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Male fertility regulation: A study on acceptance among men in Zimbabwe

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SUMMARY

Both traditional and modern methods of family planning widely practised currently in most countries, especially in sub-Saharan Africa, focus solely on the woman. There is hardly data on male directed methods of fertility regulation, or indeed whether, or not, such contraceptive options are acceptable. Contraception, whether for spacing, avoiding unintended pregnancy or limiting family size, is almost always a female prerogative. This, in certain circumstances, is despite the available female method being contraindicated. Acceptance of male sterilisation (vasectomy), condom use and male contraceptive pill were investigated in a representative sample of 711 Zimbabwean men.

Only 14 pc of men considered vasectomy an acceptable method of contraception and none of the men had current or previous use of this method. Seventeen[17] percent of the men had prompted knowledge of this method, compared to 53 pc who had prompted knowledge of female sterilisation. Only six percent of respondents reported current use of condoms and amongst condom non-users, 58,9 pc would not use the method if asked by a wife or partner. Surprisingly, 31,7 pc of the male respondents reported that they would consider a male contraceptive pill or injection if available. Should husband want no more children, 42,2 pc of men said they would agree to wife sterilisation and 19,5 pc could consider vasectomy. Previous use of condoms was reported by 33,8 pc of the men. Eighty eight (88 pc) percent of respondents had some formal education, although acceptance rates decreased with less education and older ages. Circumstances during which a male method could be considered, reasons and socio-economic determinants for acceptance of male fertility regulatory methods are discussed. Results indicate that more education and promotional information on methods available to men should be made available.

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INTRODUCTION

Despite the relative lack of contraceptive options available to men, a man and woman should be equal partners in the act of conception, contraceptive benefits or risks and responsibility for offspring up-keep. However, in most developing countries, there is an unbalanced emphasis on contraceptive technology directed solely towards women. Little is known about how men perceive their roles as reproductive agents in their communities.

World-wide, there is relative paucity of male contraceptive data in the scientific literature and a dearth of men in family planning clinics, especially as recipients of information, methods and devices.

Traditionally, both technological know-how and socio-cultural perceptions, set the stage for the current emphasis upon female-directed contraceptive options. this is despite great advances in the

elucidation and understanding of male reproductive anatomy and physiology. Proper sharing of the benefits and risks of whatever contraceptive strategy a couple may choose to follow will not occur until men everywhere demonstrate a greater readiness to accept their responsibility in family planning adoption.

Nearly 50 million men in the world have opted for vasectomy, with the growing evidence that there are no long-term deleterious effects,[1] and more men are choosing this options.[2,3] In the United States, male and female surgical sterilisations are performed in about equal numbers, with 47 pc of men electing for this procedure at a rate of half a million each year.[4]

Incentive payments have increased acceptance of male sterilisation in some developing countries faced with rapid population growth.[5,6,7]

Another male initiated contraceptive method, the condom, has high failure rates and low acceptance in some countries, which could be ascribed to lack of motivation to contraception by men.

Japan boasts a 75,9 pc condom use amongst contracepting married women.[8] with Japanese couples preferring condoms over methods that require surgery, insertion of foreign objects, or use of chemicals,[9] despite some of the advantages these methods offer, such as the separation of application from sexual activity. A high degree of male co-operation is cited as a factor in widespread condom use.

The biomedical quest for acceptable anti-fertility drugs for men continues (World Health Organisation Task Force on Methods for the Regulation of Male Fertility, 1986).[10,11]

Thus, technologically, male contraception may be achieved by stopping sperm production, altering or immobilising sperm either in the male or female or stopping transport of sperm within the male reproductive tract. Traditional methods, requiring male motivation include withdrawal (coitus interruptus) and periodic abstinence.

During the time that more male methods are undergoing clinical or laboratory evaluation, it is pertinent to pursue studies on socio-cultural factors that could elaborate and facilitate both motivation and adoption by the male partner of current and future methods.

Design and methodology: Male knowledge, attitudes and behaviour relating to fertility regulatory methods directed towards the man were determined in a survey project of a representative sample of Zimbabwe men. A stratified cluster sampling design with proportions for household distribution obtaining in Zimbabwe was used.

Zimbabwe is composed of eight provinces and five major administrative areas within each province as follows: urban and semi-urban areas (32 pc of households); communal and commercial farming areas (64 pc of households); resettlement areas (two pc of households); and small-scale commercial farming areas (2 pc of households) (Zimbabwe Central Statistical Office, 1987).

Since resettlement and small-sale commercial farming areas are each two pc of households within rural areas, they were collapsed into the rural component (communal and commercial farming areas) which make up 68 pc of the households with the remaining 32 pc being urban and semi-urban areas. The administrative areas were further divided into 4 068 enumeration areas (EAs); from which the Central Statistical Office (CSO) used 270 representative EAs for the 1987 intercensal demographic survey.

