

## Knowledge, attitude and perception of Vasectomy by educated Nigerian Christians

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(Received: November 18, 2007; Accepted: December 15, 2007)

### ABSTRACT

Acceptability of vasectomy as a family planning method in Nigeria is reportedly poor as in other developing countries due to factors which include awareness, education, religion and socioeconomic class. Using self administered structured questionnaires, we determined the knowledge, attitude and perception of vasectomy among randomly selected educated Nigerian Christians. We also collated data from ten selected Family Planning Clinics in Enugu metropolis and interviewed Practitioners of the selected Clinics. Our results show poor awareness and defective knowledge of vasectomy which was significantly more among males. Acceptability of vasectomy and reasons also differed significantly among the sexes. We propose the incorporation of family planning in health education syllabus of senior secondary schools and the involvement of men in family planning matters and decisions. This will increase the awareness and also abolish the sex-differential knowledge.

**Key words:** Vasectomy, Christians, clinics, Nigeria.

### INTRODUCTION

Vasectomy is a simple, effective and safe surgical procedure for permanent male fertility control but is underused worldwide (Wright *et al.*, 2005). In some conventional clinics part of the vas deferentia are surgically removed, while in more modern clinics and also in no-scalpel (keyhole) vasectomies none of the vas is removed, but is instead cut and sealed (Eureka Aert, 2007). The procedure which simply interrupts the delivery of sperm has no effect on either the production of male sex hormones (mainly testosterone) or their secretion into the bloodstream. Thus, sexual desire (libido) and the ability to have an erection and orgasm with an ejaculation are not affected. Also since the sperm itself constitutes only a very small proportion of an ejaculate, vasectomy does not significantly affect the volume, appearance, texture

or flavor of the ejaculate (Schwingl and Guess, 2000).

Vasectomy remains an important option for contraception and over 500,000 vasectomy procedures are done each year in the United States, with majority of recipients being non-Hispanic whites, well educated, married or cohabitating, relatively affluent, and have private health insurance (Dassow and Bennett, 2006). Although sterilization is the most widely used contraceptive method worldwide, tubal ligation accounts for more than five times as many procedures as vasectomy (Family Planning Worldwide: 2002 Data Sheet). The Population Reference Bureau (PRB), Family Planning Worldwide 2002 report also show that in year 2002, vasectomy made up only 7% of all modern contraceptive use worldwide. And although vasectomy prevalence is low in most developing

regions, it is especially low in Africa, where it rarely exceeds 0.1% (Bunce *et al.*, 2007).

In Africa, Vasectomy acceptance is limited by several factors which include poor awareness and education, religion and culture, poverty and scarcity of skilled vasectomy providers. Furthermore, there are misunderstandings about vasectomy especially a fear of decreased sexual performance as a result of the procedure. These factors may contribute to the report that Vasectomy is not readily acceptable as a method of fertility control in Nigeria (Mutahir *et al.*, 2007).

This study aims to determine the level of Knowledge and awareness of Vasectomy in an educated urban Nigerian Christian population. The data will be important in determining focal points for emphasis in promoting reliable, effective and affordable family planning practices in Nigeria.

## MATERIAL AND METHODS

### Data

Data for the study were collected between June and August 2006 at Enugu metropolitan city. All Respondents had completed secondary school education, gainfully employed, Christians and have been married with at least a child. Information was collected by oral interviews using structured questionnaires which were filled simultaneously from the following respondents:

1. 302 males aged between 30 to 64 years (mean= 44.6 ± 3.1)
2. 300 females aged 26 to 45 years (mean = 38.1 ± 2.2)
3. 10 Family Planning Clinic Practitioners (8 females and 2 males).

We also visited 10 Family Planning Clinics as Clients and analysed information being received by patients seeking assistance from the Clinic.

A respondent was considered to have no Knowledge of vasectomy if he has heard of it but not as a Family planning method.

### Data analysis

The results were then collated and analyzed using SPSS version II and test of statistically variance was done using students t- test.

## RESULTS

### Utilization of family planning services

Only 2.5% of male respondents have been to a Family Planning Clinic before compared to 38% of females (P= 0.021)

### Pattern of knowledge of vasectomy: (Table 1)

1. Males: 134 (43.4%) of respondents had no knowledge of vasectomy by our classification. 168 (56.6%) of respondents had knowledge of vasectomy that can be classified as poor (32%), wrong (17%) and good (7%).
2. Females: 96 (32%) have no knowledge of vasectomy. 204 (68%) of females respondents had knowledge of vasectomy that can be classified as poor (22%), wrong (15%) and good (31%).

