RESEARCH ARTICLE OPEN ACCESS

Manuscript received February 26, 2024; revised March 16, 2024; accepted March 16, 2024; date of publication April 25, 2024
Digital Object Identifier (**DOI**): https://doi.org/10.35882/ijahst.v4i2.44

How to cite: Winda Nur Musfiroh Agustin, Ervi Husni, Ani Media Harumi, Erwin L. Rimban, and Joylyn L. Mejilla, "An Analysis of Factors Influencing Participation of Men Fertilizer Age Couples to Acceptors of Mop (Male Operating Methods) Contraception", International Journal of Advanced Health Science and Technology, vol. 4, no. 2, pp. 36–42, April. 2024.

An Analysis of Factors Influencing Participation of Men Fertilizer Age Couples to Acceptors of Mop (Male Operating Methods) Contraception

Winda Nur Musfiroh Agustin[1], Ervi Husni[1], Ani Media Harumi[1], Erwin L. Rimban[2], and Joylyn L. Mejilla[3]

[1] Department of Midwifery, Health Polytechnic Ministry of Health Surabaya, Indonesia
[2] College of Allied Health Sciences, Philippines
[3] School of Nursing, Centro Escolar University, Manila, Philippines
Corresponding author: Winda Nur Musfiroh Agustin (e-mail: windanur53@gmail.com).

"This work was supported in part by Department of Midwifery, Health Polytechnic Ministry of Health Surabaya, Indonesia"

ABSTRACT Vasectomy or MOP is a long-term contraceptive intended for men which can be a form of husband participation in contraception and family planning so that family planning is not only the wife's obligation. Until now, there is still a lack of male participation in taking MOP Contraception, as stated in the results of the Family Health Profile survey conducted by the BKKBN in 2019 in the Indonesia Health Profile in 2019 the MOP target is 8.77% and the achievement is very far from the target, which is only 0, 5%. (RI, 2019). This study was conducted to identify Knowledge, Attitudes and Support of Childbearing age Men's Wives in Jati Village, and to determine the effect of Wife's knowledge, attitudes and support on the participation of Childbearing age Men in the use of MOP contraception. The type of research carried out is observational with analytical survey research methods and cross sectional approach with a population of 405 people and a sample of 134 Childbearing age Men. The sampling technique was cluster random sampling. The dependent variable in this study was the participation of Childbearing age Men, while the independent variables were attitudes, knowledge, and wife's support. Bivariate analysis used is Chi Square with 0.05, Multivariate analysis used is Multiple Logistics Regression. Results: Most (72.4%) Childbearing age Men have less knowledge, Almost all (78.4%) Childbearing age men have a negative attitude towards MOP contraception, and Almost all Childbearing age Men (84.3%) do not receive the support of their wives in participating in using MOP contraception. The results of the analysis test showed that there was an influence of knowledge with the participation of male pus in the use of MOP contraception (P value 0.000) , there was an effect of male pus attitude with participation in the use of MOP contraception (P value 0.025) and there was an effect of wife's support with the participation of male pus in the use of MOP contraception. (P value 0.020). The most influential factor is wife's support with an OR value of 21.712. There is an effect of Wife's Knowledge, Attitude and Support with the participation of Childbearing age Men in the use of MOP contraception.

INDEX TERMS Vasectomy, MOP, PUS

I. INTRODUCTION

Family planning is an effort to help individuals or couples, among others, to prevent unwanted births or vice versa for couples who want children, regulate the interval of pregnancy, control the time of birth related to the age of the parents, determine the number of children in the family.[1]Contraception is no longer the responsibility of women only, but husbands can also be acceptors of simple contraception, namely condoms or steady contraception, namely MOP or commonly known as vasectomy[1][2].

Vasectomy or MOP is one of the long-term contraceptives intended for men which can be a form of the husband's participation in contraception and family planning so that family planning is not only the wife's obligation[3][4]. Even so, until now there is still a very lack of male participation in following MOP contraception or vasectomy[5]. The cause of the low participation of men in the MOP method of family planning is that there are still many people who do not know about the existence of contraception for men other than condoms, making men ultimately unable to participate directly in the use of

contraception, but also because of negative attitudes and thoughts about male contraception, thinking that family planning is a duty[6][7]. women are not the responsibility of men even though the regulation of pregnancy and family welfare is a shared responsibility, not to mention the bad stigma that grows in society about vasectomy which makes people think that vasectomy is the same as castration, vasectomy interferes with ejaculation and erection as well as sexual relations, wife support also many wives are worried that if their husbands use vasectomy contraception, their husbands can have sexual relations with other people without fear of getting pregnant[3][8].

