

ORIGINAL RESEARCH ARTICLE

Levels, method choice and predictors of contraceptive use among males in southern Africa

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Abstract

This study assessed the relative risk of using male and partner contraceptive methods relative to non-use, identified the types of methods preferred by participants, and assessed the associated determinants of the use of male and partner methods. It used secondary data from the Demographic and Health Surveys conducted in Lesotho, Namibia, South Africa, and Zimbabwe. Participants were sexually active men aged 15–54. The study found that 32% of respondents did not utilize any method, while 36% and 32% used partner and male methods, respectively. The male method was more prevalent among men who had two or more sexual partners and among urban dwellers, while the partner method was predominant among those with less than two children and those who were indifferent about whether contraception is a woman's business. The study recommends that family planning programs should pay attention to male contraceptive needs and concerns. (*Afr J Reprod Health* 2022; 26[6]:27-35).

Keywords: Male, contraceptive use, Southern Africa

Résumé

Cette étude a évalué le risque relatif de l'utilisation de méthodes contraceptives masculines et partenaires par rapport à la non-utilisation, identifié les types de méthodes préférées par les participants et évalué les déterminants associés de l'utilisation de méthodes masculines et partenaires. Il a utilisé des données secondaires des enquêtes démographiques et sanitaires menées au Lesotho, en Namibie, en Afrique du Sud et au Zimbabwe. Les participants étaient des hommes sexuellement actifs âgés de 15 à 54 ans. L'étude a révélé que 32% des répondants n'utilisaient aucune méthode, tandis que 36% et 32% utilisaient respectivement les méthodes du partenaire et de l'homme. La méthode masculine était plus répandue parmi les hommes qui avaient deux partenaires sexuels ou plus et parmi les citadins, tandis que la méthode du partenaire prédominait parmi ceux qui avaient moins de deux enfants et ceux qui étaient indifférents à savoir si la contraception était l'affaire d'une femme. L'étude recommande que les programmes de planification familiale prêtent attention aux besoins et aux préoccupations des hommes en matière de contraception. (*Afr J Reprod Health* 2022; 26[6]:27-35).

Mots-clés: Masculin, utilisation de contraceptifs, Afrique Austral

Introduction

There is a relatively higher number of women who want to stop or delay childbearing but are not using any contraceptive method in sub-Saharan countries¹. In the southern African region, the situation is likely to worsen as the demand for contraceptive use is increasing among women who are infected by HIV and want to avoid further pregnancies². In South Africa, for example, more than two-thirds of pregnancies in the past five years were unintended^{3,4}. This state of affairs can lead to an increased demand for abortion services and higher maternal mortality rates, which in turn will increase the load in the health sector⁵. The use of contraception among

women is influenced by perceptions such as method health risks, myths, and societal norms that associate contraceptive use with promiscuity⁶⁻⁸. The involvement of men in contraceptive use, therefore, can alleviate the social pressure in these situations and benefit women in general, especially because men play a decisive role in whether or not women would use contraception⁹.

While southern Africa has one of the highest contraceptive prevalence rate in Sub-Saharan Africa, estimated at 49 percent, male method use has been disproportionately low in this region, with only 13,5% and 0.2% of people using male condoms and vasectomy, respectively¹². Apparently, the use of these methods varied greatly within this region.

Botswana which had the largest percentage of users in the region had only 30% of people using male method followed by Eswatini at 23%. On the other hand, Lesotho and Namibia both had 20%, while South Africa had the least number of users, with only 12.1% using male contraceptives¹⁰.

Studies have identified factors obstructing the use of male methods relative to partner methods among couples. They indicate that there are generally few contraceptive options available to men, and often, there is less information on method health risks, particularly with regard to vasectomy⁸. Furthermore, some men assume that contraception is a woman's domain and therefore males should not be involved⁸. One study found that the use of male condom was substantially higher among couples who were still planning to have children than among those that already had some¹¹. This could be because couples who intend to have children in the future may avoid some partner methods, particularly those that are associated with infertility. Additionally, the use of these methods differs depending on the HIV prevalence rate in a particular country. Perhaps as a precautionary measure, the use of male methods, particularly condom, is relatively higher in countries with high prevalence rate¹².

Factors influencing involvement in family planning in general among men include gender stereotyping, where family planning is seen as women's business, and men being too busy to get involved¹³. Additionally, media and other advertising agencies may be playing a role by being biased towards female methods and ignoring men's contraceptive needs and concerns^{14,15}.

