ORIGINAL ARTICLE

Men's Knowledge of and Attitude with Respect to Family Planning in a Sub-Urban Nigerian Community

*O.O. Odu FMCPH, K.T. Ijadunola FWACP, *J.O. Komolafe FMCOG, * W.T. Adebimpe MBBS, MPH

Department of *Community Medicine, *Obstertrics and Gynaecology, College of Health Sciences, Ladoke Akintola University of Technology, Osogbo, Osun State, Community Health, College of Health Sciences, Obafemi Awolowo University Ile-Ife, Osun State, Nigeria

ABSTRACT

Background: Men's Knowledge of and attitudes to family planning (FP) in sub-urban and rural Nigeria is still poor despite a global move to increase the involvement of men in reproductive health matters. A cross-sectional survey was conducted to determine men's knowledge of and attitude to family planning at Ganmo, a sub-urban community on the outskirts of llorin, Nigeria.

Method: The study employed an interviewer administered semi-structured questionnaire to elicit information from 360 men in the households. Only males above the age of 15 years resident in the community were selected for interview. A proportionate sampling procedure was employed in selecting the required number of men from each of the 32 compounds that make up the community.

Results: Nearly all men (96.5%) were aware of family planning and a majority of them were aware of some common methods of family planning e.g. Oral Contraceptive Pills (OCPs) (72.5%), Injectables (69.2%), Condoms (86.6%) and Traditional methods (70.6%). Knowledge of other alternative female methods was low e.g. Norplant (17.5%), IUCD (26.3%), Diaphragm (39.8%), Vaginal cream (30.2%), Vaginal tablet (37.8%) and Vaginal sponge (16.8%), and Tubal Ligation (51.3%). Knowledge of male controlled FP methods like Withdrawal (49.6%), Rhythm or periodic abstinence (54.6%) and Vasectomy (28.6%) was also poor. The Respondents had low knowledge of common side effects of FP methods e.g. nausea (9.8%), vomiting (13.1%), abnormal menstruation (34.4%), pain (23.2%) and unwanted weight gain (17.0%); some 25.3%% of respondents had no knowledge of any side effects. The attitude of respondents to family planning was also relatively poor as only a moderate proportion of men supported the FP concept (52.7%) and the Nigerian Population Policy (54.8%) of "four children to a woman". Some 54.8% of respondents were in support of men discussing about FP with their spouses. The major reasons for non-approval of FP by men were the fear of side-effects (70.4%) and perception of FP as being against religion (52.1%). The predictors of poor FP attitude were not having formal education, practice of polygyny and to a lesser extent being a Muslim.

Conclusion: The study concluded that, men at Ganmo have limited knowledge of, and poor attitude to FP. An intensive drive at a community based adult reproductive

health education was advocated among other recommendations.

KEYWORDS: Men; Knowledge; Attitude; Family Planning; Sub-Urban Community

Paper accepted for publication 20th June 2006.

INTRODUCTION

Since the International Conference on Population and Development, held in Cairo in 1994(ICPD), there has been a paradigm shift from the concept of family planning to the wider issues of reproductive health ¹. The implication of reproductive health as defined at this conference was that men , women and adolescents have rights to be informed and have access to safe, effective, affordable and acceptable methods off family planning of their choice². As defined by the World Health Organisation (WHO), family planning is a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude and responsible decision making by individuals or couples, in order to promote the health and welfare of the individual, family and community³.

In Nigeria, there is a relatively poor acceptance of family planning as indicated by the low level of use of contraceptive methods (Contraceptive Prevalence Rate of 13.3%) by men and women of reproductive age⁴. These low levels of acceptance and practice of family planning in the population is attributed to many sociological, logistic and programmatic factors, of which the influence of men had been overlooked. Studies conducted in Nigeria reveal that, with respect to FP and other social-cultural issues, men dominate the family and larger society; they dominate their wives and families due to the influence of patriarchy, since they hold greater economic power, and also head religious and governmental institutions^{5-,7}. It has being observed that men in West Africa have a desire for large families; they therefore prevent their wives from practicing family planning and do acquire more wives (polygyny) as a way of meeting their reproductive targets 5-8.