Findings in a study conducted in Ogume Delta State Nigeria showed insufficient knowledge about vasectomy among respondents, poor perception and attitudes toward vasectomy. Furthermore, the research shows that the respondent's knowledge does not significantly influenced their perception and attitude towards vasectomy[2]. This shows that the perception and The attitude of Nigerians including educated individuals towards vasectomy is still very bad and much still needs to be done should be done by all stakeholders to increase the acceptance of vasectomy as a form of family planning among men[9][10]. Therefore, this study recommends that more campaigns be carried out to enlighten the public in particular men benefit from vasectomy as a form of family planning and also men should be included in The issue of family planning has changed the current perspective that family planning is only for women[11][10].The BKKBN also revealed that the problem of public knowledge is that there are still people who do not know at all that the existence of contraception for men affects the participation of men in family planning so that knowledge is one of the factors that influence the low selection of male contraceptives[12][13]. By knowing what factors cause the low participation of male couples of childbearing age, it is hoped that it can be an evaluation for midwives in particular to be able to increase the participation of male couples of childbearing age to MOP contraception[14][7].

II. METHODS

This type of research is a quantitative method using a descriptive survey design, using a cross-sectoral model approach. This research was conducted in Jati Village, Kec. Sidoarjo, Kab. Sidoarjo in March – July 2021. The population in this study were all Men of childbearing in Desa.Jati, with a total sample of 134 Men of childbearing.With criteria Inclusion,Men of childbearing age who have wives aged 25-45 years, Have a minimum of 2 children, Willing to be a respondent and sign the Informed Concent, And Exclusion Criteria Illiterate / unable to read, Men of childbearing age with wives aged 25-49 years who have experienced menopause, Men of childbearing age from wives aged 25-49 years with chronic diseases so it is not possible to do research, Living far away or separated from Wife, Wife has Hysterectomy.

The type of research conducted is observational with analytical survey research methods and cross sectional approach with a population of 405 people and a sample of 134 Men. The sampling technique was cluster random sampling. The dependent variable in this study was the participation of Pussy Men, while the independent variables were attitudes, knowledge, and wife's support. Bivariate analysis used is Chi Square with 0.05, Multivariate analysis used is Multiple Logistics Regression.The research stages include the preparation of reference/literature studies, preparation of research proposals, obtaining initial research permits to the Poltekkes Campus of the Ministry of Health Surabaya followed by Bangkesbangpol East Java, Bangkesbangpol Sidoarjo, then coordinating with the Urangagung Health Center and the Village Head of Jati in collecting research data. After getting permission, the researcher can collect data. After that, the researcher asks permission from the respondent to do research, the respondent signs the Informed Concent. Data collection was carried out for 10 days from 26 June to 06 July 2021 with a total sample of 134 men of sexual intercourse.

The variables studied were husband's knowledge, husband's attitude and wife's support to the participation of men of childbearing age in the use of MOP contraception or vasectomy[15][16]. The sampling technique was cluster random sampling. The dependent variable in this study was the participation of men of childbearing age, while the independent variables were attitudes, knowledge, and wife's support. Bivariate analysis used is Chi Square with 0.05, Multivariate analysis used is Multiple Logistics Regression.

III.RESULTS

An overview of the research location Jati Village is located in Sidoarjo District, Sidoarjo Regency, East Java Province. Jati village is included in the Working Area of the Urangagung Health Center with an area of 142 KM2, consisting of 10 RW.

A. KNOWLEDGE OF MEN OF CHILDBEARING AGE IN MOP CONTRACEPTION

TABLE 1
Distribution of Knowledge Frequency in Couples of Childbearing Age about MOP in Jati Village, Sidoarjo, East Java June – July 2021

Knowladge	Frequency (n)	Percentage (%)
Good	2	1.5 %
Enough	35	26.1 %
Low	97	72.4 %
Whole	134	100%

TABLE 1 shows that the majority (72.4%) of male couples of childbearing age have less knowledge about MOP contraception.