Socio-economic factors associated with male method use include lower educational level and a lack of awareness programmes for men^{16,13,17}. Also, men who had discussed family planning with someone were more inclined to use some method and more so if the person was a health worker¹⁶. The lack of family planning facilities in some areas has affected the use of contraceptive methods by men, and where such facilities are accessible, they inevitably offer little or no information about contraceptive options available for men^{18,15,19,20}.

Likewise, men avoid using male methods also for reasons related to the method itself. These include diminished sexual pleasure when using a condom during sexual intercourse and also believing

that vasectomy may lead to loss of erection in the future^{17,19}. These studies alluded furthermore, that men with multiple sexual partnerships are motivated to use a condom for dual protection against impregnating more women and to avoid sexually transmitted infections (STIs), particularly HIV.

Various factors may affect the use of male contraceptive methods differently from partner methods, but few studies have looked at which factors are most influential. This information is crucial for programs designed to encourage men to become involved in family planning. The present study offers insights into some of the factors that influence the selection of partner methods versus male methods. Additionally, the study will contribute to the body of knowledge about male contraceptive practices in general, particularly in African contexts where usage is relatively low.

Methods

The study used data from the most recent Demographic and Health Surveys in South Africa (2016), Zimbabwe (2015), Lesotho (2014), and Namibia (2013). A nationally representative sample of men aged 15–54 years old was used in the study. The analysis was restricted to 9491 participants who had been sexually active in the four weeks before data collection but excluded those who were infertile or sterilised. The data were weighted to account for disparities in selection likelihood and non-response.

IBM SPSS version 16 was used to analyse the data. Chi-square statistics were used to determine variables that were significantly associated with the use of either method at the bivariate level, with the significance level set at 5%. Furthermore, the multinomial logistic regression model was utilised to estimate the relative risk ratio that an individual would use either male or female method rather than not using any method.

The respondents were asked if they or their partners used any contraceptive method the last time they had sex, and if so, what method they used. However, the questionnaire did not inquire further about whether any method was used with successive sexual partners, nor did it capture information about the use of a method other than the first. As such, the analysis is restricted to the use of a method with the last sexual partner and to one method only. The responses were categorised into three outcomes,

which are 'not using', 'female method' (pill, IUDs, injection, female condom, female sterilisation, implants, and contraceptive patch), and 'male method' (condom). The variables were coded "0" for not using a method, "1" for the partner method, and "2" for the male method. Traditional methods such as withdrawal and periodic abstinence were excluded from the analysis. These methods contributed to less than 1% of the total methods used and could not have affected the final results.

The predictor variables were countries (Lesotho, Namibia, South Africa, and Zimbabwe); the age group (15–24, 25–34, 35–44, and 45–54); place of residence (rural area and urban); marital status (never in a union, currently in a union, and formerly in a union); the number of living children, (0, 1, 2, 3, and 4 or more); whether family planning was discussed with health worker (Yes, No), the number of other sexual partners (0, 1, and 2 or more), educational level (no education, primary, secondary and higher level) household wealth index (poorest/poor, middle, rich/richest); whether the individual agrees with the statement that 'contraceptive make women promiscuous' (disagree, agree and do not know) and whether he agrees that contraception is a woman's business (disagree, agree and do not know).

Results

The results are presented as descriptive statistics followed by percentages for the preferred types of contraceptive methods and lastly, the values for multivariate analysis. The results presented in Table 1 indicated that slightly less than one-third (32%) of the participants did not use any form of contraception, while 36.6% were using a partner method relative to 31% using the male method. Less than half of the participants (46%) were from Zimbabwe followed by South Africa (22%) and the least were from Lesotho. The biggest number (36%) was in the age group 25–34 years, while those who were 45 years and older contributed the least number of participants. The participants were equally distributed between rural and urban areas, and a significant majority (73%) had a secondary or higher level of education. Regarding marital status, the vast majority (69.5%) were in a union, while 4% were no longer in a union. Likewise, slightly less than half (47%) were coming from the richer or richest

households, while 33% were from households with low-income or poorest ones.

Furthermore, the results showed that a significant majority of these participants (88%) did not discuss family planning with the health worker in the past 12 months. Also, one-quarter did not have any living children, while 22% had four or more. Also, 39% wanted to have an additional child while slightly more than a quarter (27%) did not want any. While nearly 60% of these participants did not have an additional sexual partner, 29% and 13% respectively had one and two or more partners. More than half (58%) aligned themselves with the statement that contraceptive makes a woman promiscuous, while only a quarter were of an opinion that contraception is a woman's business.