In Nigeria and many other countries of West Africa, though more men than women are aware about the concept and modern methods of family planning, they do not have enough information to motivate and guide

them or their wives towards adopting family planning as a way of life. A number of studies in Africa and Middle East¹⁰ show that men have limited knowledge of various methods of modern contraception, of how to use them effectively, of where to source them and of the different side effects that accompany contraceptive use. Though some African men approve of family planning, those in West Africa with the exception of Ghana are less likely to have a positive attitude to family planning'. In Nigeria, a substantial proportion of women who were not using contraceptives cited negative male attitude and opposition as the major reason why they were not using contraceptives; for example in Ilorin 11 (North-central zone of Nigeria), 31.4% of women at risk of unplanned pregnancies were not using contraceptives due to husbands' opposition and in Benin¹², 20% of married women at risk of pregnancy were not using contraceptives because their husbands opposed it; in Northern Nigeria 5, the culture forbids women from obtaining family planning services without their husbands consent. Men in Africa resist the use of contraceptives, even by women, for a variety of reasons of which the major ones are based on cultural, socioeconomic, religious and health issues e.g. the fear of side effects 5-,8.

Some of the adverse effects of poor acceptance of FP on the Nigerian population are the high Fertility (TFR) and Population Growth Rates (PGR), high Infant Mortality Rate, high Maternal Mortality Rate, poverty, communal clashes and environmental degradation¹³. In Nigeria, Total Fertility Rate (TFR) which reflects the average fertility experience of women of various age groups in any given country, is still sustained at a high level of 5.2⁴. The 1990 and 1998 Nigerian Demographic and Health Surveys (NDHS) had estimated TFR at 6.0 and 5.7 respectively. One of the negative effects of Nigerian women's high TFR of 5.2 and its PGR of 2.3 % is the current large population of 126 million people⁴.

Since the Nigerian Population Policy (NPP) 14 had recommended that a woman should not have more than four children, and if the TFR of women and population growth rates must be reduced to acceptable levels, then there is a need to focus attention on male factors with respect to family planning. The ICPD (1994) 2 in Cairo had recommended that "special research should be undertaken in factors inhibiting male participation in family planning", while the Nigerian Reproductive Health Policy (NRHP) 15 also recommended that special attention must be focused on men with respect to reproductive health matters. Also in Ganmo community, it had been observed that men desired large family sizes with the Mean Number of Living Children (MNLC), Mean Number of Children Ever Fathered (MNCEF) and Ideal Family Size (IFS) estimated at 4.2, 5.2 and 5.8 respectively⁸. This study was therefore conducted to determine men's knowledge of and attitudes with respect to family planning in Ganmo, a suburban location in Nigeria.

METHOD

Study location: The study was conducted at Ganmo, a semi-urban settlement on the outskirts of Ilorin metropolis, the capital city of Kwara State in Nigeria. The community is located on a major highway linking Ilorin to Ajase-Ipo also located in Kwara State. The 1991 national census estimated the population of Ganmo at 5199¹⁶. Based on the national population growth rate of about 3.0%, current population projection of Ganmo stands at about 6500. The estimated adult male population of the settlement is approximately 1800.

Study population: Ganmo is mainly inhabited by the Yoruba-speaking people of Southwestern Nigeria and the major religions of the residents are Islam and Christianity, while the major occupations of the men are farming, trading and semi-skilled work (artisans). The community is made up of 32 compounds of varying population sizes with each having a compound head. Community entry was achieved through a formal meeting with the traditional chief of Ganmo and his council where the objectives and rationale for the study were shared and thoroughly explained. Study participants were required to give a verbal consent.

Study design: The study employed a cross-sectional descriptive design. Any male that was 15 years and above and resident in the village, was eligible for participation in the study. There were no exclusion criteria.

Sample size determination and sampling technique: A minimum sample size of 333 was obtained, using the Fisher's formula for populations less than 10,000 ¹⁷; this was increased to 360 to make room for attrition. Sampling was done with the probability proportional to size method, as the compounds had varying populations of men. A proportion of the sample size was allocated to each compound depending on the relative contribution of the compound to the total population of the community. The heads of the 32 compounds supplied a list of all males above 15 years of age living in each compound. Samples of men were then drawn from each compound (depending on the proportion of the sample size that had been allocated to the compound) from the list supplied by compound heads, using a table of random numbers.

