

Research article

Knowledge and Acceptance of 'Vasectomy as a Method of Contraception' amongst Literate Married Men in Ekpoma, Nigeria

¹Akpamu U, ¹Nwoke E O, ¹Osifo U C, ¹Igbinovia E N S, ¹Adisa A W,

¹Department of Physiology, College of medicine, Ambrose Alli University. PMB 14. Ekpoma, Edo State, Nigeria.

ABSTRACT: Women have been shown to accept surgical intervention methods of contraception than men. Despite the fact that vasectomy is safer, simpler and effective, it is underutilized and relatively unknown in Nigeria. This study therefore, investigates the knowledge and acceptance of 'vasectomy as a male contraceptive method in Ekpoma, Edo State, Nigeria. The study population comprises of 250 respondents targeting literate married men which were randomly selected. A suitable constructed questionnaire which has been pre-tested was the tool for data collection. Overall, 23.2% have adequate knowledge of vasectomy. On acceptance of vasectomy as a male method of contraception, 1.6% agree and another 5.2% agree conditionally. Furthermore, no respondent with Islamic beliefs agrees to any degree. Result shows poor knowledge of vasectomy among the studied population and this may be the cause of low acceptance. Conclusively, this low acceptance will persist due to misconceptions, incomplete and incorrect information about vasectomy.

Key words: *Vasectomy, Knowledge, Acceptance, Contraception; Married men.*

INTRODUCTION

For quite some time in Nigeria family planning has targeted women (Olawepo and Okedare, 2006) probably because of the need to free them from excessive childbearing, reduce maternal and infant mortality (Toure, 1996) and curb population growth. Yet the population growth rate is still an issue that needs public attention. While reports show men in

developing countries to make most of the decisions regarding family formation (Bankole and Singh, 1998), research has also shown that men need information and want to be involved in reproductive matters (PIP. 1994). This opportunity can be taken to involve men and make male method of contraception utilized.

Vasectomy or male sterilization is a method of contraceptive that involves incision, occlusion or excision of a portion of the vas deferens. Although safer, simpler, less expensive and equally as effective as female sterilization (Bob's Blog, 2009), throughout the world, it is one of the least used and least known methods of contraception (Jacobstein and John, 2007). While female sterilization is twice as common as male sterilization in the developed world, in Asia, it is 8 times more common and in Latin America and the Caribbean it is 15 times more common (Bob's Blog, 2007). The rates of male sterilization in sub-Saharan Africa are too low for an accurate comparison (Bob's Blog, 2007). Worldwide tubal ligation accounts for more than five times as many procedures as vasectomy (PRB. 2002). In Africa its prevalence is low and rarely exceeds 0.1% (Bunce et al, 2007) and has remained relatively stable throughout the past decade (Bob's

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Department of Physiology, College of medicine, Ambrose
Alli University PMB 14. Ekpoma,
Edo State, Nigeria.

GSM: (+234) 0803 277 0151
E-mail: uwaifoah@yahoo.co.uk

Blog, 2007). This study therefore investigates the level of knowledge and acceptance of vasectomy among married men in Ekpoma with emphasis on accepting it as male method of contraception.

MATERIALS AND METHODS

Study Area

Ekpoma is the administrative head quarter of Esan West Local Government Area of Edo State, Nigeria. This area lies between latitudes 6° 43' and 6° 45' North of the Equator and longitudes 6° 6' and 6° 8' East of the Greenwich Meridian (Aziegbe, 2006). With the recent population census, its population is estimated at 125,842 (63,785 males and 62,057 females) inhabitants (NPC 2006).

Sample Size and Study Population

Calculating sample size using this formula; $n = \{Z^2 P (1 - P) / e^2\}$ (Where n = sample size, Z = degree of confidence = 99% = 2.59, P = prevalence = 0.1% = 0.001 (from above; Bunce et al, 2007), and e = acceptance error = 5% = 0.05), gives a sample size of 2.41 which were too small to study. This was then multiplied by 100 to give 241 and then approximated to 250.

Data Collection and Analysis

Data was collected by carefully designed questionnaire which has been pre-tested, targeting married men which were randomly selected irrespective of economic status. The questionnaire sought for information on respondents' personal profile (section 1), knowledge of vasectomy (section 2) and acceptance of vasectomy as a method of male contraception (section 3). Participation was voluntary and questionnaire administration extended from June 2009 to November 2009.

Data analyses (using SPSS version 16.0) include descriptive statistics and chi-square analysis. Results were presented with suitable tables.

RESULTS

Age distribution of the respondents are as follows; 10 (4.0%) in age range of 25 – 29, 88 (35.2%) in 30 – 39, 90 (36.0%) in 40 – 49, 49 (19.6%) in 50 – 59 and 13 (5.2%) in 60 years and above. While the entire respondents have tertiary education, 78.8% were civil servants and 21.2% self employed. On religious beliefs, 94% were Christians and 6.0% Muslims.