Contraceptive method preference

Figure 1 depicts preferences for various forms of contraceptive methods. The partner methods were the most popular, with more than half (54%) of the participants using them. Regarding partner methods, the pill was the most popular method, with 31% taking it, followed by injection and implant with 15.2% and 5.5%, respectively, and 'other' methods with only 2% using it. Apparently, male condom was the only method used by men. In terms of age, younger age groups preferred condoms more than alternative methods, but the use declined with subsequent age groups, although remained fairly high. The pill was the second most popular option among those aged 25 and older, followed by injection and implant.

Contraceptive prevalence by a method

Table 2 presents the percentage of respondents using either male or female contraceptive methods by socio-economic characteristics. All variables listed in the table were statistically significant ($p < 0.005$). Zimbabwe had the highest prevalence rate with 72% of the participants using a method, while Namibia and Lesotho followed with 69% and 66% respectively, and South Africa had the least with only 60% of the participants using a method. However, the preference varied amongst these countries. In Zimbabwe, the majority (57%) used partner methods with only 15% selecting male methods.

Table 1: Descriptive statistics

Variable	Number (%)
Contraceptive use	
Not using	3045 (32.1)
Partner method	3477 (36.6)
Male method	2969 (31.3)
Country	
Lesotho	1381 (14.6)
Namibia	1674 (17.6)
South Africa	2083 (21.9)
Zimbabwe	4353 (45.9)
Age group	
15–24	1716 (18.1)
25–34	3416 (36.0)
35–44	2752 (29.0)
45–54	1607 (16.9)
Place of residence	
Urban	4750 (50.1)
Rural	4740 (49.9)
Educational level	
No education	375 (4.0)
Primary	2215 (23.3)
Secondary	5663 (59.7)
Higher	1237 (13.0)
Marital Status	
Never in union	2536 (26.7)
Currently in union	6596 (69.5)
Formerly in union	358 (3.8)
Wealth index	
Poorest/poor	3179 (33.5)
Middle	1825 (19.2)
Richer/Richest	4487 (47.3)
Discussed FP with health worker	
No	8362 (88.1)
Yes	1129 (11.9)
No of living children	
0	2353 (24.8)
1	1697 (17.9)
2	1871 (19.7)
3	1443 (15.2)
4 or more	2126 (22.4)
Fertility preferences	
Have another	3673 (38.7)
Undecided	375 (4.0)
No more	2548 (26.8)
Has no partner	2895 (30.5)
Other sexual partners	
2 or more	1230 (13.0)
1	2752 (29.0)
0	5509 (58.0)
Makes women promiscuous	
Disagree	585 (6.2)
Disagree	5453 (57.5)
Agree	3452 (36.4)
Don't know	
Women's business	
Don't know	376 (4.0)
Disagree	6869 (72.4)
Agree	2246 (23.7)
TOTAL	9491 (100)

The use of male methods was relatively higher relative to Zimbabwe in the other countries with 49%, 44%, and 41% of users in Namibia, Lesotho, and South Africa using this method respectively.

The use of contraception was high among younger age groups, although preferences differed significantly with each group. Most participants (58%) in ages 15–24 used the male method, but the percentages of users dropped with each subsequent group to 21% among those 45–54 years. In contrast, the prevalence of the partner method increased with age, but the percentage decreased in the last age group. The percentage of non-users differed only slightly between urban and rural dwellers (30.3% vs 34%), but more rural than urban dwellers (41% vs 32%) preferred the partner method, while the male method was preferred by most urban dwellers (37% vs 25%).

Regarding marital status, men who were not currently in union preferred male methods over other methods. More than two-thirds (69%) of men who were never in a union and 54% of those who were formerly in a union, were using the male method. In contrast, only 16% of those currently in union chose this method while 47% utilised the partner method.

As expected, method use increased with the educational level and this was more evident with the partner method than the male one. For example, the partner method more than doubled from 21% among men with no education to 43% of those with a higher level of education. On the other hand, the male method increased by only five percentage points between the two groups showing that the effects of education was more noticeable with a partner method. Furthermore, an increase in the household wealth index improved the use of male method, although marginally.