Data collection instruments: A semi-structured questionnaire was used in obtaining information from each selected respondent by interview. The questionnaire had been pre-tested at Amoyo, another semi-urban community in the same state. It collected

information on the socio-demographic status, knowledge, perception and attitudes of men with respect to family planning. The interviews were conducted mainly in the evenings of weekdays and on weekends by trained interviewers, who were community health workers working in the area.

Data analysis: Data collected were checked manually for errors and then entered and analyzed on a microcomputer using the EPI-INFO version-6-software package. Discrete variables were expressed as percentages and displayed on frequency tables. The chi-square test was used to test for association between discrete variables on the contingency tables and statistical significance was accepted at p values of less than 0.05.

RESULTS

Three hundred and sixty men were interviewed but only 357 were sufficiently completed to be used in analysis representing a response rate of 99.2%. More than 2/3 of the respondents were aged 20-49 years with a mean age of 35 years, while only 8.4 % were above the age of 60 years. Most (71.4%) of the respondents had at least primary education while the rest had no formal education. A majority of the respondents were Muslims, while 25.7% were Christians. Most of the respondents (65.3%) were married and about half of them were married by the age of 25 years; 1.1% were separated from their spouses and 33.3% were single. The respondents were mostly artisans, farmers, traders and students and civil servants Table I.

Almost all the respondents (96.5%) were aware of the concept of FP and about the government's population policy (85.0%) recommending that a woman should not have more than 4 children. Among respondents, knowledge for contraceptive methods was highest for Condoms (86.6%), OCP (72.5%), Injectables (69.2%) and Traditional methods (70.6%); knowledge was lowest for Vasectomy, Vaginal sponge, Norplant, Intra Uterine Contraceptive Device (IUCD), Diaphragm and Vaginal tablet at 28.2%, 16.8%, 17.5%, 26.3%,39.8% and 37.8% respectively Table II.

The knowledge of common side-effects associated with the use of contraceptive methods was very low e.g. knowledge about common side effects like nausea, genital irritation, vomiting, loss of libido and weight gain among respondents were 9.8%, 10.3%, 13.1%, and 13.4% respectively Table III. Many respondents (50.8%) stated that method failure (resulting in unwanted pregnancies) was a common side effect associated with FP. However, most respondents were aware that not planning their families can have a negative impact on the health of their wives and children. Common sources of family planning

information among respondents were the Radio, the television (T.V.) and the newspaper.

Approval for family planning was just moderate as some 52.7% of the respondents approved of FP. Men who were educated, those in monogamous marriages and Christians were more likely to approve of FP compared to the uneducated, married men and Muslims; the differences were statistically significant at p values of less than 0.001, 0.001, 0.05 respectively Table IV. Approval for the recommendation of the National Population Policy of "four children to a woman" was moderate, at 54.8% of respondents in support of it, a similar 54.8% of respondents also supported that men should discuss about FP with their wives. The major reasons for men's disapproval of FP methods were due to the fear of side effects (70.4%) and infertility (12.4%), the negative effect of religion (52.1%), fear of loss of authority (13.0%) and the belief that FP was against culture (8.9%) Table V.

Table I. Socio-Demographic Characteristics of Respondents (N= 357)

SOCI-DEMOGRAPHIC	FREQUENCY	PERCENTAGE (%)
CHARACTERISTICS		
AGE (YEARS) :		
15-Ì19	49	13.7
20-29	99	27.7
30-39	83	23.2
40-49	62	17.4
50-59	34	9.5
60-69	20	5.6
70 YEARS +	10	2.8
EDUCATIONAL LEVEL:		
No Formal Education	102	28.6
Primary	112	31.4
Secondary	89	24.9
Tertiary	54	15.1
MARIŤAL STATUS:		
Married	234	65.6
Single	119	33.3
Separated	4	1.1
OCCUPATION:		
Farmers	63	17.6
Artisans	74	20.7
Businessmen	42	11.7
Civil Servants	52	14.5
Students	62	17.3
Drivers	27	7.6
Arabic Teachers	12	3.4
Others	25	7.0

Table II. Knowledge of Contraceptive Methods by Response (Multiple Responses) N=357