A representative sample of 11 EAs from the 270 was obtained to provide a sampling frame of 711 households using the CSO household name and address master file lists for each EA. Each EA type was systematically samples with household proportions based on a total of 711 interviews.

The survey questionnaire was administered to male respondents in all the selected EAs to obtain information on background characteristics, knowledge and attitudes towards male contraception. The study instrument was pre-tested and piloted in ecologically similar but geographically separate EAs. Relevant amendments were made and logistics were implemented when the main study was fielded. Data was coded, verified and analysed using a Data General Mainframe Computer employing statistical package.

RESULTS

The mean age of respondents was $37.7 \pm 14,1 \pm$ years old ($\pm$ SD) and 88.3 pc had attended formal education. Male respondents were asked to identify any contraceptive methods which they knew and which could be initiated by either the male or the

female. Only 1,8 pc of men had unprompted knowledge of male sterilisation (vasectomy) as a contraceptive method, compared to 74 pc with knowledge of the female pill. Prompted knowledge of female sterilisation was 15,3 pc, compared with 53,9 pc with knowledge of female sterilisation.

Table 1 shows the percent distribution of knowledge and use of male initiated contraceptive method amongst the men surveyed.

Table I: Male knowledge and use of male contraceptive methods

Method	Knowledge Unprompted	Prompted (pc)	Ever-use (pc)	Current-use (pc)
Vasectomy	1,8	17,4	0,0	0,0
Condom	37,6	53,6	33,8	6,0
Withdrawal (Traditional)	5,4	73,6	42,4	4,0

When asked if male sterilisation as an acceptable method of contraception, only 14,2 pc of men considered the method acceptable, 81,6 pc would not accept the method and 4,3 pc were uncertain.

The reasons given for finding male sterilisation acceptable are presented in Table II.

Table II: Reasons for accepting male sterilisation

Reason	Number	Percent
Joint male-female contraceptive participation	1	0,1
Only if not wanting any more children	53	7,5
Most effective method	21	3,0
If only available method	1	0,1
Important method	3	0,4
Other	23	3,2

Men who did not consider male sterilisation acceptable gave their reasons as outlined in Table III.

Table III: Reasons for disapproving male sterilisation

Reason	Number	Percent
Might want more children	207	29,3
Fear of virility loss	124	13,4
Children may die	48	6,8
Might re-marry	45	6,3
Method risky to health	25	3,6
God decides on fertility	12	1,8
Might fail to ejaculate	7	0,9
Only female sterilisation possible	4	0,6
Too young	2	0,2
Other	98	13,8

While only few men also considered female sterilisation (tubal ligation) an acceptable contraceptive method, as much as 63,3 pc reported that they would agree to sterilisation of their wives on medical advice, and 42,2 pc would consider wife sterilisation if they did not want any more children. The socio-economic characteristics of male respondents knowledgeable and approving or disapproving male sterilisation is outlined in Table IV.

Table IV: Socio-economic characteristics of male respondents approving or disapproving vasectomy

Social characteristics	Approving vasectomy	Disapproving vasectomy
Age (mean)	35,8	37,6
Education (years in school)	7,6	6,0
Rural (percent)	37,4	71,9
Urban (percent)	42,6	28,1
Unskilled and Agricultural worker (percent)	50,0	65,4
Other occupations (percent)	50,0	34,6

Age-specific approval or disapproval of vasectomy was comparable amongst the men with knowledge of the method, being highest in the 20–29-year age group 37,3 pc approving, 38,7 pc disapproving), followed by the 30–39-year-old group 33,39 pc approving, 23,4 pc disapproving) and lowest in the 50 years or more age group (15,7 pc and 20,6 pc respectively).

Only six percent of men reported that they were currently using condoms and previous use of condoms was reported by 33,8 pc of them. The highest proportion of condom ever use (43,3 pc was in the 20–29 years age group. Reasons given for not using condoms are given in Table V.

Table V: Reasons for not using condoms

Reason	Number	Percent
Spoils coitus	116	16,4
Don't know condoms	84	11,9
No extra-marital affairs	76	10,7
Wife on other method	42	5,9
Religious	6	0,8
Not effective	1	0,1
Other	85	12,0

Men who never used condoms, compared to hose who ever used them, were older, had less education

and the majority were in the rural population. Table VI shows the distribution of socio-demographic characteristics amongst the men who had used and those that had not used condoms.

Table VI: Distribution of social characteristics amongst men who had used and never used condoms

Social Characteristics	Ever Use	Never Used
mean age (years)	34,3	40,3
Mean Education (years in school)	7,6	5,3
Rural (percent)	60,4	75,6
Urban (percent)	39,6	24,4
Unskilled and agricultural economic activity (percent)	53,8	69,5
Other occupations (percent)	46,2	30,5

Ever use of coitus interruptus was reported by older men, men with fewer number of school years and reportedly used more amongst the rural (74,8 pc) compared to the urban (25,2 pc) population. Characteristic of respondents who either used or never used this traditional male initiated method is shown in Table VII.