Discussing family planning with a health worker in the past year improved the use of a partner method showing that the use increased by 15 percentage points from 35% to 50%, while the male method decreased. Interestingly, there was a shift from a male to a partner method for every increase in the number of living children. While nearly 60% of the participants with no children were using a male method, the number decreased with each additional child to only 16% of those with more than three children. The partner method, on the other hand, increased from 10% among those with no children to 52% among men with three children. Perceptions about contraception were also critical

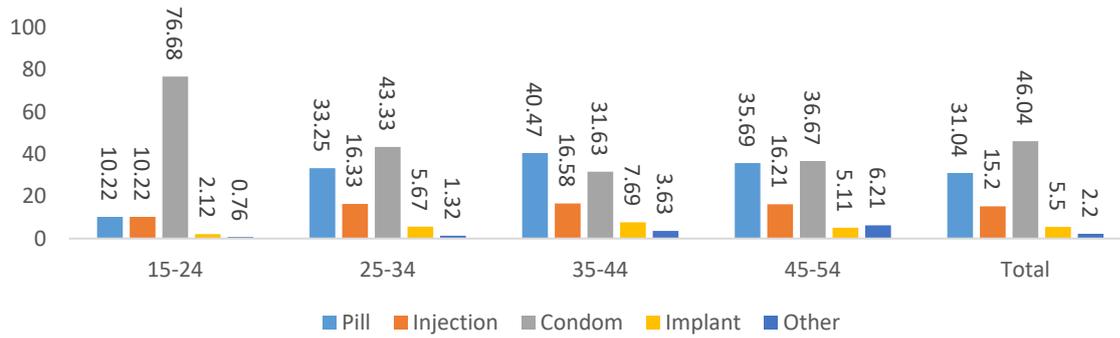


Figure 1: Preferred type of contraception used by different groups

Table 2: Percentage of study participants using a method of contraception

Socio-economic variables	% using	Not Partner	% Using a method Male	Total	P-value
Country					
Lesotho	34.4	21.3	44.4	1381	0.000
Namibia	31.2	19.3	49.4	1674	
South Africa	40.4	18.5	41.0	2083	
Zimbabwe	27.7	56.8	15.5	4353	
Age group					
15-24	25.0	16.9	58.1	1718	0.000
25-34	30.9	38.2	30.9	3416	
35-44	32.8	46.1	21.1	2752	
45-54	41.0	37.9	21.0	1607	
Place of residence					
Urban	30.6	31.8	37.0	4750	0.000
Rural	33.6	41.4	24.9	4740	
Marital Status					
Never in union	19.1	11.7	68.8	2536	0.001
Currently in union	37.2	47.1	15.6	6596	
Formerly in union	26.5	19.5	54.0	358	
Educational level					
No education	52.0	20.5	27.5	375	0.000
Primary	36.8	33.5	29.9	2215	
Secondary	30.0	37.5	32.5	5663	
Higher	27.1	43.1	29.9	1237	
Wealth index					
Poorest	35.6	37.0	27.4	3179	0.001
Poor/middle	33.4	34.1	32.5	1825	
Richer/Richest	29.0	37.3	33.6	4487	
Discussed family planning					
No	33.3	34.8	31.9	8363	0.000
Yes	23.3	50.2	26.7	1128	
No of living children					
4 and above	37.7	48.9	16.4	2126	0.001
3	29.6	52.0	18.4	1443	
2	30.8	46.3	22.9	1871	
1	34.0	34.5	31.5	1697	
0	30.9	9.80	59.6	2353	
Contraception is women's business					
Disagree	30.6	39.6	29.8	6877	0.000
Agree	33.6	32.1	34.3	2250	
Don't know	49.5	09.0	41.2	339	
Contraceptive makes women promiscuous					
Disagree	29.70	41.23	29.06	6869	0.001
Agree	32.11	33.07	34.81	2246	
Don't know	45.99	18.07	35.95	376	
Other sexual partners					
0	38.0	47.4	14.5	5509	0.000
1	25.2	24.2	50.6	2758	
2 or more	20.9	15.7	63.3	1230	