B. ATTITUDES OF MEN OF CHILDBEARING AGE TO MOP CONTRACEPTION

TABLE 2
Frequency Distribution of Attitudes of Men and couples of childbearing age regarding MOP contraception in Jati Village, Sidoarjo, East Java June – July 2021

Attitudes	Frequency (n)	Percentage (%)
Positif	29	21.6%
Negatif	105	78.4%
Wholly	134	100%

TABLE 2 shows that almost all (78.4%) of male couples of childbearing age have a negative attitude towards MOP contraception.

C. WIFE'S SUPPORT FOR MOP CONTRACEPTION

TABLE 3
Frequency Distribution of Wife Support to Men Couples of childbearing age in MOP Contraception in Jati Village, Sidoarjo, East Java June – July 2021

Wife Supports	Frequency (n)	Percentage (%)
Support	21	15.7%
Not Support	113	84.3%
Total	134	100%

TABLE 3 shows that almost all (84.3%) male couples of childbearing age do not get wife's support to participate in using the MOP contraceptive method.

D. PARTICIPATION OF MEN OF CHILDBEARING AGE IN MOP CONTRACEPTION.

Table 4
Distribution Frequency of Participation Men Childbearing Age in MOP Contraception in Jati Village, Sidoarjo, East Java June – July 2021

Participation	Frequency (n)	Percentage (%)
Participate	1	0,7%
Not Participate	133	99,3%
Wholly	134	100%

TABLE 4 shows that almost all (99.3%) male couples of childbearing age do not follow MOP contraception.

E. THE EFFECT OF KNOWLEDGE ON THE PARTICIPATION OF MEN OF CHILDBEARING AGE IN THE USE OF MOP CONTRACEPTION.

Table 5
Cross tabulation of knowledge with husband's participation in MOP contraception in Jati Village, Sidoarjo, East Java

Knowladge	Participation Men Childbearing Age: Participate Σ	Participate %	Not Participate Σ	Not Participate %	Total Σ	Total %
Good	1	50%	1	50%	2	100%
Enough	0	0%	35	100%	35	100%
Low	0	0%	97	100%	97	100%
statistical test results	*Chi Square* 0.000					

Based on TABLE 5, all men of reproductive age (100%) with poor knowledge do not participate in the use of MOP contraception, while half of (50%) Men of reproductive age with good knowledge participate in the use of MOP. The results of the statistical test P Value 0.000 (α<0.05) which means that there is a significant effect between knowledge of Men of reproductive age and participation in the use of MOP contraception.

F. EFFECT OF ATTITUDE ON THE PARTICIPATION OF MEN OF CHILDBEARING AGE IN THE USE OF MOP CONTRACEPTION.

TABLE 6
Cross-tabulation of Attitudes with Husband's Participation in MOP contraception in Jati Village, Sidoarjo, East Java

Attitudes	Participation Men Childbearing Age: Participate Σ	Participate %	Not Participate Σ	Not Participate %	Total Σ	Total %
Positif	1	3.44%	28	96.55%	29	100%
Negatif	0	0%	105	100%	35	100%
statistical test results	*Chi Square* 0.025					

Based on Table 6, it can be interpreted that all male couples of childbearing age (100%) who have a negative attitude choose not to participate in the use of MOP contraception, while a small percentage (3.44%) of male couples of childbearing age with a positive attitude choose to participate in the use of MOP contraception. The results of the statistical test obtained a P value of 0.025 (α <0.05), which means that there is a significant influence between the attitudes of men of childbearing age and participation in the use of MOP contraception.

G. EFFECT OF WIFE'S SUPPORT ON THE PARTICIPATION OF MEN OF CHILDBEARING AGE IN THE USE OF MOP CONTRACEPTION.

TABLE 7
Cross tabulation of Wife's Support with Husband's Participation in MOP contraception in Jati Sidoarjo Village, East Java

Wife's Support	Participation Men Childbearing Age: Participate Σ	Participate %	Not Participate Σ	Not Participate %	Total Σ	Total %
Support	1	4.7%	20	95.2%	21	100%
Not Support	0	0%	113	100%	113	100%
statistical test results	*Chi Square* 0.020					

TABLE 7 shows that all male couples of childbearing age who do not get wife's support do not participate in the use of MOP contraception. The statistical test results value P Value 0.020 (α < 0.05) which means that there is a significant effect between Wife Support and husband's participation in the use of MOP contraception.

