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# Evaluation of Momentum Male Sterilization Service Effectiveness as an Attempt to Reach Museum Rekor Indonesia

Evaluasi Pelayanan Momentum Keluarga Berencana Sterilisasi Pria dalam Upaya Mencapai Museum Rekor Indonesia

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## **Abstract**

Family Planning (FP) program achievement in North Sumatera Province is less encouraging. Total fertility rate in North Sumatera (3.0) is higher than the national (2.6) and contraceptive prevalence (55.9%) is lower than the national (61.9%). A strategy to increase FP participation called momentum sterilization service was feared not to meet the standard of medical care because related to *Museum Rekor Indonesia* (*MURI*). This evaluation aimed to explain service quality and satisfaction among male sterilization acceptors. Both qualitative and quantitative evaluation were done cross sectionally against FP officers, prospectives and acceptors who received medical procedure during momentum service performed in 13 health facilities in Medan City, North Sumatera on October 23 to 24, 2012. Qualitative data were obtained through in-depth interview with subdistrict and village FP managers. Quantitative data regarding prospective acceptors and a structured questionnaire to subsample of male sterilization acceptors were collected by the provider at the service location. Results showed the relatively smooth preparation, mobilization, Information, Education and Communication, male sterilization services and its reporting records. 2001 men were offered services by the sterilization service and 1379 accepted, so the national record was achieved. Almost all respondents were satisfied with the services provided both by FP and medical officers.

Keywords: Male sterilization, momentum family planning services, museum rekor indonesia

#### Abstrak

Pencapaian Program KB di Sumatera Utara kurang menggembirakan. Total Fertility Rate Sumatera Utara (3,0) lebih tinggi dibandingkan nasional (2,6); dan prevalensi kontrasepsi (55,9 %) lebih rendah dibandingkan nasional (61,9%). Sebagai salah satu strategi peningkatan kesertaan KB, pelayanan momentum sterilisasi pria dikhawatirkan tidak memenuhi standar pelayanan karena dikaitkan dengan rekor Museum Rekor Indonesia (MURI). Evaluasi ini bertujuan untuk menjelaskan kualitas pelaksanaan pelayanan dan kepuasan akseptor sterilisasi pria. Evaluasi bersifat kualitatif dan kuantitatif dilakukan secara potong lintang terhadap petugas KB, calon akseptor dan akseptor yang mendapat tindakan sterilisasi pada pelayanan momentum di 13 fasilitas kesehatan di Kota Medan, Sumatera Utara pada 23-24 Oktober 2012. Data kualitatif diperoleh melalui wawancara mendalam terhadap pengelola KB kecamatan dan desa. Data kuantitatif dikumpulkan provider di tempat pelayanan dengan menggunakan angket mengenai calon akseptor, dan kuesioner berstruktur terhadap sub sampel akseptor sterilisasi pria. Hasil menunjukkan relatif lancar persiapan, penggerakan, KIE, pelayanan sterilisasi pria dan pencatatan pelaporannya. Pelaksanaan pelayanan sterilisasi pria berhasil melayanai 1379 dari target 2001 target calon akseptor, sehingga mendapatkan rekor MURI. Hampir semua peserta sterilisasi pria merasa puas terhadap pelayanan dari petugas medis dan petugas KB.

Kata kunci: Pelayanan KB momentum, sterilisasi pria, rekor MURI

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### Introduction

The Population and Family Planning program in Indonesia had not succeeded in decreasing the total fertility rate (TFR) from 2.6, for 10 years (IDHS 2002/2003-2012). The proportion of family planning participation, as the dominant contributor relatively did not increase substantially in the same period, from 60% (IDHS 2002/2003) to 62% (IDHS 2012). The target performance indicators for 2010-2014 in the Middle Term National Development Plan were not achieved. They were 2.3 children per woman, 65% family planning prevalence, and 27.5% use of mix long-term contraceptive method (LTM) as to be achieved by the end of 2014, were not reached. North Sumatera Province is one of the provinces with the low achievement in the Population and Family Planning Programs. The TFR in North Sumatera is still high (3.0 children per-woman), family planning use is low (55.9%), and the use of modern family planning methods is significantly low (42.8%).<sup>3</sup>

Male sterilization was the least common method of contraception. The prevalence of male sterilization in North Sumatera, according to various surveys, was between 0.0 to 0.3%, which is similar to the national prevalence of 0.2%. In recognition of this, momentum service activities aim to improve the achievement of LTM. The people of North Sumatera understand momentum services as an event which supports family planning services, integrated across relevant institutions or sectors, and providing a large-scale family planning service in a single service movement. Momentum service activities are rarely evaluated thoroughly.

