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ATTITUDES AND ACCEPTANCE OF NIGERIANS TOWARDS VASECTOMY- A COMPARISON OF MARRIED MEN AND WOMEN IN LAGOS

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ABSTRACT

Background: Nigeria with a growth rate of 28%, accounts for over two thirds of the West African population. It also has one of the highest maternal mortality rates in the world with contraceptive prevalence among married couples less than 10%. Despite its safety and efficacy vasectomy appears to be unpopular in our environment..

Objective: To assess the perception and acceptance of married men and women towards vasectomy and the influence of the spouse on the man's decision to accept or reject vasectomy.

Design: A cross sectional questionnaire based study.

Setting: With an estimated population of 20 million, Lagos is the most cosmopolitan and urbanised city in Nigeria and accounts for 65% of all commercial activities in the country. Virtually all the tribes in Nigeria are represented in the city.

Subjects: Literate pregnant women recruited from the antenatal clinics and literate new fathers. All subjects were recruited from three health facilities in the Lagos metropolis.

Results: Twenty seven point five and twenty one percent of the men and women respectively had a good Knowledge of vasectomy while 49.1% and 19% of all men and women respectively with good knowledge would accept vasectomy (or agree for their spouses to have the procedure). Overall acceptance rates for men and women were 26 and 13.5% respectively while 92% of men who can opt for vasectomy will only do so if their spouses agree. Knowledge about vasectomy was the strongest single factor influencing the acceptance of vasectomy ($p=0.013$) with stronger correlation among men than women ($p=0.005$ vs $p=.0.023$).

Conclusion: Knowledge and acceptance of vasectomy is significantly better in males than female Nigerians living in Lagos.

INTRODUCTION

Nigeria with an estimated population of 167 million is the most populated nation in Africa, accounting for over two thirds of the population of West Africa, with a growth rate of 28% and high fertility rate of 5.9 births/woman (1). It also has one of the highest maternal mortality rates in the world with contraceptive prevalence among married couples less than 10% (1). Despite its safety, efficacy and popularity in the West, recent studies have reported low acceptance of vasectomy by Nigerians (2).

Surgical sterilisation which includes tubal ligation (BTL) in females and vasectomy in males are prevalent among married couples. In the US, it

was reported as the contraceptive of choice in one third of all married couples (3). The advantages of sterilisation include effectiveness, safety, convenience and avoidance of high rate of discontinuation

In addition, vasectomy is regarded as the safest and least expensive option of permanent sterilisation. Compared with tubal ligation, it is less likely to fail, with less complications and costs and has been reported to be a major contraceptive method in more developed nations. Its use in the New Zealand is particularly high as it accounts for 44% of all forms of family planning (FP) among married couples (4). Even though there appears to be no historical or national population data about male sterilisation, recent survey among Lagos residents using the

hospital records of the two largest health institutions in Lagos which are also the only government establishments known to be rendering vasectomy services showed that only two vasectomies had been performed in the last ten years in a state with a population of about 20 million (5). While it appears that the number of vasectomies performed worldwide is increasing, it does not appear to be so in the West African sub-region; where a prevalence of less than 0.1% of couples has been reported (6).

FP involves a couple and it is reasonable to assume that the partner plays a role in decision making. Studies on vasectomy among Nigerians are relatively sparse and have mainly been aimed at assessing the knowledge and attitude of men towards vasectomy as a way of attempting to explain the poor utilisation of vasectomy by Nigerians with virtually all reporting poor knowledge and unfavourable disposition towards vasectomy. Most studies have however failed to assess the disposition and possible role of women in the utilisation of vasectomy services. In this study, we tried to assess the knowledge and disposition of literate married Nigerian women and men towards vasectomy.

MATERIALS AND METHODS

Setting: With an estimated population of 20 million, Lagos is the most cosmopolitan and urbanised city in Nigeria and accounts for 65% of all commercial activities in the country (5). Virtually all the tribes in Nigeria are represented in the city (5). It is regarded as the fastest growing city in the world and is estimated to become third largest city in the world after Bombay and Tokyo by 2015 (5).

Data Collection : This was a cross-sectional questionnaire based study conducted amongst 200 literate married men and women between the ages of 20 and 50 years. The questionnaire consisted of structured Multiple Choice Questions (MCQ) and two open-ended questions. The questionnaire was divided into three main sections - personal profile, knowledge of vasectomy and attitudes towards vasectomy. There were two open-ended questions - one asking the participants to explain what they understood by vasectomy (in section 2) and the other asking participants (who would not accept vasectomy) to give the single most important reason for not accepting vasectomy (in section 3).

The women were recruited from the ante-natal clinics of the Lagos University Teaching Hospital, continental hospital, RAO hospital and Mushin

General Hospital all in the Lagos metropolis while the men were fathers of new born babies from the same hospitals. Specific attempts were however not made to identify or match husbands of previously interviewed women.

The questionnaire had been pre-tested amongst patients and patients' relations attending Continental Hospital and RAO specialist hospital both located in Lagos.

