3	9	75	51	51.5	
Higher Education	64	73.6	10	83.3	74	74.7	0.465
Low	23	26.4	2	16.7	25	25.3	
Income							
High	26	29.9	9	75	35	35.4	0.002
Low	61	70.1	3	25	64	64.6	
Number of children							
≤ 2	53	60.9	5	41.7	58	58.6	0.204
> 2	34	39.1	7	58.3	41	41.4	
Number of children chilled							
≤ 2	31	35.6	4	33.3	35	35.4	0.876
> 2	56	64.4	8	66.7	64	64.6	
Knowledge							
Good	33	37.9	10	83.3	43	43.4	0.003
Less	54	62.1	2	16.7	56	56.6	
Attitude							
Support	34	39.1	10	83.3	44	44.4	0.004
Less Support	53	60.9	2	16.7	55	55.6	
PLKB							
Support	51	58.6	5	41.7	56	56.7	0.267
Less Support	36	41.4	7	58.3	43	43.3	
Support Istri							
Support	34	39.1	10	83.3	44	44.4	0.004
Not Support	53	60.9	2	16.7	55	55.6	

Source: primary data, 2019

Based on these data there is no effect of age with the use of male contraceptive methods of operation (MOP). This is following the research of Susi E (2016), based on the results of the bivariate test using the test *Chi-Square*, it is known that (p is greater than 0.05), namely 0.438 so that statistically it can be seen that there is no relationship between age and male participation in family planning.

The Effect of Education on the Use of Contraception MOP

Knowledge about the vasectomy method in men influenced by the level of male education the. One of important factor of knowledge change is an educational background. Education can change attitudes and perceptions, from attitudes the majority of which is negative to be attitudes positive. (Ratna, 2013)

The education level of respondents in Somba Opu Subdistrict, Gowa Regency is categorized into two categories, namely: high and low education, from the results of the study where respondents who used MOP contraception were more often found among highly educated respondents, namely 10 people (83.3%). The results of statistical tests obtained $p\text{-value} = 0.465$, it can be concluded that there is no influence between education and the use of MOP

(Male Operation Method). This is in line with the research conducted by Sri Nowo (2011), the results of the *chi square* test $p = 0.678$, which means there is no significant relationship between husband's education and vasectomy participation.

The Effect of Income on the Use of MOP Contraception.

The higher a person's income, it can be assumed that the better his health status will be, because access to health services will be easier. The level of income will affect the choice of contraception. This is because to get the necessary contraceptive services, acceptors must provide the necessary funds. Someone will definitely choose contraception according to their ability to get contraception.

Based on the bivariate analysis between income and the use of vasectomy contraceptives, the obtained value of $p = 0.002$. That is, there is an influence between income and the use of MOP contraception (male surgery method). The results of this study are following research conducted by Rosmadewi (2015) which states that there is an influence between economic factors on the use of the male contraceptive method $p < 0.05$. This is following the statement of Ratih (2011), namely that the level of income is a measure of a person's eligibility in

obtaining an award from his work that is used to meet his needs. Based on the results of research in Somba Opu Subdistrict, Gowa Regency, the respondents who used MOP contraception were more often found among respondents with high income, namely 9 respondents (75%).

Effect of the number of children wanted on the use of MOP contraceptives

Amountchild life affects couples of childbearing age indetermine the contraceptive method to be used. In couples with a small number of living children there is a tendency to use methodscontraceptives with low effectiveness, while on couples with a large number of living children existthe tendency to use contraceptive methods withhigh effectiveness. (Vida, 2014)

Based on the bivariate analysis between the number of children wanted with the use of vasectomy contraception, the value of $p = 0.876$ was obtained. That is, there is no effect between the number of children wanted and the use of MOP (male surgery method) contraception. This is not following research from Aminatul M, Maulida I, et al., 2014. The results of the Spearman rank correlation statistical test show that there is a significant relationship between the number of families desired and the choice of contraceptives, with a p -

value of 0.000 smaller than 0.05 (0.000 less 0.05). This shows that someone who wants to limit having children tends to choose long-term contraception, while someone who still wants to have children will choose short-term contraception. The number of children wanted, depending on the family itself, thus the decision to have many children is an option, which choice is very much influenced by the value which is considered as an expectation of each wish chosen by the parents. As the head of the family, the husband is the backbone of the family and is always involved in making decisions about family welfare, including determining the number of children he wants. The desire to have children will create a demand that does not take into account either the supply or the possible limited family costs.

The Effect of Knowledge on the Use of MOP Contraception

Knowledge is the result of knowing, and this occurs after people sensing a certain object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste, and touch. Knowledge is a very important factor in the formation of one's actions (Soekidjo N, 2014).