This study was conducted to evaluate whether the mass family planning services strategy could achieve the expected goals, both in the program and of the recipient sides. The more specific was that the evaluation was expected to explain the implementation process including the planning, preparation, socialization, implementation and result of the momentum male sterilization services, in terms of service output, quality of service and client satisfaction. This study was expected to provide input for improvement of the quality of momentum male sterilization services, for recording and reporting, as well as for services strategy in achieving *Museum Rekor Indonesia* (MURI) record.

#### Method

Using ex post facto design, this study collected cross sectionally. This study was located in Medan City, North Sumatera Province, because a large momentum male sterilization service was carried out in this region. The study sites were in 12 family planning clinics in Medan City during October 2012. The respondents were Family Planning district and village managers, and male sterilization acceptors. Six Family Planning managers and

1,379 candidates, of whom 93 underwent sterilization, were included in the survey. Inclusion criteria for respondents were male, married, at least two living children, and participated in and/or obtained momentum services on 23 to 24 October 2012. The type of data collected were both qualitative and quantitative.

The qualitative data were obtained through interviews to the district and village family planning program managers. Quantitative data were collected with two instruments, both unstructured and structured questionnaires. The questionnaires were filled out by service provider for 1,379 prospective male sterilization participants, and 93 respondents as subsample of the 1,379 male sterilization acceptors. These respondents were interviewed by the research team using a structured questionnaire. Variables in qualitative data collection regarded male sterilization service process, including planning, target education/mobilization, reporting and record keeping. Quanitative variables were output variables, included male sterilization respondent characteristics, Family Planning records, service quality and service satisfaction. Qualitative data analysis is written narratively, after data validation using triangulation of collection techniques against source of data. The quantitative data were presented in frequency distributions, cross tabulation and multivariately analyzed. This study evaluated the male sterilization momentum service in terms of the services output, and the quality of service; and the male sterilization momentum services in terms of the services output, the quality of service, and the male sterilization client statisfaction.

### Results

Male sterilization service was implemented in the stages of planning, mobilization, implementation, reporting and record keeping. The planning stage began with the formation of a joint commitment between the chief representative of North Sumatera Province National Population and Family Planning Board and the Mayor of Medan City. Then activities were planned hierarchically from the mayor to the neighborhood/environment leader (kepling) level. In order to reach the targeted number of male sterilizzation candidate, every kepling was required to prepare one candidate. Because Medan consists of 2001 neighborhoods (environment), 2001 candidates for male sterilization were expected from this city. Male sterilization service preparatory activities were monitored through coordination meetings at the municipal, district and village levels.

The acceptor candidate mobilization process was done in several stages. Initially, family planning and health officers disseminate information in the districts and villages, by inviting speakers such as neighbourhood head, clinical officers, cadres/pembantu Family Planning village officers and the people. Furthermore, a field

Family Planning officer assited by Family Planning village officers/cadre identified and collected acceptor candidate data, motivate/perform information, education and communication (IEC) and inform prospective male sterilization services acceptors. IEC materials disseminated include male sterilization participant requirements, effectiveness, side effects and contra indications, and aftereffects. Services were provided to 1379 of 2001 targetted acceptors. Momentum male sterilization service activities were conducted in 13 health facilities in Medan City, simultaneously in two days (October 23-24, 2012). Male sterilization experts numbered 28; 8 from North Sumatera, 14 from East Java and 6 from Special Region of Yogyakarta Province.

Forms used to record momentum male sterilization services data were similar to what is used in the Family Planning Recording Reporting in general. Filling K/I/KB (Family Planning Acceptor Card) and K/IV/KB (Family Planning Acceptor Status) were performed by the health officers. Male sterilization acceptor was recorded as the new Family Planning acceptor (PB) in the health facilities where the service obtained, go to the F/II/KB which record the amount of Family Planning acceptors served. Then the participant were recorded as active Family Planning participant (PA KB) and entered into the form F/I/Dal (Field Family Planning Participants Control form) where the acceptor live in.

# Respondents' Background

The number of clients who came to the momentum male sterilization services was 1379 of 2001 targetted. The data of 1346 acceptors could be analyzed. Respondent's age and age of wife varied. The average of husband age was 45.24 years, ranged from 23 as the youngest to 81 years as the oldest. Wife's average age was 38.93 years, varied from, aged 19 as the youngest to 62 years as the oldest. Further examination showed that 13% were aged 46 to 50 years and 1,3% were aged >51. A very young woman (19 years) was also found, despite the percentage was low (0.1%).

