Men's awareness of, Barriers to, and Intention to adopt Vasectomy among Married Men in Ibadan, Nigeria

Names, initials and Addresses of Authors: Desmennu AT* and Ajuwon AJ, Department of Health Promotion and Education Ibadan, College of Medicine, Faculty of Public Health, University of Ibadan, Nigeria. adeyimikades@hotmail.com / 08034087648; ajajuwon@yahoo.com / 08034892561

* Corresponding Author

Abstract

The study was to assess married men's awareness of, barriers to and intention to adopt vasectomy.

Four hundred and thirty one men were selected and interviewed in a cross sectional survey. The mean age of the respondents was 44years (± 13.2). Fifty-eight (13.5%) respondents had never heard of vasectomy. One hundred and sixty (30.8%) considered it an 'unacceptable' method of contraception while 84(16.2%) see it as a sin against God. Barriers to the adoption of vasectomy included fear of the surgery; 61(14.2%), its irreversibility; 53(12.3%), fear of side-effects; 46(10.7%), lack of evidences; 28(6.3%) and lack of awareness; 27(6.3%). One hundred and twenty-eight (29.7%) showed willingness to adopt vasectomy. This was significantly related to respondent's age ($p<0.05$).

There is limited awareness of vasectomy, some barriers and few had intention to adopt it. Educational strategies such as; training and public enlightenment are needed to increase awareness and adoption of vasectomy.

Keywords: Awareness, Vasectomy, Intention, Barriers

Introduction

The Nigerian population is the highest in Africa at over 150 million, with a growth rate of 2.9 and a Total Fertility Rate of 5.7 NPC, 2009). The NDHS report of 2008 shows that only 14.6% of currently married women aged 15-49 in Nigeria use any method of contraception (Nigerian Population Commission, 2008). This is in spite of the existence of the national policy on population and sustainable development which encourages voluntary limitation of births to 4 children per woman as well as various family planning programmes that have been carried out in the country (Federal Government of Nigeria 2004). Men's participation is a promising strategy for addressing some of these pressing reproductive health problems. There is a growing call for greater involvement of men in family planning (Drennan, 1998). Use of the two male-oriented contraceptive methods – the condom and vasectomy – is low compared with use of other methods, but it is slowly increasing in some countries (Drennan, 1998). In most countries, traditional methods that require male cooperation – withdrawal and abstinence – also are little used. Worldwide, condoms and vasectomy are among the least used of all contraceptive methods (Yohanne, 2004). Among surveyed married women in developing countries, approximately 4% report using condoms, and 4% vasectomy. If China is excluded from the vasectomy estimates, the percentage of men in developing countries relying on this method is just 3% (Abma, et al, 1997). In many developing countries, men hold several misconceptions about vasectomy and the procedure is not widely available. Even if it is available and men have heard of it, many believe incorrectly that the procedure affects a man's sexual functioning and weakens his strength. Vasectomy is a safe, cost effective and permanent method of contraception, but there are many factors that play a role in its relative lack of acceptance, such as socio-demographic factors, economic factors, low social support and inaccurate knowledge and belief about the procedure (Mahat, 2010).

Vasectomy is the most reliable of all birth control methods. A tested, successful vasectomy is 50 times more reliable than the birth control pill, 300 times more reliable than condoms in preventing pregnancy. Vasectomy is a convenient office procedure. The procedure itself takes 5 to 10 minutes and the benefits last a lifetime. Vasectomy is, over time, the least expensive method of birth control. Over several years, it would cost more to use the pill, the IUD, even condoms, than the one-time cost of a vasectomy. Vasectomy is the only currently available method other than condoms that allows the man to take responsibility for preventing pregnancy (The Vasectomy clinic, 2013).

Despite its many advantages, vasectomy is widely used in only a few countries, including China, India, Thailand, Korea, the United Kingdom, Canada and the United States. About 45 million couples worldwide rely on vasectomy for contraception, compared with about 150 million female sterilization users, even though male sterilization is safer and easier to perform (Finger, 1997). Incorrect information and unfounded fears often limit its use, even in countries where the procedure is readily available. In Nigeria, few studies have explored the perception of men to vasectomy. This study is significant for two reasons. One, given the critical role that men play in

family decisions; their support, involvement and understanding their reproductive intentions are essential for family planning to become more widespread. In addition, a growing number of family planning and other reproductive health care programs and providers now understand that men deserve more attention for their own sakes, for women's sake and for the health of their families and communities. The objective of this study therefore was to assess married men's awareness of, barriers to and their intention to adopt vasectomy.