Data analysis were done using the SPSS version 16 software which included descriptive statistics and Chi-square analysis. The level of statistical significance was set at $p < 0.05$.

RESULTS

Mean age of male respondents was 35.8 years while that of females was 31.2 years. All had at least secondary school education while 30.5 and 18% of the male and females had post-secondary school education.

Knowledge about vasectomy: For the convenience of analysis, the participants were classified into three groups based on the response to the knowledge-based questions on vasectomy.

- Good knowledge – Answered the open ended question and at least 75% of the MCQ correctly.
- Fair knowledge – (a) Answered the open ended question and less than 75% of the MCQ correctly or (b) answered more than 75% of the MCQ correctly but did not answer the open ended question correctly.
- Poor knowledge: incorrect answers to the open-ended questions and correct answers to less than 75% of the MCQs

Table 1

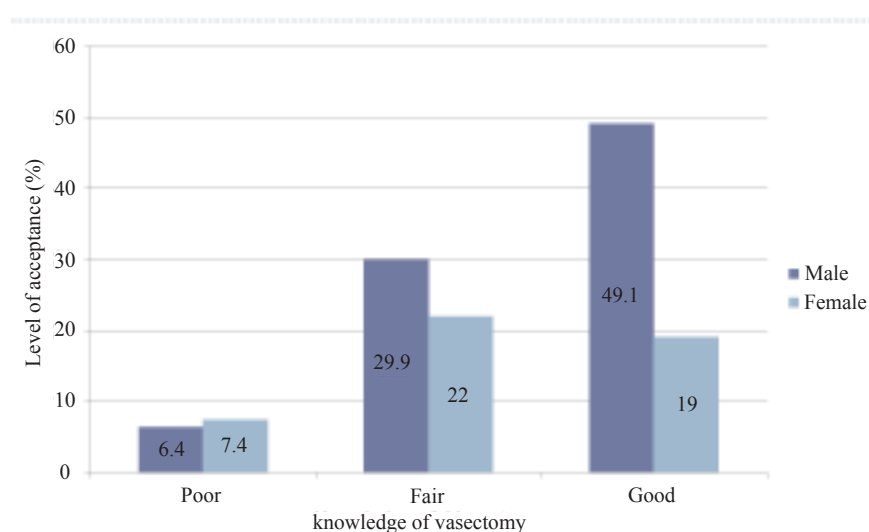
Level of knowledge amongst respondents by sex

Sex	Male (N/%)	Female (N/%)
Good	55 (27.5)	42 (21)
Fair	67 (33.5)	50 (25)
Poor	78 (39.0)	108 (54)
Total	200 (100)	200 (100)

Table 2
Over all acceptance versus level of knowledge

Level of knowledge	Male N=200 (%)	Female N=200 (%)
Good	27 (13.5)	8 (4)
Fair	20 (7.5)	11 (5.5)
Poor	5 (2.5)	8 (4)
Total Acceptance	52 (26.0)	27 (13.5)

Acceptance Vs Level of Knowledge



Twenty-seven (49.1%) and 8 (19%) of all men and women respectively with good knowledge would accept vasectomy, 20 (29.9%) and 11(22%) of all men and women respectively with fair knowledge would accept vasectomy while 5 (6.4%) and 8 (7.4%) of men and women respectively with poor knowledge would accept the procedure.

Table 3
Factors Affecting disposition towards vasectomy amongst all respondents (males and females)

Factor	P-value
Age	0.561
Sex	0.022*
Level of knowledge	0.013*
Tribe	0.741
Religion	0.585
No of children	0.298
Profession	0.102

*- statistically significant

Table 4
Comparison of factors affecting predisposition towards vasectomy between males versus females

Factor	P – Value	
	Male	Female
Age	0.602	0.511
Level of knowledge	0.005*	0.023*
Tribe	0.711	0.763
Religion	0.566	0.634
No of children	0.319	0.274
Profession	0.212	0.048*

*- Statistically significant.

Eighteen percent of men prefer vasectomy over BTL while 14.5% of the women prefer vasectomy over BTL. One hundred and seventy six (88%) of all men will not accept vasectomy (even if they wanted it) if their spouses disagree, while 48 (92.3%) of all men who would accept vasectomy would do so only if

their spouses agree.

Twenty seven (13.5 %) women will agree for the spouse to have vasectomy while only 16 (8%) will advise their sons or brothers to have a vasectomy, while 60 (30%) of the males are ready to recommend vasectomy to a male relation.