Male sterilization participants' number of children varied from one child to six or more children. 3,0% of families had the father undergo sterilization with only one child. 15.8% of families had two children and 25.6% had three children. 14.9% had six children or more.

To be a male sterilization participant, it is required to have at least two children and the youngest child aged at least five years. Table 1 showed that 81.2% of the male sterilization respondents had three or more living children, while 18.8% had 1-2 children. Those who had 1-2 children (6.3%), had the youngest child aged < 5 years. Thus the inclusion requirements that the youngest children should be at least five years were not met.

Table 2 below was resulted from multiple logistic re-

gression analysis towards male sterilization participant who did not meet the inclusion requirements ( $\leq 2$  children and the youngest child aged < 5 years) as dependent variable. Determinants were identified among the male sterilization participants who did not meet the selection criteria. The findings would be used as the input to improve the future recruitment of prospective male sterilization clients.

In Table 2, the dependent variables were male sterilization participants who were unqualified for male sterilization compared to those qualified. The independent variables were the age of respondent and the wife under similar criteria, such as younger versus older age (0 < 35 versus  $1 \ge 35$  years); low versus high education ( $0 \le JHS$  versus 1 > JHS); low versus high wife's education using similar criteria namely low vs high education ( $0 \le JHS$  versus  $0 \le JHS$ ); Family Planning participation variables before changing into male sterilization (1 for Yes and 0 for No); and Family Planning counseling variable (1 or Yes, 0 or No). (JHS is junior high school or 9 years of education).

Variables significantly associated with male sterilization participation for those who did not meet the inclusion criteria were the respondent's age and the age of the wife. A young aged husband (<35 years) was three times more likely to be a male sterilization participant who did not meet the inclusion criteria as compared to older husbands. A similar pattern occurred in the maternal age variable. Young aged (<35 years), as compared to older mothers, had a 5 times higher chance that their husbands were sterilization participants who did not meet the inclusion requirements. Other variables such as respondent's and wife's education level, previous Family Planning participation, and counseling showed no significant relation to the male sterilization participants who did not meet the inclusion requirements. Attention and precaution were needed during participant's recruitment towards respondent's age and wife with younger age (<35 years), particularly regarding number of children and age of the youngest child that must fulfill the requirements.

## **Records of Contraceptive Use**

Knowing the records of participant or pair's birth control use before participating in male sterilization aimed to determine whether the participant was new to contraception or changing method. It was found that of all male sterilization participants, 51% were using any contraception during the survey, 6% had contraception previously (before sterilization action), and 43% had never been practicing family planning. Type of method or contraceptives used varied. Among those practicing and and ever practiced family planning before, 44% used injection method, 36% took birth control pill, 10% used implant, 7% traditional contraceptive and 3% Intra Uterine

Table 1. Percentage of Respondents by Category of Number of Living Children, Ages of Youngest Child and Wife

Living Children	Age of Youngest Child	Wife Age		Total	
		≤ 32 Years	>32 Years	Percents	Cases
1-2 children	< 5 years	3.7%	2.6%	6.3%	70
	≥ 5 years	1.8%	10.8%	12.6%	140
≥ 3 children	< 5 years	10.0%	24.0%	34.2%	378
	≥ 5 years	1.9%	45.0%	47.0%	518
Total	v	17.6%	82.4%	100.0%	1,106

(Note: No data of youngest child age in 258 cases)

Table 2. Relation between Respondents and Spouses Characteristics with Participation in Male Sterilization Who
Do Not Meet the Requirements

Variable	β	Standard Error	Significancy	Odd Ratio
Age of father	1.130	0.363	0.002	3.096
Education of father	-0.372	0.345	0.281	0.689
Age of mother	1.775	0.402	0.000	5.903
Education of mother	0.183	0.351	0.602	1.201
Family Planning participation	0.218	0.315	0.488	1.244
Family Planning counselling provision	17.325	8818.218	0.998	33440664.260
Constanta	-11.676	4409.109	0.998	0.000

Note:

Dependent Variabel:

 $0 \ \text{Male}$  sterilization participant who do not qualify as  $\ \text{participant}$ 

Independent Variabels:

Age of father, mother, 1 young (<35 years) 0 old (≥35 tyears)

Education of father, mothetr  $1 \ \ low \ (\leq junior \ high \ school) \quad 0 \ \ high \ (> junior \ high \ school)$ 

Family Planning partcipation, counselling 1 yes 0 n

# Device.

When calculating the percentage of new Family Planning participants and active participants, the male sterilization participants coming from 6% of those who had never been practicing Family Planning; then the percentage of new participants became around 43-49% and change method participants became around 51-57%. In reality, all result from entirely male sterilization family planning services were categorized as new participant (100 % male sterilization).