Methodology

The research which was cross-sectional in design was carried out among married men in Ibadan South East Local Government Area, Oyo state, Nigeria. They were recruited from selected households in the communities who provided informed consent to participate in the study.

Heads from 431 households were selected by multistage sampling technique using a proportional population ratio of 3:2:1 from the inner core, transitional and peripheral areas of the study site. The study focused on married men because they are the ones who would have concerns on regulating or limiting the family size through contraceptive choices with their wives.

Face-to-face interviews were conducted by four trained male interviewers using a validated questionnaire to obtain information on awareness of, barriers and intention of men to adopt vasectomy. The data were analyzed using the Epi-info version 6 software. Data presentation was in varying descriptive statistical frequency representation such as tables and charts while chi-square was used to find out associations between variables.

Results

The results generated from the survey revealed that the mean age of the respondents was 44 years (± 13.2). Almost all, 413 (95.5%) of them were married and living with their spouses, 272 (63.1%) were in monogamous marriage with 102 (23.7%) of those in polygynous marriage having two wives. Only 58(13.5%) of the respondents have heard about vasectomy, while the majority 373(86.5%) were not aware of the procedure. The main sources of information about vasectomy were materials (book, pamphlets) 25 (41%) and radio (16.4%). There is a significant relationship between respondents' awareness of vasectomy and their places of residence, more people in the peripheral areas were aware of vasectomy compared with those in other areas ($p= 0.014$). This indicates a significant relationship between the educational status of respondents and their awareness of vasectomy, subjects with higher (tertiary and secondary) education had heard of vasectomy than those with lower education ($p=0.0000$). There is also a significant relationship between respondents' occupation; more of the professionals were aware of the procedure compared with those in the other occupational groups do ($p=0.000003$), religion ($p=0.0019$) and their awareness of vasectomy respectively (Table 1).

Table 1: Relationship between respondents' Educational status, Occupation, religion and awareness of Vasectomy

awareness / Variables	Yes N (%)	No N (%)	Total N (%)	p-value
Place of Residence				
Inner-core	22(10.5)	188(89.5)	210	
Transitional	18(12.4)	127(87.6)	145	0.014
Peripheral	18(23.7)	58(76.3)	76	
Educational Status				
Primary	7(6.9)	94(93.1)	101	
Secondary	11(9.5)	105(90.5)	116	
Tertiary	34(31.2)	75(68.8)	109	0.00000000
Adult Edu.	4(12.1)	29(87.9)	33	
Arabic/Quranic	0(0)	8(100)	8	
None	2(3.1)	62(96.9)	64	
Occupation				
Unemployed	1(8.3)	11(91.7)	12	
Unskilled	14(11)	113(89)	127	
Skilled	9(5.3)	160(94.7)	169	0.00000309
Cleric	2(12.5)	14(87.5)	16	
Professional	32(29.9)	75(70.1)	107	
Religion				
Christianity	29(19.1)	123(80.9)	152	
Islam	27(10)	243(90)	270	
Traditional	0(0)	5(100)	5	0.00195
Others(Armoc, Eckankar, Free thinker)	2(50)	2(50)	4	

Many respondents, 160 (30.8%) considered vasectomy a 'bad' method of contraception while 84 (16.2%) see it as a sin against God. Of all the respondents only 2(0.5%) reported they have had vasectomy, while about a third 128 (29.7%) were willing to undergo the procedure. The main barriers to the adoption of vasectomy were fear of the surgery 61 (14.2%), the fact that it is irreversible 53 (12.3%), fear of side effects 46 (10.7%), not knowing about men who had done it before 28 (6.3%) and lack of awareness of the procedure 27 (6.3%) (Table 2). Intention to adopt vasectomy was significantly related to respondent's age; men aged 34 – 44 years were more likely than those older to want to adopt vasectomy ($p<0.05$). There was no significant relationship between respondents' place of residence ($p=0.98$), marital status ($p=0.48$), occupation ($p=0.54$) and their ethnic group ($p=0.87$) and their intention to adopt vasectomy (Table 3). Many of the respondents, 176 (40.8%) suggested that use of mass-media for public enlightenment would likely increase awareness of men about vasectomy.