H. THE MOST INFLUENTIAL FACTOR

TABLE 8
Summary of Multivariate Analysis Test Results Using Logistics Regression Method

Variabel	Exp (B) / OR
Knowladge	12.4111
Attitude	5.663
Wife's Support	21.712

TABLE 8 shows that for the knowledge factor with an odds ratio of 12,411 with the interpretation that men of childbearing age with good knowledge are 12 times more likely to participate in the use of MOP contraception, for the male attitude factor, fertile age couples with positive attitudes are 5 times more likely to participate in the use of MOP contraception, while for wife support. Men of childbearing age couples with Wife Support are 21 times more likely to participate in the use of MOP contraception[3][4]. The independent variable with the greatest influence is wife's support, seen from the value of Exp (B) or OR, the greater the value, the greater the effect on the dependent variable.

IV. DISCUSSION

A. THE INFLUENCE OF KNOWLEDGE FACTOR WITH THE PARTICIPATION MEN OF CHILDBEARING AGE AS MOP ACCEPTORS

The results showed that most of the knowledge of male couples of childbearing age in Jati village about MOP contraception was lacking, and all male couples of childbearing age with less knowledge did not follow MOP contraception[17][18]. Analysis of the data found that there was a significant effect between knowledge and participation of male couples of childbearing age in the use of MOP contraception, with an OR of 12,411 or it could be interpreted that male couples of childbearing age with good knowledge were 12 times more likely to take MOP contraception[19].

Notoatmodjo said that knowledge is what people or respondents know related to health and illness or health, for example: about disease (causes, modes of transmission, methods of prevention), nutrition, sanitation, health services, environmental health, family planning, and so[11]. Likewise with the theory revealed by Kholid and Notoadmodjo Knowledge will encourage someone to do something starting from a sense of knowing and ending with being willing to take responsibility for his choices because what he chooses is based on the knowledge gained so as to provide strong confidence.[3]

Likewise, research conducted in Tabor City, East Africa conducted by Alemu Dagu which also said that there was a significant relationship between husband's knowledge of the use of MOP contraception, this is also in line with the results of research conducted by Ashley L. White who presented the same results as a study conducted in the United States with the results of a relationship between husband's knowledge of the use of MOP contraception[6]. The result showed a significant association of knowledge of males with their selected variables. The calculated p value of males and females with selected variables of knowledge and attitude was nonsignificant which showed that there was no association between the level of knowledge and attitude of males and females towards tubectomy and vasectomy[8]. Conclusion: It was concluded that Knowledge of the males and females regarding tubectomy and vasectomy was in average and Attitude was moderately favourable[20]. There was not any relationship between knowledge and attitude of males and females regarding tubectomy and vasectomy.[6]Research in Nigeria by Hyganus Since 29.5% of the respondents may choose vasectomy if they understood the procedure to be safe, this calls for co-ordinated programmes to educate the public and to provide information on vasectomy[21]. Further research in Debre Tabor Town, North West Ethiopia the prevalence of intention of married men to use vasectomy for future life was inlined with a study done in four regions of Ethiopia (Amhara, Oromia, SNNP and Tigray). Age (30–39) years, having more than three living children, having good knowledge, and a positive attitude towards vasectomy were significantly associated with the intention to use vasectomy for future life as a contraceptive method[13]. As per finding, improving level of knowledge and attitude towards vasectomy is an essential strategy to scale up the intention of men to use vasectomy[20].[8] In other result in Ethiopia In this study, about 75% of Married men have heard of vasectomy. This This finding is higher than the 2011 EDHS report which showed that only 17.6% of married men had heard of vasectomy. This is probably due to the change in time since EDHS 2011 was conducted 5 years ago. Another reason is that our study was conducted in a temporary urban environment EDHS involves both rural and urban areas. Enhanced efforts of governmental and non-governmental organizations to increase long-term family acceptance planning methods may be another reason. Data the method of collection and the curiosity of the data collectors in this study may be another reason. In EDHS, data collectors may not be health professionals. In the In addition, information about vasectomy is one of the the many variables they collec[8]t. Although the proportion of married men who have heard of a vasectomy is high compared to the 2011 EDHS report, the proportion of those who have never heard of a vasectomy no small (24.8%). This shows that health workers and the media put little emphasis on this method. That the most frequently mentioned sources of information for vasectomy is a friend. This reaffirms the assumption above that healthcare professionals and the media give less emphasis on vasectomy. Proving that knowledge strongly supports vasectomy[22] [9]. Further research, a cross-sectional survey design was carried out utilizing a questionnaire. Stratified and simple random sampling was used. The sample size consisted of 234 respondents, with 142 male respondents and 92 female respondents. Descriptive statistics, independent T-test and chi square for assessing association between variables using SPSS version 17 were used for data analysis. This study found that 51.2% of respondents had good knowledge about vasectomy. Knowledge did not correlate with acceptance of vasectomy: 92.6% of respondents with good knowledge, 96.2% of those with fair knowledge and 92.9% of those with poor knowledge did not accept vasectomy (P=0.787).[10]