Interestingly, all claimed to be aware of family planning and have knowledge of male contraceptives. However, only 23.2% have adequate knowledge of vasectomy (see table 1). On acceptance of vasectomy as a male method of contraceptive, 4 (1.6%) of the respondents agrees and another 13 (5.2%) agrees conditionally (see table 1).

Table 1:
Respondent level of knowledge and acceptance of vasectomy as male contraceptive method

Level of knowledge of vasectomy	Frequency	Percentage (%)
Adequate knowledge	58	23.3
Fair knowledge	28	11.2
Inadequate Knowledge	164	65.6
Degree of acceptance of vasectomy as a male contraceptive		
Acceptance	4	1.6
Conditional acceptance	13	5.2
Non acceptance	233	93.2

Table 2:
Cross tabulation of level of acceptance with age, occupation, religion and knowledge of vasectomy.

Characteristic	Level of acceptance of vasectomy as a male contraceptive		
	Acceptance	Conditional	Non acceptance
Age (P < 0.05)			
25 to 29	0	0	10
30 to 39	0	1	87
40 to 49	0	1	89
50 to 59	3	6	40
60 and above	1	5	7
Occupation (P > 0.05)			
Self employed	1	2	50
Civil servants	3	11	183
Religion (P > 0.05)			
Islamic	0	0	15
Christianity	4	13	218
Knowledge (P > 0.05)			
Poor knowledge	4	7	153
Fair knowledge	0	2	26
Adequate knowledge	0	4	54

No respondent younger than 49 years accepted vasectomy as a male contraceptive. However, one each

within age 30 – 39 and 40 – 49 accepted it conditionally. On respondent occupational status, 1 out of the 4 respondents who accepted vasectomy and 2 out of the 13 who conditionally accepted were self employed. On religious belief, none of the Muslim respondents to any degree accepted vasectomy as male contraceptive. Surprisingly, none of the respondent with knowledge of vasectomy accepted vasectomy to be practiced as male contraceptive. However, 4 show conditional acceptance among those with knowledge (see table 2). On asymptotic significance of chi square test cross tabulating age, occupation, religion and knowledge with level of acceptance, only age was statistically significant (i.e. less than 0.05) on two sided Pearson chi square. Others were greater than 0.005, thus, not significant (see table 2).

DISCUSSION

Studies show men to be interested in family planning in general (Green et al, 1995; Landry and Ward, 1997; Salem, 2004), and in vasectomy specifically (Atkins and Jezowski, 1983). As shown in this study, a good number of men are aware of family planning and male contraceptive methods but probably not vasectomy. This finding is in agreement with other studies in Nigeria and other African countries (Touré, 1996) which have thus promoted campaigns, but disagree with a study among 250 women where 65.6% have knowledge of vasectomy (Ogedengbe et al, 1990). While Caldwell and Caldwell (2002) reported vasectomy to be unacceptable to most African men and probably will long remain so, there is evidence that the low use of vasectomy is because of the failure of information's and services available and accessible (Bunce et al, 2007). Furthermore, majority of men in this study reported low life expectancy of young people partly resulting from poor, inadequate and inaccessible health services and general political and social instability to be the root of vasectomy apprehension and rejection. Thus, misconceptions about and inadequate knowledge of this procedure may be the overriding factors in vasectomy apprehension; a finding of this study. This lack of correct and complete information may be the result of regrets after male surgical intervention method of contraception reported by recent studies (Jamieson, 2002; Hollander, 2002; CDC, 2006).

The finding of this study shows that men do not approve vasectomy as male method of contraception. This is in accordant with findings in Nigeria (Ogedengbe et al, 1987) and other African countries (Touré, 1996). Incorrect and incompletes information about vasectomy is no doubt the reason of its low

prevalence. Barriers posed by lack of knowledge and incorrect or incomplete information concerning vasectomy have been noted in past studies (The ACQUIRE Project 2006). These barriers include fear of impotence, the equation of vasectomy with castration (Qureshi and Solomon, 1995; Muhondwa et al, 1997; AVSC 1998; Fapohunda and Rutenberg 1999), wives' concerns about sexual functioning and physical strength of their husband after vasectomy (Ruminjo, 1999), lack of access to vasectomy provision sites (Ross et al, 1993), age, religion and community one belongs to. This has however raised a research question- 'will women choose vasectomy as a method of contraceptive for their spouse'?

While it is important for clinicians and other health service providers to be armed with the most recent information on vasectomy, the benefit of male cooperation in family planning and population control can not be overemphasized. Publicity through the media removing misconceptions and individual counseling by doctors and health workers may popularize vasectomy and promote acceptance.

Conclusively, Vasectomy to an extent is unknown and even to those with knowledge; it is unacceptable owing to lack of information's, failure of health workers to make male contraceptives information available and accessible. In view of the above findings, we recommend that health workers make available accurate and understandable information's on vasectomy and also discuss family planning with patients irrespective of their main purpose for visiting the clinic. However, we recommend that caution be exercised.

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