# **Interpersonal Communication and Counseling**

Data about interpersonal communication and counseling (ICC) were based on two sources. Firstly from the questionnaire of all male sterilization participants that was filled by officers, and secondly data from researcher interviews of a subsample of 93 male sterilization participants. According to the questionnaire, almost all participants (99.9%) received ICC about male sterilization, however the interview determined that only 30.1 % of the subsample of 93 male sterilization participants received ICC. There was a discrepancy between these two sources of data.

From the researcher interview, the type of issue counseled varied (Figure 1). The less common issue were counseled by respondents was family approval and failure possibility of male sterilization (1.1% each), followed by requirement, effectiveness, mechanism of action and side effects of male sterilization (respectively 4.3%, 9.7%, 9.7% and 10.8%). While the issue mostly counseled were male sterilization as a permanent method (66.7%). As much as 63.4% of male sterilization clients asked about expecting more children.

Table 3 showed how counselling affected the number of children after which an individual would choose to undergo sterilization. Of those who received family planning counseling, those with 3 or more children were significantly more likely to accept sterilization. Those who received family planning counseling were 2.8 times more likely to plan to participate in male sterilization when they had three or more children than those who did not.

Informed consent or client approval is important in a medical procedure. Almost all male sterilization participants had a signed informed consent form, according to data from the questionnaire (99.9%) and from the researcher interviews (94.0%).

<sup>1</sup> Male sterilization participant who do not qualify as participant (≤ 2 children and the youngest child aged <5 years)

Almost thirty percent (26.9%) of respondents did not make a decision about sterilization or did not know about the information delivered about after male sterilization services. The rest 73.1% received the information. Type of information received after procedure varied. The least known by the respondents was about after surgical side effects (4.4%), prohibition to scratch surgical wound (8.8%), semen examination (8.8%), and wearing special underwear to support scrotum (17.6%). Other information were received more commonly, such as the use of condoms when having sex (88.2%), taking medication until it dissolved (72.1%), avoid lifting heavy loads (69.1%), shower 24 hours after surgery and not wetting the wound (69.1%), wearing plaster on the surgical wound and did not open for three days (57.4%).

## Male Sterilization Service Satisfaction

In terms of ratings of male sterilization satisfaction services received, respondents gave a good judgment. Nine out of ten respondents rated the operation as quick and 6% as good and skilfully done. Almost all respondents rated the doctor's serving attitude as kind and friendly; while only 1.5% rated as common. Further-

more, 96% of respondents were satisfied with the doctor's services, as well as 81% for Family Planning service officer.

## Discussion

As many as 1379 or 68.9% of the targetted 2001 male sterilization potential acceptors were included in this study. The number of male sterilization acceptors was lower than planned, due to socio-cultural, gender and environmental issues. Socio-cultural aspects are commonly associated with beliefs, social norms, and the client's status in the family and society. Socio-cultural and environmental chalenges include misperceptions about male sterilization such as that is similar to castration. Similar barriers also occur in Khatmandu Nepal, where misperceptions about male sterilization were still deeply rooted. Barriers to participation include environment, society and families who may be less supportive to male sterilization as a choice in family planning.

Those who have a limited knowledge and understanding of sterilization may be particularly susceptible to non-supportive influences from their community and family. Most men strongly objected to male sterilization,

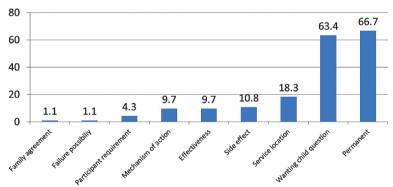


Figure 1. Percentage of Male Sterilization Receiving by Type of Information

Table 3. Relation between Respondents and Spouses Characteristics, Family Planning Participation and Counseling with Number of Children When Deciding to Participate in Male Sterilization

Variable	β	Standard Error	Significance	Odd Ratio
Age of father	-0.740	0.227	0.001	0.477
Education of father	0.063	0.172	0.716	1.064
Age of mother	-0.391	0.186	0.036	0.676
Education of mother	-0.089	0.175	0.609	0.914
Family Planning participation	-0.243	0.145	0.093	0.784
Family Planing counselling provision	1.030	0.518	0.047	2.800
Constant	0.625	0.268	0.020	1.868