Table 5
Single most important reason for rejecting vasectomy amongst respondents

	Male (%)	Female (%)
Irreversibility	44 (29.7)	35 (20.2)
Impotence	41 (27.7)	52 (30.1)
Risk of major complications	19 (12.8)	9 (5.2)
Man incomplete	7 (4.7)	20 (11.6)
Better to have BTL	5 (3.4)	8 (4.6)
Fear of the unknown	16 (10.8)	23 (13.3)
Ignorance of procedure	5 (3.4)	3 (1.7)
Psychological problems in future	10 (6.8)	21 (12.1)
Religious belief	1 (0.7)	2 (1.2)
Total	148 (100)	173 (100)

DISCUSSION

In many male dominated societies in Africa men make most of the decisions regarding family formation. In practice in a developing country like Nigeria, even though Family Planning Service Delivery Points have virtually only female subjects, married women are usually advised to at least take their husbands consent before taking a decision on family planning especially the permanent methods of contraception. Little is however known on the influence of the Nigerian woman on the husband's choice of contraception especially vasectomy as most studies have focused only the male. The influence on the partner's choice

of contraception appears not to be limited to the male alone as the female also appears to have strong influence on the male partner's choice of contraception as was shown in this study. In this study 93% of all women believed that their husbands would seek their approval before going ahead with any form of permanent contraception, 88% of all the men would not consider vasectomy (even if they wanted it) if their spouses were averse to it while 92.3% of all men who are willing to accept vasectomy would only go ahead if their wives agreed.

The level of awareness and knowledge about vasectomy was poor in both sexes but was better in men with 27.5% and 21% of men and women

respectively having good knowledge of vasectomy while 33.5% and 25% respectively had a fair knowledge of the procedure. This is consistent with studies by others in our environment which have reported poor knowledge of vasectomy among Nigerians. Information for men was mainly via newspapers and magazines, while for the women it was mainly from visits to the ante-natal or post-natal clinics.

An important finding in this study was that men were more favourably disposed than women towards vasectomy. While 26% of men were ready to accept vasectomy, only 13.5% of women will agree for their men to have the procedure and even fewer (8%) women will be in favour of a decision by their sons or male relation to have vasectomy. While these values may be regarded as low they actually constitute improvements from previous studies conducted in Nigerian men. In Ekpoma (7) and Ibadan (8), only 6.8% and 19.2% of men would agree to vasectomy respectively. It must however be noted that the study in Ekpoma was conducted on tertiary institution graduates while the study in Ibadan was conducted amongst health workers at the University Teaching Hospital who were likely to be more knowledgeable about vasectomy than the general population. Even though most studies in Nigeria had been focused on men, a recent study of women was done in Jos, North-Central Nigeria which reported an approval rate of 18.75% (9). It is however difficult to compare the responses of women in Jos with responses of men in Ekpoma or Ibadan due to significant geographical, religious and socio-cultural differences. In our study, the men and women lived or worked within the Lagos metropolis

In many developing countries and some developed countries FP is still regarded by most couples as mainly a feminine issue (10-12). Even though majority of both male and female respondents preferred female to male sterilisation a higher number of males (18% versus 14.5%) preferred vasectomy to tubal ligation. It must however be noted that preference in this case was not synonymous with acceptance.

Most studies have reported a positive correlation between knowledge of vasectomy and its acceptance by men. In this study, the most important singular factor affecting the acceptance of vasectomy in both sexes was knowledge. The effect of knowledge on the acceptance of the procedure was more statistically significant in the male (0.005 versus 0.023) (Table 4). This was mainly due to the rather surprising findings where out of the eight female nurses interviewed, who as expected had adequate knowledge of vasectomy, only one would agree to her spouse having vasectomy. This itself may have implications on counselling as most individuals coming to the family planning

delivery points for contraception in Nigeria usually have female nurses as their first (or only) contact (13). However a study amongst literate men in Ekpoma, Nigeria found no statistically significant correlation between knowledge and acceptance of vasectomy (7). Other studies have reported religion to play a role in the disposition towards vasectomy (7) while others found no relationship (8). In this study the effect of religion was not statistically significant.

Reasons for rejection of vasectomy were similar for majority of respondents in both sexes with misconception about vasectomy such as fear of impotence, fear of the unknown, lack physical strength and fear of surgery being the most common barriers. Among women with adequate knowledge, the major reason for rejection of vasectomy was the fear of the unknown.

While it still appears that most Nigerians men still find vasectomy unacceptable due to failure of information and cultural prejudices, it appears that the role of the women in changing the attitudes of their spouses have been overlooked. A local interview of the primary health care officers (trained nurses and midwives) involved in counselling for FP in a local PHC showed that none of them routinely counselled their patients (who were all women on ante-natal or post-natal visit) on vasectomy. A recent study of gynaecology residents involved in family planning service delivery across the country showed that while 89.4% of them regularly discussed Bilateral Tubal Ligation (BTL) with their patients, only 5.8% discussed vasectomy with them (14). Almost 85% of the residents decided not to discuss vasectomy because they believed that the Nigerian man will not accept vasectomy.

In conclusion, this study suggests that while the attitudes towards vasectomy is still poor by western standards, there appears to be an improvement in the attitude of men towards vasectomy. The women appear to be more averse to it than the men. Misconceptions about the procedure appear to be the main factor responsible. While the influence of the man in a women choice of BTL is our environment is well established, it appears the role of women in the decision of their spouse on the choice vasectomy has been underestimated and under-utilised. .

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