The participation of men of childbearing age in MOP is influenced by knowledge because knowledge has a major contribution in changing a person's behavior to do something[9][23]. The knowledge that a person has will allow that person to do things that are profitable and bring benefits to him from the information he gets. With sufficient knowledge about contraceptives, it will affect the husband's participation in the use of contraception in this case is MOP[19].

The lack of knowledge resulted in the formation of misunderstandings about MOP contraception so that many misunderstandings about MOP formed a mindset that MOP is the same as castration and affects Erection and ejaculation forming fear in the husband and finally the husband decides to be reluctant to follow MOP Contraception[24][21]. become an MOP Contraception Acceptor, because knowledge encourages someone to want to do something.

B. THE INFLUENCE OF ATTITUDE FACTORS WITH HUSBAND'S PARTICIPATION AS MOP ACCEPTORS

The results showed that most of the attitudes of male couples of childbearing age in Jati village about MOP contraception were negative, and all male couples of childbearing age with negative attitudes did not follow MOP contraception[17]. Analysis of the data found that there was a significant effect between attitudes and the participation of men of childbearing age in the use of MOP contraception, with an OR of 5,663 or it could be interpreted that men of reproductive age with positive attitudes were 5 times more likely to take MOP contraception[18].

According to Allport (1924) in [5] states that attitude is a very important concept in the socio-psychological component, because it is a tendency to act, and perceive. Attitude is a person's closed response to a certain stimulus or object, which already involves the opinion and emotion factors concerned (happy – not happy, agree – disagree, good – not good and so on).[3]. The same thing was also revealed by research conducted Ashley L. White in the United States stated that there was a significant effect between the attitudes of men of childbearing age and participation in the use of MOP contraception[19]. Positive attitude will encourage individuals to do this. Research in Ahmedabad City of Gujarat In depth interview of vasectomy beneficiaries was done to explore the factors behind less acceptance of vasectomy as a permanent method of contraception[24][23]. It was difficult to convince them for interview because their fertility status was not known in the society and visiting their house may disclose it. This kind of attitude shown by the beneficiaries indirectly points that vasectomy is not looked upon as a good choice of family planning method in the society[25]. Next research in Nigeria The findings in the study showed fair knowledge of vasectomy among respondents, poor perception and attitude towards vasectomy[22]. Furthermore, the study showed that the knowledge of the respondents did not significantly influence their perception and attitude towards vasectomy[9]. This shows that the perception and attitude of Nigerians including educated individuals towards vasectomy is still very poor and a lot still needs to be done by all stakeholders to improve the acceptance of vasectomy as a form of family planning among men[11]. The study therefore, recommended that more campaigns should be carried out to enlighten the public especially men of the advantages of vasectomy as a form of family planning and also men should be incorporated into issues of family planning more so as to change the current perspective that family planning is only for women.[12]

The results of the same study in Burundi afrika were also revealed In terms of attitude, the overall attitude Mean score was 47.1% signifying a negative attitude towards vasectomy. 95.6% of respondents agreed that vasectomy was not acceptable in the Burundian culture, and 90.1% of respondents stated that vasectomy was against their religious belief. 80% of respondents also agreed that there is not enough information available on vasectomy, 90.5% agreed that the irreversibility of vasectomy constituted a reason for not adopting it. In terms of acceptance of vasectomy, the study found that the majority of respondents was not willing to accept vasectomy: 91.6% of male respondents and 95.7% of female respondents. A significant association was noted between vasectomy acceptance and age (P=0.029) and the number of current children (P=0.012). No other significant association was noted with other socio demographic factors. Overall knowledge of married men and women about vasectomy was acceptable (52.1%), attitude towards vasectomy was poor, and acceptance was low. Myths and misconception about vasectomy were noted. There is a need for greater awareness of vasectomy knowledge as a potential vehicle to affect attitude change towards vasectomy.[10]