Table 2: Barriers to Adoption of Vasectomy by married men

Barriers	No	Percentage (%)
No example	28	6.5
Irreversibility	53	12.3
Fear of illness	46	10.7
Fear of operation	61	14.1
Fear of not being able to have children later	21	4.8
Fear of increased promiscuity by wife	3	0.7
Civilization	1	0.2
Disagreement by family members	3	0.7
Fear of what people will say	3	0.7
Money/ finances	14	3.2
It is not our culture	18	4.2
Death	4	0.9
Not in conformation with faith/ sinful to God	26	6.0
Individual differences	6	1.4
Age	1	0.2
Lack/ inadequate health facilities	2	0.4
Inadequate publicity/ lack of knowledge	27	6.3
Lack of assurance of its safety	8	1.8
Fear of impotence	5	1.2
Divorce	1	0.2
No response	89	20.6
Total	431	100

Table 3: Respondents Intention to adopt Vasectomy and relationship with residence, marital status, age, occupation, Religion and ethnicity

Intention / Variables	Yes N (%)	No N (%)	Total N (%)	p-value
Place of Residence				
Inner-core	63(30)	147(70)	210	0.98
Transitional	43(29.7)	102(70.3)	145	
Peripheral	22(28.9)	54(71.1)	76	
Marital status				
Married	125(30.3)	288(69.7)	413	0.48
Separated	0(0)	5(100)	5	
Divorced	2(22.2)	7(77.8)	9	
widowed	1(20)	4(80)	5	
Age				
25-34	37(39.4)	57(60.6)	94	0.03127
35-44	45(29.8)	106(70.2)	151	
45-54	19(20.9)	72(79.1)	91	
55-64	21(34.4)	40(65.6)	61	
65 and above	6(17.6)	28(82.4)	34	
Occupation				
Unemployed	2(25)	6(75)	8	0.54
Unskilled	37(29.1)	90(70.9)	127	
Skilled	57(33.7)	112(66.3)	169	
Cleric	6(37.5)	10(62.5)	16	
Professional	26(23.4)	85(76.6)	111	
Religion				
Christianity	54(35.5)	98(64.5)	152	0.0523
Islam	69(25.6)	201(74.4)	270	
Traditional	2(40)	3(60)	5	
Others(Armoc, Eckankar, Free thinker)	3(75)	1(25)	4	
Ethnic group				
Yoruba	124(29.5)	296(70.5)	420	0.87
Hausa	1(33.3)	2(66.7)	3	
Igbo	2(50)	2(50)	4	
Other (Igbirra)	1(25)	3(75)	4	

Discussion

The discussion is grouped into awareness, factors that could hinder or promote the adoption of vasectomy and men's intension to use vasectomy for family planning. The section also offers conclusion and recommendation aimed at promoting the adoption of vasectomy as a contraceptive method by married men in Nigeria.

Men's awareness of vasectomy remains low with only 14% ever heard of it. This study is consistent with the 1990-1991 Botswana males and family planning survey, conducted among sexually active men ages 13 to 39, found that almost all men knew about the pills and condoms many also knew about IUDs, injectable, and female sterilization. Fewer knew about vasectomy, periodic abstinence and vaginal methods, this finding is consistent with a qualitative study among married men and women carried out by Shih, Dubé and Dehlendorf, (2012) in which most men reported a lack of counseling around both female and male sterilization and contraception in general. Respondent who have heard about vasectomy mostly reported literature and health workers as their major source of information about it (Owusu-Asubonteng et al, 2012).

The men surveyed have several misconceptions about the procedure which constituted barriers to the adoption of the procedure. These includes fear of surgery, expressed by most men, believe that it is sin against God, fear of impotence and diseases which they believe may result from it and lack of awareness of the method. In the RESPOND project carried out among married men and women in Uttar Pradesh, Fears about weakness resulting from the procedure were common among both men and women and served as one of the main barriers to acceptance of non-scapel vasectomy (the RESPOND Project, 2011) The report by Liskin et al, 1992 support these stated misconceptions as it is said that men do not care about avoiding pregnancy, that they prize their fertility, that they think wrongly that vasectomy will end their manhood, that they unreasonably fear minor procedure, that they put all responsibility of family planning on women. This may be the major reason why only 128(29.7%) of the respondents indicated their intention to adopt the method in the near future.