### Attitude and perception of vasectomy among respondents.

Table 2 shows the following pattern among respondents:

1. Males: 66.8 % believes it reduces sexual performance and drive, 26.3% sees it as a

**Table 1: Pattern of knowledge of vasectomy among the respondents**

Vasectomy knowledge	Males	Females	P value
No knowledge	134(43.4%)	96 (32%)*	0.033
Poor knowledge	96 (32%)	66 (22%)*	0.047
Wrong knowledge	51 (17%)	45 (15%)	0.052
Good knowledge	21( 7%)	93 (31%)*	0.002
Total	302(100%)	300(100%)	

\*= significant at P ≤ 0.05

- procedure for both sexes, 22.2% sees it as castration, while only 9% believes it is an effective birth control measure.
2. Females: Majority 68% sees it as effective family planning method, 40.2 % believes it reduces sexual performance and drive, 10.1% sees it as castration, while only 1.8% sees it as a procedure for both sexes.

**Reasons for Non acceptance of Vasectomy by respondents**

Table 3 shows the following

1. Males: 89.6% were afraid of the procedure and another 67.6% afraid of side effects. Other reasons given were cost implications (9%), religious reasons (2.4%) and cultural

- reasons (0.2%).
2. Females: Reasons given were religious reasons (64%), cost implications (55.7%), Fear of side effects on spouses(45.9%) or the procedure (26.6%), and cultural reasons(1.8%).

**Interaction with family planning clinic practitioners**

1. Over 95% of their clients are females and a great majority do not visit the Clinic with spouses.
2. Most of their clients seek reversible means of family planning.
3. 9 (90%) will advice on vasectomy as a last resort but none offers vasectomy.

**Table 2: Attitude and perception of vasectomy among respondents**

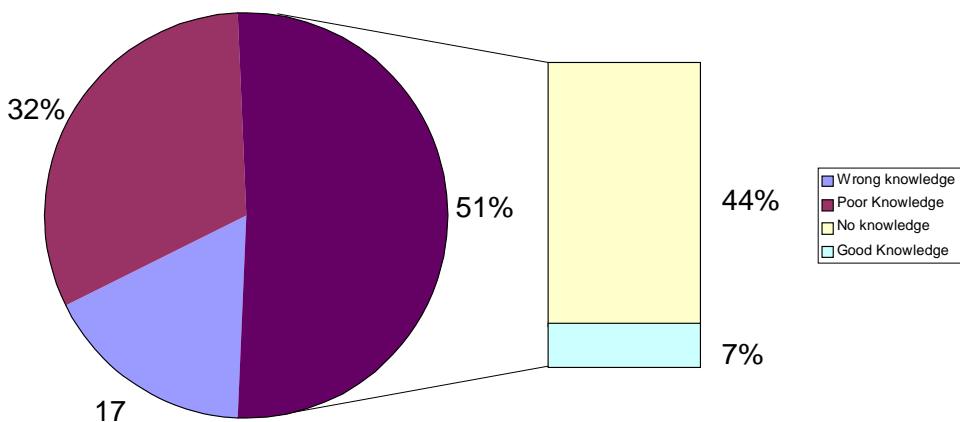
Attitude and perception	Males	Females
Reduces sexual performance and drive	66.8%	40.2%
Procedure for both sexes	26.3%	1.8%*
Sees it as castration	22.2%	10.1%*
Effective birth control measure	9%	68%*

**Table 3: Reasons for the rejection of vasectomy**

Reasons for the rejection	Males	Females
Fear of procedure	89.6%	26.6%*
Fear of side effects	67.6%	45.9%*
Religious	2.4%	64.0%*
Cost	9.0%	55.7%*
Cultural reasons	0.2%	1.8%

\* =Significant at P ≤ 0.05

\*= significant at P ≤ 0.05



**Fig. 1: Classification of Knowledge exhibited by male respondents**

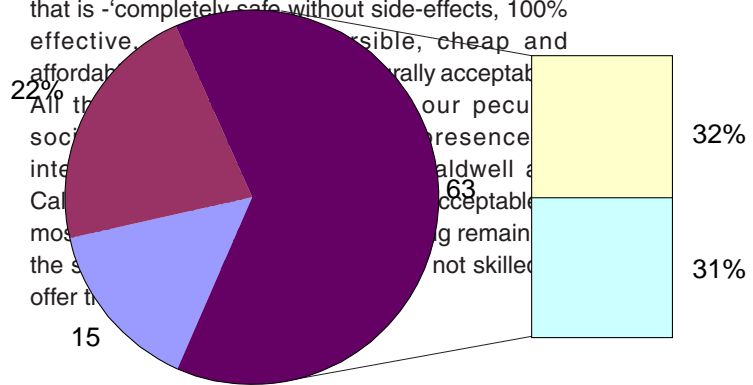
**DISCUSSION**

Family planning in Nigeria is a component of Primary health care and its being promoted actively both by government and non governmental agencies with the support of international donor agencies and organizations. Till date religion, education, culture and ignorance is still a major determining factor in the acceptability of vasectomy as a family planning practice in Nigeria (Ekwueme, 2007). Our finding however shows a low level of awareness of vasectomy among the educated population in an Enugu metropolis which was significantly higher among males. This means that despite other factors, there is a high level of unawareness of vasectomy in Nigeria despite efforts in promoting Family planning. This factor can be partly attributable to promotion of other methods of family planning more than vasectomy by practitioners due to factors ranging from their inherent views on acceptability, their personal preferences (based on religious and cultural inclinations) and to their inability to offer the service. Their view on acceptability is valid since a majority of their clients are females. For instance only 2.5% of male respondents have been to a Family Planning Clinic before compared to 38% for females suggesting that a majority of visits to Family planning clinics in Nigeria are by females, a view supported by both our discussion with the Family Planning Clinic practitioners and attendance registers in the few clinics visited in Enugu. This greatly explains the better and more informed knowledge of

