

# VASECTOMY: A SURVEY OF ATTITUDES, COUNSELING PATTERNS AND ACCEPTANCE AMONG NIGERIAN RESIDENT GYNAECOLOGISTS

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## SUMMARY

**Objectives:** Previous Nigerian studies show widespread ignorance and low acceptance of vasectomy among the male population. The objectives of this study were to determine the level of knowledge of, attitudes to, counselling pattern and acceptance of vasectomy among Nigerian Resident Gynaecologists.

**Design:** A cross-sectional questionnaire based survey.

**Method:** Resident Doctors attending a national update course in obstetrics and gynaecology.

**Results:** Most of the doctors had good knowledge of Vasectomy. More than four-fifth of the doctors were convinced that the average Nigerian male will not accept vasectomy when indicated while more than three-fifth consider BTL a more appropriate option for permanent contraception in our setting. Forty one point three percent of the doctors will opt for vasectomy or urge their husbands to. Reasons for opposition to vasectomy were socio-cultural (21.3%), religious (13.1%) and psychological (41.0%), 24.6% had no specific reasons. While 89.4% of the doctors counselled often for BTL only 5.8% did for vasectomy.

**Conclusion:** The Doctors showed good knowledge of vasectomy but most were poorly disposed towards use of vasectomy. The findings suggest a need for effective national training programmes targeted at resident doctors to enhance their knowledge of vasectomy as well as break barriers to personal use of, and counselling for vasectomy.

**Keywords:** vasectomy, doctors, knowledge, counselling patterns, attitudes, acceptance

## INTRODUCTION

Nigeria with an estimated population of 120 million is the most populous nation in Africa and among the 10 most populated nations of the world<sup>1</sup>. The large population is characterized by a growth rate of 2.8%, high fertility rate of 5.9 per woman and Maternal mortality ratio of 1000 per 100,000 live births<sup>2,3</sup>; one of the highest in the world. Despite these statistics, the contraceptive prevalence rate among married couples<sup>2</sup> is as low

as 10%. The use of permanent contraception is low. While previous reports have shown acceptance rates for Bilateral Tubal Ligation (BTL) as 8% among women aged 35-44 years and 1.25% of all deliveries<sup>4,5</sup>, considerably lower than rates reported from elsewhere, there are no readily accessible published incidences of vasectomy use from health institutions in Nigeria.

Vasectomy, or male surgical sterilization, involves the division or occlusion of the lumen of the vas deferens leading to disruption of the passage of sperm from the testes.<sup>6,7</sup> It is one of the few fertility control methods that enable men to take personal responsibility for contraception.<sup>7</sup> It is a simple procedure usually done under local anaesthesia on outpatient basis and is associated with less risk of morbidity than BTL. It is less expensive than BTL and its method failure rate of 0.01 per 100 women years is lower than 0.13 per 100 women years for female sterilization.<sup>6,7</sup> While high acceptance rates have been reported in developed countries like the USA and Australia.<sup>8,9</sup> Vasectomy is still not widely accepted in many African countries including Nigeria.<sup>10,11</sup>

Previous studies in Nigerian men have identified ignorance among males as the major reason for the low acceptance of vasectomy in Nigeria.<sup>12,13</sup> Ignorance is reflected in widespread misconceptions about vasectomy. These include the belief that it causes impotence, ejaculatory failure, weight gain, and its equation with castration. Spread of accurate information in a population has been shown to improve the perception and acceptability of vasectomy.<sup>14</sup> This study set out to explore the knowledge, attitudes, and patterns of counselling for and acceptance of vasectomy among Obstetrics and Gynaecology resident doctors in Nigeria.

## METHODS

The study was a cross-sectional questionnaire based survey of Resident doctors attending the update course of the Faculty of Obstetrics and Gynaecology, National

Postgraduate Medical College of Nigeria that took place in Benin City, Nigeria in August 2008.

The National Postgraduate Medical College of Nigeria is the organization empowered by law to co-ordinate postgraduate training of doctors in Nigeria. The Residency training programme spans over six years. Residents do their first professional examinations after about three years of training and the final examinations is usually after 5-6 years of specialist training. The professional examinations hold twice a year and two Revision/Update courses are held before each examination.