Conclusion

In Conclusion, the study inquired into men's awareness of willingness/ intention to adopt vasectomy for family planning and some factors that are associated with their intention to adopt it. Majority of the men surveyed had limited awareness of vasectomy as a method of family planning and few had intention to adopt it due to misconceptions about the procedure. The main reason for low levels of use may not lie in men's attitude alone but also in policy-makers' and providers' lack of attention to vasectomy and sometimes - even prejudice against it. Experience makes clear that high-quality vasectomy services can draw clients. While often neglected in the past, men are an important audience. Providing information, education, and communication (IEC) about reproductive health is key to gaining their interest and support. Many men today

appear ready to change their reproductive health behaviour and willing to participate in reproductive health activities. In view of these, several health education strategies need be employed to bring about a positive behavioural change by men to adoption of vasectomy as a method of contraception in an attempt to get men more involved and ensure their participation in family planning. Educational strategies such as; training and public enlightenment are needed to increase awareness and to encourage greater adoption of vasectomy as a family planning method.

References

Abma J, Chandra A, Mosher W, Peterson L and Piccinino L (1997) Fertility. Family Planning and Women's health: New data from the 1995 National survey of Family Growth. Hyattsville, Maryland, US Dept. of Health and Human services, National center for Statistics May 1997 (series 23 No 19) 114p.

Azmat S. K, Mustafa G, Hameed W, Ali M, Ahmed A, Bilgrami M (2012) Barriers and perceptions regarding different contraceptives and family planning practices amongst men and women of reproductive age in rural Pakistan: a qualitative study Pak J Public Health Vol. 2, No. 1, 2012

Drennan M (1998) Reproductive Health: New Perspectives on Men's Participation. Population Report series J No 46. Baltimore, Johns Hopkins University of Public Health. Population information programme. Oct. 1998

Dunmoye O. O., Moodley J., Popis M.(2001) Vasectomy in developing countries 2001, Vol. 21, No. 3 , Pages 295-297 (doi:10.1080/01443610120046459) http://informahealthcare.com/doi/abs/10.1080/01443610120046459

Finger W.R (1997) Vasectomy offers Many Advantages; Network FHI Vol. 18 No 1.

Liskin, Laurie, Ellen Benoit and Richard Blackburn. (1992). Vasectomy; New Opportunities. Population Reports. Series D, No. 5. Baltimore, John Hopkins University, Population Information Program.

Mahat K.,Pacheun O and Teachaboonsermsak P.(2010) intention to Accept Vasectomy among Married men in Kathmandu, Nepal Asia J Public Health 2010;1(1): 8-14

National Population Commission (NPC) [Nigeria] and ICF Macro. 2009. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro.

Owusu-Asubonteng G, . Dassah E. T , . Odoi A. T., Frimpong P and Ankobea F. K.(2012) Trend, client profile and surgical feature s of vasectomy in Ghana June 2012, Vol. 17, No. 3 , Pages 229-236 (doi:10.3109/13625187.2012.661109)

Shih G, Dubé K, Dehlendorf C (2012) "We never thought of a vasectomy": a qualitative study of men and women's counseling around sterilization. Contraception xx (2012) xxx–xxx

article in press; Received 29 June 2012; revised 31 August 2012; accepted 19 October 2012

The RESPOND Project. 2011. Factors affecting acceptance of vasectomy in Uttar Pradesh: Insights from community-based, participatory qualitative research. RESPOND Project Brief No. 3.April. New York: The RESPOND Project/EngenderHealth

The Vasectomy clinic, (2013) Family Planning Decisions

Xiaozhang L. Scalpel versus no-scalpel incision for vasectomy: RHL commentary (last revised: 27 July 2009). The WHO Reproductive Health Library; Geneva: World Health Organization.

Yohannes T (2004) The role of men in family planning in a rural community if western Ethiopia A Thesis Submitted To The School Of Graduate Studies, Addis Ababa University In The Partial Fulfillment Of The Requirement For The Degree Of Masters Of Public Health April 2004, Addis Ababa