vasectomy by the female respondents compared to the males.

There are also cost implications that hinder promoting vasectomy since a variety of other services are adequately subsidized unlike vasectomy. We also noted that personal preferences of the practitioners contributes to information given to clients, such that a Christian of the Roman Catholic denomination may be reluctant to promote vasectomy especially in a setting where there are cheaper and assumingly more acceptable and instantly available methods of contraception. In addition, majority of their clients seek easily reversible contraceptive methods and this may also account for their reluctance to mention vasectomy as an alternative family planning method to their clients.

Interviews with practitioners of Family planning clinics revealed a background training that may not include Vasectomy as an ideal contraceptive. This is because it emphasises characteristics of an ideal contraceptives as one that is 'completely safe without side-effects, 100% effective,



**Fig. 2: Classification of Knowledge exhibited by female respondents**

Our study also shows that where awareness of Vasectomy exists, majority of respondents have defective knowledge. Overall over 93% of male respondents and 69% of female respondents have what we can classify as defective knowledge which invariably reflects their sources of information especially as about 51% of them admitted their source of information to be non-medical oral communication.

Most of our male respondents will not accept vasectomy mainly because it is considered a surgical operation with its attendant risks, its non-reversibility and possible side effects especially fear of reduced sexual performance. This finding is consistent with earlier report of a study done in six-countries (Laundry and Victoria, 1997). Scientist believes that although men considering vasectomies should not think of them as reversible, there is a procedure to reverse vasectomies using vasovasostomy (a form of microsurgery which is not yet available in Nigeria). However, the success rate depends on such factors as the method used for the vasectomy and the length of time that has passed since the vasectomy was performed. Also a mechanically successful reversal does not always restore fertility with the evidence that men who have had a vasectomy may produce more abnormal sperm (Abdelmassih *et al.*, 2002).

Vasectomy indeed has side effects like Chronic Post Vasectomy Pain (PVP) and minor others related to procedure. Some studies have also reported immunological complications with the finding of antibodies generated in response to sperm antigens in 55% to 75% of patients within two years after vasectomies (Tung, 1975). There has also been earlier reports of psychological side-effects which may actually cause decreased sexual satisfaction and performance (Ziegler *et al.*, 1966, and Edey, 1972).

Despite these reports, Vasectomy is considered among the safest options for family planning. However the rate of vasectomies to tubal ligations worldwide is extremely variable and the statistics are mostly based on questionnaire studies rather than actual counts of procedures performed. In Britain where vasectomy is more popular than

tubal ligation it is offered free of charge as part of National Health Service (Vasectomy encyclopaedia, 2004). Programs in Tanzania and Kenya have acknowledged the importance of economic pressures on vasectomy uptake (Muhondwa *et al.*, 1997 and Wilkinson, 1996). This means that cost is a major factor on acceptance of vasectomy worldwide. Indeed, it is well established that cost and quality of service (perceived and real) are major players in decision to seek and use medical care in Africa (Jimoh, 2003) and Nigeria (Orijji *et al.*, 2003). These factors exist in our study population and is contributory to our results.

A majority of female respondents will prefer vasectomy to other methods for various reasons understandably by the fact that the risks are transferred, however over 30% will reject it as a choice based mainly on religious reasons. Fear of side effects on their husbands was also reported consistent with reports from Kenya (Ruminjo, 1999). In both sexes, cultural reasons were not a common reason for choice of family planning method, this is understandable considering that all respondents were educated. Religion as a reason for rejecting vasectomy was rare among male respondents.

Factors affecting choice of vasectomy will vary among people due to sex, education and socioeconomic group. Among the educated group in Nigeria there is a poor and very defective knowledge of the procedure which is significantly higher in males. There is a need to incorporate Family planning into health education at the senior secondary school level. This will increase the awareness and also abolish sex-differential in knowledge. This is true because reports show that men are interested in family planning generally (Salem, 2004) and the low use of vasectomy is not entirely because of men's resistance to the method, but also because of the failure of many health professionals to make information and services available and accessible (Bunce *et al.*, 2007). There is thus a valid need to include men more in matters of reproductive health and family planning. The women must be encouraged to seek reproductive health services with their husbands because we believe that involving the men in decision making will benefit both the men and women.

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