The results of statistical tests obtained $p\text{-value} = 0.003$, it can be concluded that there is an influence

between knowledge and the use of MOP (Male Operation Method). Knowledge of birth restriction and family planning (KB) is an important aspect of understanding the various contraceptives available. The better the husband's knowledge about MOP, the higher the interest husband uses MOP. (Betristasia, 2018)

This is in line with research conducted by Agustian S, (2015). The results of the test *chi-square* with the variables studied were the relationship between knowledge and the choice of male contraception (vasectomy) which has a significant value of 0.000. Therefore, because the smaller the p-value of 0.001, it can be concluded that there is a relationship between knowledge with the election of contraceptive Men (Vasectomy) In the Work Area UPTD Kampung Bali Puskesmas District of Pontianak City 2015.

Influence Attitudes Toward Contraceptive Use MOP

Attitude is a reaction or response still closed from a stimulus or object. Because it is logical to expect that someone will be reflected in the form of a tendency towards behavior towards objects (Soekidjo N, 2014).

Based on the results of the study showed that respondents who had a supportive attitude who used MOP contraception (Male Operation Method)

were 10 people (83.3%), while respondents who had a less supportive attitude were 2 people (16.7%). The statistical test results *p-value* =0.004, it can be concluded that there is an influence between attitude and the use of MOP (Male Operation Method). The results of this study are in line with Aryanti's research (2015) where $p = 0.014$ means that there is a significant relationship between attitudes and MOP behavior in Bandar Lampung. This shows that a good attitude of respondents towards male KB, especially the male surgical method, can increase the use of male methods of surgery because attitudes can influence a person to have KB or not. (Aryanti, 2015).

The Effect of Family Planning Field Officer (PLKB) on the use of MOP contraception.

Based on the bivariate analysis between PLKB and the use of vasectomy contraception, the p-value was obtained (0.267). This means that there is no influence between PLKB and the use of MOP contraception. This is in line with research conducted by Elsa (2018), the results of the analysis *Chi Square test* $p = <0.05$ which means that there is PLKB's role relationship as male extension agents in family planning. Based on the results of interviews with respondents in the Somba Opu District, Gowa Regency, it shows that

the majority of respondents stated that PLKB does not always explain the vasectomy contraceptive method, as well as family planning health workers who rarely provide counseling about the Male Operation Method, from the statistical results show that family planning field officers 5 respondents (41.7%) supported respondents using MOP contraception in Somba Opu Subdistrict, and 7 respondents (58.3%) who were less supportive.

Based on the results of research in the field, the role of family planning field officers has a strong influence on the use of contraception in Somba Opu District, Gowa Regency. Based on the results of observations in the field, there is still little counseling or socialization regarding the use of MOP contraception to respondents and some respondents said that Family Planning Field Officers should be men because they are embarrassed if the PLKB in the area is a woman. This can be one of the factors that husbands/men of PUS do not use MOP contraception.

The Effect of Wife's Support on Contraceptive Use of MOP

Based on the bivariate analysis between the wife's support and use of vasectomy contraception, the p-value was obtained (0.004). This means that there is an influence between the wife's support and the use of MOP contraception. The

results of this study are in line with research conducted by Surya (2019) in Jember District, the results of data analysis using the test logistic regression yields significance equal to 0.000 ($p < 0.05$) which means that there is an influence wife's support for male participation in the family planning program.

The results are consistent with the theory of Green in Notoatmodjo (2014) which states that the wife's support is a one-factor amplifier (*reinforcing*) which makes a person act against a specific object. However, the factor *reinforcing* can be positive or negative depending on the attitude and behavior. The wife's support variable has a positive effect on participation in family planning, namely the more supporting the wife the more respondents consider before participating in male family planning. Support is the availability of resources that provide physical and psychological comfort obtained through the knowledge that the individual is loved, cared for, valued by others and he is also a member of a group based on common interests.

CONCLUSION

The results showed that there was an influence between income ($p = 0.002$), knowledge ($p = 0.003$), attitude ($p = 0.004$), wife's support ($p = 0.004$) with the

use of MOP contraception and there was no influence between ages ($p = 0.082$), education ($p = 0.465$), number of children ($p = 0.204$), number of children wanted ($p = 0.876$), PLKB ($p = 0.267$) with the use of MOP contraception.

SUGGESTION

Increase and optimize the frequency of counseling on contraception, especially MOP for the community, so that it can increase public knowledge, especially those who are the target of MOP. The community is willing to take part in every program implemented by the Government, especially in the field of family planning so that people can gain a clear understanding of contraceptives and can easily determine their choice of family planning, especially male family planning (Male Operation Method).

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