A positive attitude also makes people more open in dealing with something so that remote information will be easier to enter. By accepting it, someone will not reject the information obtained and can receive information properly and correctly and later will encourage Male Couples of childbearing age to be able to become MOP Contraceptive Acceptors[17].

C. THE INFLUENCE OF THE WIFE'S SUPPORT FACTOR WITH THE PARTICIPATION OF MEN OF CHILDBEARING AGE TO BECOME MOP ACCEPTORS

The results showed that almost all respondents did not get support from their wives regarding their participation in the use of MOP contraception, even though from the results of the analysis test carried out, wife's support was one of the factors that influenced the husband's participation in the use of MOP contraception, with OR 21.712 which means Male partner of childbearing age with wife's support 21 times more likely to follow MOP contraception[9][24].

This is in accordance with the theory which states that wife support is a social support, namely information or feedback from others that shows that someone is loved and cared for, valued, and respected, and is involved in a network of communication and reciprocal obligations. [3]
The research conducted by Ashley L. White which also states that the information received by the wife regarding Vasectomy/MOP also affects husbands' participation with good information about MOP, negative and contra statements about MOP can be related to reproductive age so that it can provide awareness husband against MOP[16].[5]

Research in Turkey The views of women concerning the use of vasectomy were particularly interesting. Almost 40% of the women reported having heard of vasectomy before the survey. Of those, more than 81% of women stated that vasectomy is a safe contraceptive method, but 79% of women did not approve of vasectomy as a FP method[16]. These results are compatible with other studies. One of the most important barriers to vasectomy use is the negative opinions of women toward vasectomy. wives have a strong influence on the outcome of decisions about vasectomy as a contraceptive method.[13] A cross-sectional questionnaire-based study from Nigeria, which aimed to assess the influence of the spouse on the man's decision to accept or reject vasectomy, reported that only 13.5% of women accepted vasectomy compared with 26% of men. Furthermore, 92% of the men who would agree to vasectomy stated that they will only do so if their spouses agree Most of the women stated that vasectomy does not have an adverse effect on men's health, on sexual health, or on married life. Only 10.1% of women had an opinion that vasectomy has a negative effect on marriage. Studies in recent years continue to support the idea that the use of vasectomy has no negative affect on the sexual lives of individuals. A study about the sex lives of nine women living with vasectomized partners determined that vasectomy proved to be a good method to enjoy and increase the frequency of sexual relations and sexual satisfaction among couples who could stop worrying about unwanted pregnancies).[14]

In accordance with the results of the study, it can be interpreted that the knowledge, attitudes, and wife's support are factors that influence the husband's participation in the use of MOP contraception[18]. The most influential factor is the wife's support factor. Wife's support is very influential because in this case the wife is someone the husband trusts and the problem of contraception is a common problem if the encouragement from my wife includes providing knowledge through the wife so that it can make the husband finally want to take an attitude of accepting MOP contraception and be willing to participate in the use of MOP contraception[23].

V. CONCLUSION

Knowledge of the majority of men of reproductive age (72.4%) about MOP contraception is less, with all men of reproductive age couples having less knowledge of not taking MOP contraception. The attitude of almost all male couples of childbearing age (78.4%) towards MOP contraception is negative, with all male couples of reproductive age who have a negative attitude not taking MOP contraception. Wife's Support Almost all (84.3%) wives do not support the use of MOP contraception, with all male couples of childbearing age who do not take MOP contraception without the support of their wives. Wife's Knowledge,Attitude,and Support Affect Men's Participation Couples of childbearing age become MOP contraceptive acceptors.

Suggestions for respondents to better understand MOP to participate actively in the use of MOP Contraception. Suggestions for further research can be to conduct research with other variables, namely socio-cultural and family support and community support because apart from the factors studied by researchers, these factors are also commonly found in the community as a factor inhibiting the participation of pus men in MOP contraception so that it can be a joint solution to increase MOP coverage.

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