Table VII: Characteristics of men with knowledge of withdrawal who either used or never used the method

Social Characteristics	Ever Use	Never Used
Mean Age (years)	41,5	34,6
Mean Education (years in school)	5,7	7,2
Number rural (percent)	74,8	63,5
Number urban (percent)	25,2	36,5
Unskilled and Agricultural worker (percent)	74,1	50,0
Other occupations (percent)	25,9	50,0

When asked if they would consider a male contraceptive pill or injection, 37,7 pc of them said they would, 61,1 pc said no and 7,2 pc were uncertain.

DISCUSSIONS

The findings illustrate a large gap in the acceptance of responsibility for fertility control between men and women in the population studied. This can be said for many other populations, particularly in less industrialised countries. While some promotional arguments in favour of family planning are based on macro factors like maintenance of a per capita net economic growth rate and a positive ecological balance, such arguments, concerned with population growth rates and their effects on national development, are most important and yet do not necessarily motivate the individual men. The micro factors of individual family benefits in health, education, well-being and welfare might stand a good chance in influencing male contraceptive behaviour and acceptance.

Very few men were readily aware of vasectomy as a contraceptive method (1,8 pc) which could reflect a lack of balanced family planning information dissemination at the onset by the relevant health care providers. On the other hand, only 14,2 pc indicated preparedness to consider the method while none of the men had ever used the method. Prompted knowledge of vasectomy was also low (15,5 pc) compared to 53,0 pc with knowledge of female sterilisation. Whereas economic liability and quality of family support could be a strong consideration in wanting no more children, end-user options for fulfilling this goal might remain a domain of the female partner.

In societies where vasectomy has been widely adopted, more than 90 pc of new acceptors are men who had discussed vasectomy with a vasectomised man.[12] Such person-to-person communication could be reassuring, especially in terms of fear of long-term effects. None out of 10 men interviewed by Mumford[12] prior to vasectomy stated that it was essential to have spoken with a vasectomised man before accepting vasectomy themselves and negative features of temporary methods became major considerations following birth of the child considered to complete the family.

Lack of information from an influential source on whatever advantages of male sterilisation against other available methods could be a major limiting factor in the initiation of this method, especially as some of the misconceptions surrounding vasectomy include subsequent failure to ejaculate. This inconsistency between scientific evidence and public perception warrants the need for active dissemination of scientific data not only for this particular method, but for other widely used FP methods.

Coitus interruptus or male withdrawal, was reportedly being used by 4,0 pc of men. This traditional family planning method is known to be less effective especially where there is no use of intravaginal spermicides. Fear of probable failure

often leads to anxiety in some couples on this method. However, its use could be a step towards adoption of more effective methods of family planning.

In traditional European society, coitus interruptess was considered a male method not only in its practice, but in its emotional identification. For example, Cartwright[13] showed that amongst the couples where the wife believed that the husband should take responsibility for family planning, 22 pc used coitus interruptus, whereas in those situations where the wife thought the woman should take responsibility for family planning, only 13 pc used the method.

However, 60 pc of women surveyed by Cartwright[13] had discontinued use of the withdrawal method because they thought the method was unreliable and 31 pc withdrew because they found it unpleasant to use.

Condom acceptance and current use was low amongst the men surveyed. The main objective to condom use concerned the lowering of sensation. Surprisingly, as much as 10,7 pc of men reported that they did not know about the condom. This is despite the emphasis on condom use both as a contraceptive and prophylaxis against sexually transmitted diseases,including the Acquired Immuno Deficiency Syndrome (AIDS). This contrasts with early studies in other parts of the world such as Japan, where Coleman[8] reported current condom use by married women of up to 75,9 pc. Forty percent condom use was reported for Swedish and British couples[14] and 42 pc use by couples in Finland.[15]

Perhaps the ultimate question of whether a new male contraceptive pill would be used if made available produced a higher positive response (31,7 pc) than would have been expected. This could be associated with the traditional acceptance of the female contraceptive pill. In one survey conducted in the United States, 70 pc of men answered positively[16] to male contraception.

Men, particularly, are aware of the economic hardships concomitant with large families. However, the responsibility for sharing contraceptive risks, at most,is left to the woman. Studies of male attitudes concerning reproductive responsibility are relatively few in comparison to the numerous reports which questioned only women and about women initiated methods.

There is a clear need for male contraceptive counselling; innovative methods development and rigorous promotion of available methods directed at men. Up to date, information about human reproduction is most important in the direction of acceptance of the idea of male directed family planning. If the basic knowledge is faulty, then all advice and information given on family planning is likely to be interpreted in a faulty context.

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