#### Note:

Dependent Variabel:

1 Participate in MS, no of children ≥ 3

0 Participate in MS, no of children <3

## Independent Variables:

Age of father, mother, 1 young (<35 years)
Education of father, mothetr 1 low (≤junior high school)

0 high (> junior high school)

0 old (≥35 years)

0 no

Family Planning partcipation, counselling 1 yes

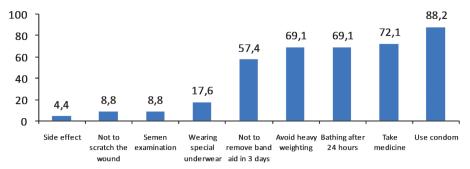


Figure 2. Percentage of Respondents by Information Received after Male Sterilization Procedure

and conveyed that family planning is the wife's responsibility.<sup>5,8</sup> Another potential barrier is the concern of both husband and wife of impotency and weakened physical strength after the procedure.<sup>8-10</sup>

Similar barrier was also found in several countries in Asia such as Nepal and Iran, as well as Tanzania and Nigeria.<sup>7,11-15</sup> Even medical personnels such as gynecologist resident in Nigeria had a very low acceptance of vasectomy because of the psychological, social, cultural and religious issues, although they had high knowledge of vasectomy.<sup>16</sup>

Studies in Pakistan presented a different picture, where people were more aware and open to male sterilization. Clients who are satisfied with male sterilization can aid in dissemination of family planning methods.<sup>17</sup>

This study found that most of participants' wives were older, ranging from 51 to 62 years old (1.3%), while the youngest was 19 years old (0.1%). These data were not matched with the requirements of recruitment male sterilization and reference for rational Family Planning method election. <sup>18</sup> The findings showed that momentum male sterilization services were not ensuring that all candidates met the inclusion criteria.

One of the inclusion criteria was that the wife should be within childbearing age and with a minimum age of 30 years. Screening for male sterilization candidates needs to be improved, since fertility decreases with age. <sup>19</sup> On the other hand, there are recruitment issues, such as a wife who was below the minimum age (19 years). Hence, it is necessary to scrutinize the number of children and the youngest child. The requirement that the youngest child is above five years is because upon reaching that age, there is a high chance of surviving into adulthood. The data informed that 81.2% had three or more living children, and 18.8% had 1-2 children.

It was also found that there were male sterilization participants who had 1-2 children with the youngest child aged <5 years (6.3%). This findings suggested that male sterilization requirements using the number of children and age of the youngest child were less fulfilled by male sterilization participants. Applicant screening aspect of male sterilization program requires attention.

Terms of male sterilization clients must absolutely fulfilled by every prospective family planning client.

Results of this study showed that most of male sterilization wives were old, age ranged from 51 to 62 years (1.3%), and the youngest was 19 years (0.1%). This data was not in accordance with male sterilization requirements and rational reference for Family Planning method elections. This showed that there were momentum male sterilization services were less carefull in the recruitment aspects of male sterilization candidate.

Officer was less careful in performing screening prospective male sterilization clients. One of the requirements for male sterilization was eligibility criteria for the wife, that were still in childbearing age or at least 30 years. Criteria for screening potential male sterilization participants need to be improved and adjusted, since women fertility was naturally decrease along the age. <sup>19</sup> Besides, there was related recruitment problem found such as very young woman (19 years). Hence, more exploration towards the number of children and age of the last child of the potential client was needed.

Age of respondent and wife were significantly associated with requirements of male sterilization participant. In the future, recruitment of the male sterilization candidate is expected to mention age of respondent and his spouse to avoid recruiting too young candidate aside from number of children and age of the youngest child as the major factor. One aspect in quality measurement was information provided to clients regarding contraception selection.<sup>20</sup> In this study, information disseminated from the provider to the client include providing IEC on male sterilization, counseling, informed consent, and post operative information. Counseling materials about male sterilization had apparently not been fully received by the respondent. This finding was similar to IDHS 2012, that the Family Planning client received less counseling. Similarly, information received through counseling such as on side effects (36.5%) and on action in case of side effects (29.4%).<sup>3</sup> Hence, provision of counseling materials for momentum male sterilization family planning services require more attention and improvement. Counseling from health care and family planning officers

to the prospective male sterilization acceptors are intended to have the candidates better understand, confident, secure and steady on selecting family planning methods.<sup>21,22</sup>