Table 3: Relative risk-ratio estimates for using a male and partner method

Variable	Partner method	95% CI	Male method	95% CI
Country				
Lesotho	0.40***	0.34 - 0.48	1.69***	1.41 – 2.03
Namibia	0.33***	0.27 - 0.39	1.43***	1.20 – 1.70
South Africa	0.23***	0.19 - 0.27	0.76***	0.64 – 0.90
Zimbabwe	1.00		1.00	
Age group				
15–24	2.21***	1.70 - 2.85	1.61***	1.25 – 2.06
25–34	1.88***	1.57 - 2.24	1.35***	1.10 – 1.65
35–44	1.57***	1.34 - 1.84	1.13	0.94 – 1.37
45–54	1.00		1.00	
Place of residence				
Urban	1.03	0.89 - 1.20	1.59***	1.36 – 1.85
Rural	1.00		1.00	
Marital Status				
Never in union	1.85***	1.27 - 2.70	1.50***	1.12 – 2.01
Currently in union	1.38	0.96 – 2.00	0.38**	0.28 – 0.53
Formerly in union	1.00		1.00	
Educational level				
No education	0.43***	0.30 – 0.60	0.48***	0.34 – 0.68
Primary	0.63***	0.51 – 0.78	0.88	0.70 – 1.10
Secondary	0.81*	0.68 – 0.96	0.95	0.79 – 1.15
Higher	1.00		1.00	
Household wealth index				
Poorest/Poor	1.02	0.87 – 1.21	1.03	0.87 – 1.23
Middle	0.99	0.84 – 1.81	1.04	0.88 – 1.24
Richer/Richest	1.00		1.00	
Fertility preference				
Have another	0.72***	0.63 – 0.83	0.58***	0.49 – 0.70
Undecided	0.63***	0.48 – 0.83	0.87	0.65 – 1.18
No more	1.00			
No. of living children				
0	0.15***	0.12 – 0.20	0.88	0.69 – 1.11
1	0.64***	0.53 – 0.77	1.07	0.86 – 1.34
2	0.97	0.82 – 1.15	1.15	0.94 – 1.46
3 or more	1.00		1.00	
Discussed FP				
No	0.65***	0.55 - 0.77	0.63***	0.52 – 0.77
Yes	1.00		1.00	
Makes women promiscuous				
Don't know	0.91	0.68 – 1.22	0.74*	0.56 – 0.97
Disagree	1.14*	1.01 – 1.28	1.07	0.94 – 1.22
Agree	1.00		1.00	
Contraception is women's business				
Don't know	0.42***	0.27 – 0.65	0.91	0.65 – 1.24
Disagree	1.05	0.91 – 2.00	0.99	0.85 – 1.14
Agree	1.00		1.00	
Other sexual partners				
2 or more	1.10	0.85 – 1.42	1.84***	1.45 – 2.34
1	1.20*	1.02 – 1.42	1.66***	1.38 – 2.00
0	1.00		1.00	

*** P<0.005 **p<0.01 * P<0.05

for method use showing that partner methods increased among those participants who did not believe that contraception makes a woman promiscuous, and those that did not agree that using

a method is a woman's business. On the other hand, relatively lower percentages in these groups were using the male method. As was the case with the number of children, the use of the male method

improved significantly with an increase in the number of sexual partners, increasing from 15% to 63% among those with no additional sexual partner to those with two or more partners. On the other hand, the percentage using the partner method increased when sexual partners decreased.

Multivariate analysis

Table 3 depicts the influence of various socioeconomic factors on the risk of utilising male and partner methods in comparison to not using any method at all. Participants in the other three countries had a decreased likelihood of using the partner method when compared to those in Zimbabwe ($p < 0.005$). Nevertheless, the risk of using a male method was higher in Lesotho and Namibia but remained low in South Africa. Conversely, in contrast to Zimbabwe, South Africa had fewer participants using either of the two methods relative to not using a method.

Method use increased with younger age groups for both methods, although the likelihood of using a partner method increased by a higher margin than was the case with the male method. The risk of using the male method was higher and significant among urban dwellers than rural counterparts ($p < 0.005$), however, the partner method was not significant. Regarding marital status, the use of both methods was higher and significant among those who were never in a union ($p < 0.005$) with the highest increase observed with the partner method. On the other hand, the risk of using a male method was significantly reduced among those currently in a union ($p < 0.01$), but the partner method was not statistically significant for this group.

Likewise, education was a significant predictor for using a partner method, with the risk decreasing with lower levels of education ($p < 0.005$). However, when considering the use of the male method, the differences were only significant among those without education. Thus, education was a stronger predictor of the partner method than it was for the male method. In contrast, the results showed that the wealth index did not significantly influence the use of either method.