The study population consisted of Resident Doctors who had spent at least three years in the residency programme and were preparing to sit the professional examinations of the College in November 2008. Doctors that had spent less than three years in the residency programme were excluded from the study. This was because the researchers felt that they may lack adequate knowledge and experience to adequately answer the questions raised in the study since they would not have completed the necessary postings and clinical exposure required for at least the junior stage of residency training (Ten doctors belonged to this category, 8.8% of the course attendants).

The Doctors were from 24 accredited tertiary health institutions spread across the six geopolitical zones of Nigeria. The study was done using a questionnaire, which had been pre –tested among Doctors in the department of obstetrics and gynaecology, University of Benin Teaching Hospital. It had two parts. The first part sought information on the Doctors' sociodemographic variables including sex, age, marital status, occupational status, tribe and, religion. The second part explored the knowledge, perceptions, counseling patterns and attitudes to vasectomy among subjects. Analysis of data was computer based and Statistical analysis was with the INSTAT Statistical package.

## RESULTS

One hundred and four doctors participated in the study. Table 1 shows the sociodemographic variables in the study population. Most (79.8%) were in the fourth decade of life, mainly Christian, about three-quarter were males and the vast majority (90.4%) were of the Registrar cadre.

Table 2 shows that most of the Doctors had good knowledge of Vasectomy. Using a simple scoring system of 1 point per question correctly answered, 3.9%(4) of the subjects had a score of 9/9, 50%(52) had a score of 8/9, 31.7%(33) had a score of 7/9,

6.7%(7) had a score of 6/9, 5.8% (6) had a score of 5/9, and 1.9 %(2) had a score of 4/9.

**Table 1** Socio-demographic variables in the study population

Variable	Percentage (number)
<b>Age (years)</b>	
30-39	79.8(83)
40-49	20.2(21)
<b>Sex</b>	
Male	74.0(77)
Female	26.0(27)
<b>Marital Status</b>	
Single	22.1(23)
Married	66.3(69)
Separated/Divorced	11.5(12)
<b>Religion</b>	
Muslim	18.3(19)
Pentecostal Christian	33.7(35)
Catholics	24.0(25)
Protestants Christians	21.2(22)
African traditional religion	2.9(3)
<b>Cadre</b>	
Senior registrars	9.6(10)
Registrars	90.4(94)

**Table 2** Knowledge of vasectomy among respondents

Statement	A	DA	DK
Vasectomy is best considered a permanent method of contraception	92.3(96)	7.7(8)	0
The normal functioning of the testis is altered	76.9(80)	22.1(23)	1.0(1)
There is usually a reduction or loss of libido in the male	1.0(1)	98.0(102)	1.01(1)
The man may have difficulty in achieving an erection	0	97.1(101)	2.9(3)
Ejaculation is impaired	23.1(24)	75.0(78)	1.9(2)
The procedure requires admission of the client routinely	1.0(1)	97.1(101)	1.9(2)
The procedure is best done under general anaesthesia	1.9(2)	197.1(101)	1.0(1)
Vasectomy is more difficult to perform than BTL	3.9(4)	96.2(100)	0
Vasectomy increases the risk of prostate cancer	19.2(20)	80.8(84)	0

Table 3 shows that more than four-fifth of the Doctors were convinced that the average Nigerian male will not accept vasectomy when indicated while more than

three-fifth consider BTL a more appropriate option for permanent contraception in our setting. Forty one point three percent of the doctors (43) will opt for vasectomy or urge their husbands to, if the family had no plans to have more children while 27.9% (29) would rather opt for or urge their wives to have BTL. Of those 61 respondents who would not use vasectomy, 21.3% (13) gave their reasons as socio-cultural, 13.1% (8) as religious, 41.0(25) as psychological while 24.6% had no specific reasons. Analysis of the pattern of counselling for permanent contraception showed that 89.4% of the doctors (93) stated that they counselled for BTL often, 9.6%(10) rarely while only 1.0% had never counselled for BTL. In contrast, only 5.8% counselled often for vasectomy while 47.1% did so rarely and 47.1 had never counselled any patient for vasectomy.