Interaction between providers and clients in counseling is more emphasized for the benefit of the client; and provision of fully informed choice is the right counseling client.<sup>6,21</sup> Complete and clear information, will provide flexibility to a client and family to decide or choose contraception. Another counseling principle is that the counselor should be able to identify potential barriers to selection and subsequent use of contraception. The clerk did confirm rumors about the truth of the issue of contraception, ask the origin of the rumors, and help clients think in dealing with the issues rumor.<sup>22,23</sup> Counseling officers are expected to help the client to make a decision, understand the client's needs, offer choice matching method, fill the gaps in the knowledge of the client, and assist clients in determine the choice of contraceptive.<sup>5</sup>

Information provided after male sterilization procedure action is still imperfect. Information about the use of condoms after male sterilization was quite good, but the information about the examination of semen three months after the operation was not good. This information was very important in order to avoid unwanted pregnancies, because a period of time must pass after the procedure before sterility is achieved. Sterility (zero sperm) is achieved after 20 ejaculations or three months after the sterilization. Examination should be conducted to confirm sterility.<sup>24</sup>

Still related to family planning IEC and male sterilization counseling aspects, Family Planning manager or officers need to ensure the timeliness of the provision of IEC and family planning counseling. Decision to accept male sterilization after having many children, was not profitable birth control program, because it had not much impact on fertility decline. This situation implied that the provision of family planning information and family planning counseling should be planned and implemented from the beginning, at the time a couple is planning a family or whenever a couple still have few children.<sup>18</sup>

The analysis showed a contradiction between the signing of informed consent and IEC/counseling received by respondents. A high percentage of male sterilization respondents signing informed consent was not in line with the low ICC received. Acceptance towards ICC supposed to be proportional to the signatories informed consent. The signing of the agreement was easy to remember, while the male sterilization ICC provided was difficult to understand and remember for the respondent. The quality of the ICC needed to be addressed, to help the respondents clearly receive and understand the materials presented. In the counseling process, ability to provide

quality ICC depends on the trust developed in the relationship between officer and client. So that officer received information about contraception wanted by the client, and the client believe and understand the information received. Positive thinking was also needed. Positive thinking would give comfort to the client, through provision of complete information, encourage clients to ask questions and taking the time to answer the client's questions and concerns. Positive thinking for clients meant that the client could receive and understand information, comfortably and open.<sup>22,23</sup>

A limitation of this study is that it did not analyze the medical aspect, and only examined the social aspects. Also because the study was conducted in Medan, which is an urban area, generalizability of results to all of North Sumatera province and other provinces may be limited. The findings were only intended to aid in evaluation of the momentum male sterilization service in Medan. Also, a limitation of the quantitative analysis was the limited number of variables.

## Conclusion

Momentum male sterilization service has been well prepared in planning, mobilization, service and post-service. Mobilization may be a weak point in terms of screening/recruitment male sterilization candidate. There is a significant relation between age of the respondent and wife and participation in male sterilization. Young respondent and wife, aged <35 years are significantly associated with the participation in male sterilization among those who do not meet the requirements. In counseling, information regarding male sterilization received are limited. Counseling shows a significant relationship with the decision to accept male sterilization among respondents who have many children (three or more).

The signing of the informed consent is almost uniformly performed in all male sterilization acceptors. Information after male sterilization is not consitently provided. In the recording aspect, the reference criteria for the new male sterilization acceptor is different with that in the field. In general, assessment satisfaction towards the Family Planning services are good.

# Recommendation

Recommendations are addressed to the Family Planning managers and executors in the field who are involved with the recruitment of male sterilization clients. The provision of services should comply with the criteria for male sterilization candidate, and need supervision, so that the criteria set for male sterilization participant can absolutely be met by the target. Recruitment of male sterilization candidate in the future are expected to pay more attention to the age of the respondent and his wife, aside from other major factors such as number of chil-

dren and age of the youngest child.

The quality of the ICC provided for male sterilization needs to be improved and the time for Family Planning officers and health workers must be adequate to provide all information related to male sterilization. ICC provision must be carried out early, because the client's decision to accept male sterilization may require considerable time. In future literation, inclucion criteria for new Family Planning acceptor should apply the standards developed by all involved parties. Momentum male sterilization services momentum can be continued in the future, with improvements. However, it is suggested that future family planning programs do not aim to achieve a MURI record because it detracts from the quality of the service.

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