Concerning fertility preference, participants who wanted an additional child and those who were undecided on this issue had a reduced likelihood of using any of the two methods compared to those who wanted none ($p < 0.005$). In this case, the risk was much lower for the male method than partner

method. Also, participants who had less than two children were significantly less likely to use a partner method ($p < 0.005$) while the use of male method was not statistically significant.

In addition, participants who did not discuss family planning with a health worker were significantly less likely to have used either of the two methods ($p < 0.005$), and the impact of this variable was neither favourable to male or partner methods. Likewise, men who disagreed that contraception makes women promiscuous had a higher relative risk of using a partner method, although the association was weak ($p < 0.05$). However, the risk was reduced for the male method in this case but only for those who were indifferent to this statement. Furthermore, having more than one sexual partner was strongly associated with a higher risk of using the male method, with the risk rising with each additional partner ($p < 0.005$). On the other hand, the risk of the partner method was elevated but only for one additional partner ($p < 0.05$).

Discussion

The purpose of this study was to determine the levels of contraceptive use among males, the preferred methods of contraception used by the study participants, and to identify socio-economic factors associated with the relative risk for using male and partner methods relative to non-use of a method. The findings indicated that more than two-thirds (68%) of participants were using contraception and the rate was higher than the one observed in other regions in sub-Saharan Africa^{21,22}. The study found that non-permanent methods were more popular with respondents than long-term contraceptives. This is because users in sub-Saharan Africa prefer to use contraceptive methods from community health facilities, which in turn do not offer alternative methods such as permanent contraceptives⁴. This finding raises a concern that, in cases where other methods are to be avoided due to side effects for an example, the unmet need is likely to increase generally in these countries.

As reported in one study in the sub-Saharan African region²³, participants who used a method tended to rely more on the partner method than other participants. It is possible that due to the fact that partner methods do not obstruct sexual pleasure during intercourse, they are preferred over male condoms during sexual encounters²⁴. Besides, information on method choices available to men is

generally scant in different countries and this creates a barrier for choice of method^{24,25,8}. Also, the findings revealed that methods varied across countries in the study. Males in Lesotho and Namibia, but not in South Africa, were more likely to use the male method compared with their counterparts in Zimbabwe. Men in countries experiencing a relatively high HIV infection rate are more likely to use male method than otherwise. A study conducted in Lesotho found that a substantial number of people believed the pandemic was negatively affecting the different sectors of the population²⁶.

Younger respondents had a higher probability of using contraception than their older counterparts. However, there was a shift towards a partner than male method as the age of the individual decreases. In addition, participants who were never in a union were more likely to use a method than those with a different marital status. The reason may be that they want to avoid or postpone pregnancy, but also because of the need to evade STIs, especially because the male method was mostly used in this case than the partner method. In support of this view, one study found that unmarried men are at a higher risk of STIs due to their propensity to engage in multiple sexual partnerships²⁷. In contrast, being in a union significantly reduced the risk of using the partner method. This may be an indication that men are likely to use a method mainly for protection against STIs and they will therefore abandon it once they are in a secure relationship and there is no fear of infection.

The results further indicated that an additional sexual partner was a significant predictor of the use of the male method. This is a further indication that male contraceptive methods are mainly used for protection against sexually transmitted infections more than is the case with pregnancy prevention. On a positive note, it is heartwarming to note that men are reacting positively to campaigns regarding the importance of getting a protection against HIV infection.

The study further revealed that the partner method was significantly and strongly linked to changes in educational level than the male method. This is likely because, among educated women, the opportunity cost of not using contraception is higher than among their male counterparts, as the risk of unwanted pregnancy interferes with their career than

it does with men. Another finding of the study was that participants with fewer or no children were more likely to rely on male method than otherwise. Studies have shown that there is a general fear that some methods may lead to permanent infertility among those using some. In that case, male condom is more likely to be preferred as it does not have such side-effects^{8,28}.

Recommendations

The study has the following recommendations:

The study found that the contraceptive prevalence rate for the male method was relatively low. Therefore, in order to increase utilization of male methods, the study recommends that family planning programmes should provide different choices of male contraception, especially male sterilisation, and these methods should be readily accessible with relevant information for each method.

The study recommends also that family planning programmes be maintained in general for both couples given that those who discussed family planning with health practitioners had an increased likelihood of using a method.

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Competing interest

The author declares that he has no competing interest.

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