**Table 3** Perception of Vasectomy

Perception	Percent-age(No.) (n=104)
Vasectomy is not an appropriate family planning option in Africans because it makes the man less of a man	9.6(10)
It should not be considered because it curbs the man's ability to marry more wives if he chooses	12.5(13)
I believe the expertise for safe vasectomy is not available in our environment	15.4(16)
I am convinced the average Nigerian male will not accept vasectomy even when a most appropriate option	84.6(88)
I consider BTL a more appropriate option for permanent contraception in our setting	64.4(67)

## DISCUSSION

Most of the subjects of this study showed good knowledge of vasectomy which would be expected of resident doctors in a training programme. A previous study among Nigerian health workers in Ibadan showed good knowledge of vasectomy<sup>15</sup> but level of knowledge among the general population of males has been shown to be considerably lower<sup>12, 13</sup>. However, as much as three quarter of the subjects believed that the normal functioning of the testis is altered after vasectomy, about one fourth that ejaculation may be impaired while about one fifth felt that vasectomy increases the risk of Prostate cancer. These are important defects in the knowledge of the doctors that may influence willingness to recommend the procedure or lead to spread of erroneous information to the general population

An important finding of this study was that the vast majority of doctors were convinced that the average

Nigerian male will not accept vasectomy when indicated while more than three-fifth consider BTL a more appropriate option for permanent contraception in our setting. The belief that Nigerian males will not accept vasectomy is clearly not borne out of the experience of counselling males for vasectomy since most of the Doctors admitted to not counselling often for vasectomy. It is possible that the belief that Nigerian males will not accept vasectomy partly explains the seeming hesitance towards counselling for vasectomy and greater willingness towards counselling couples with completed family sizes for bilateral tubal ligation.

Our findings show that while 89.4% of the doctors stated that they counselled for BTL often only 5.8% counselled often for vasectomy while almost half of the study population had never counselled any couple for vasectomy. However, these findings must be viewed in the light of the fact that our questionnaire did not look at whether the doctors counselled women with their husbands and how often this occurred. This is a limitation of our study. It is possible that if the doctors saw women alone most of the time, there might be a greater tendency to counsel more for BTL than for vasectomy, which may explain the aforementioned findings.

The findings of a previous study suggest that spread of accurate information among the population is a major contributor to better acceptance of vasectomy.<sup>14</sup> In settings with better acceptance of vasectomy, it has been shown that most vasectomised males became aware of the procedure through family planning clinics or health personnel.<sup>8</sup> Counselling gives opportunity for provision of appropriate information as well as correction of erroneous views on the effects of vasectomy in the concerned couple. This information is likely to be shared with spouses, relatives and peers<sup>8</sup>, hence widespread and persistent counselling may hold the key to better acceptance of vasectomy. None of the doctors or their partners had had vasectomy and almost three fifth of the Doctors would not use Vasectomy when they decide not to have more children.

These findings are in contrast with a previous finding in Brazil where one tenth of Doctors surveyed had had vasectomy.<sup>15</sup> Doctors in developed countries have been shown to be better disposed to vasectomy.<sup>16</sup>

The reasons given by those averse to the use of vasectomy were mainly psychological, sociocultural and religious. It is likely that these factors may also influence the disposition towards counselling for vasectomy. It would be expected that a doctor who is biased against use of vasectomy personally may consciously or unconsciously transfer his or her biases to the patients.

It is therefore important that doctors who for strong personal or religious reasons are opposed to contraception or forms of contraception do not get involved in contraceptive counselling.

## CONCLUSION

In conclusion, the findings of our study suggest that most of the resident doctors are poorly disposed towards use of vasectomy. The findings suggest a need for effective national training programmes targeted at resident doctors to enhance their knowledge of vasectomy as well as break barriers to personal use of, and counselling for vasectomy.

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