METHODS	YES	NO
FEMALE METHODS:		
1. OCP	259(72.5%)	98(27.5%)
2. Injectables	249 (69.2%)	108(30.8%)
3. Norplant	59 (17.5%)	298(82.5%)
4. IUCD	94 (26.3%)	263(73.7%)
5. Diaphragm	142 (39.8%)	215(60.2%)
6. Vaginal Cream	108(30.2%)	249(69.8%)
7. Vaginal Tablet	135(37.8%)	222(62.2%)
8. Vaginal sponge	60(16.8%)	297(83.2%)
9. Tubal Ligation	183 (51.3%)	174(48.7%)
MALE METHODS:		
10. Condom	209 (86.6%)	48 (13.4%)
11. Withdrawal	177 (49.6%)	180 (50.4%)
12. Rhythm	195 (54.6%)	162 (45.4%)
13. Vasectomy	101 (28.2%)	256 (71.7%)
14. Traditional methods	252 (70.6%)	105 (29.4%)

Table III. Knowledge about the Side Effects of Contraceptives Methods (Multiple Responses) N=357

SIDE EFFECTS	YES	NO
1. Nausea	35 (9.8%)	322 (90.2%)
2. Vomiting	47(13.1%)	310 (86.9%)
Becoming fat	61(17.0%)	296 (83.0%)
4. Pain	83 (23.2%)	274 (76.8%)
5. Abnormal Menstruation	123 (34.4%)	234 (65.6%)
6. Reduced sexual satisfaction	81 (22.6%)	276 (77.4%)
Loss of sex-drive	48 (13.4%)	309 (86.6%)
8. Method failure	182 (50.8%)	175 (48.2%)
9. Genital Irritation	37 (10.3%)	320 (89.7%)
10. No knowledge of side effects	90 (25.2%)	267 (74.8%)

Table IV: Approval for Family Planning Methods by Selected Socio-Demographic Characteristics N=357

Socio-demographic	Approval for Family Planning			
characteristics			Total	
	Yes	No		
Religion :				
Christian	64 (65.0%)	35 (35.0%)	99 (100%)	
Muslim	124 (48.1%)	134 (51.9%)	258 (100%)	
P<0.05				
Educational Status:				
Educated	150 (58.8%)	105 (41.2%)	255 (100%)	
No formal Education	38 (37.3%)	64 (62.7%)	102 (100%)	
P<0.001				
Marital Status:				
Married	137 (57.6%)	101 (42.4%)	238 (100%)	
Single	51 (42.9%)	68 (57.1%)	119 (100%)	
P<0.01				
Total	188 (52.7%)	169 (47.3%)	357 (100%)	

Table V. Reasons for Non-Approval of FP by Men (Multiple Responses) n= 169

Reason for Non-approval	Frequency	Percentage
Loss of authority	22	13.0 %
Fear of side-effects	119	70.4 %
Fear of infertility	21	12.4 %
Against culture	15	8.9 %
Against religion	88	52.1 %
Other reasons	4	2.4 %

DISCUSSION

The largest proportion of respondents (68.2%) were found within the age groups of 20-29,30-39 and 40-49 years (only 8.4% were 60 years and above) with a mean age of 35 years; the implication of this was that most of the respondents were still involved in active childbearing. In Ganmo community, it was observed that most of the respondents (71.0%) had at least primary education; the 2003 NDHS show that some 72.5% of Nigerian men were literate⁴. A sizeable proportion of the respondents were employed as artisans and farmers while others were engaged as traders, businessmen and government workers; many of them (17.3%) were Students. Many of the socio-demographic characteristics observed among these respondents Table I are typical features of men living in sub-urban and rural Nigeria.

In Ganmo, awareness of FP was very high as some 96.5% of respondents had heard about it, while at least 93.8% of them had knowledge of at least a FP method. Among the respondents, the most widely known contraceptive methods were Condoms, Oral Contraceptive Pills (OCP), Injectables and Traditional methods of FP, while the least known methods were Vasectomy and Norplant Table II. In Nigeria, the NDHS ⁴ estimates that 9 out of every 10 men know at least one method, and the best known methods are the male condom (87.0%) followed by the pill (57.0%). In many

African countries, awareness about the concept of FP is nearly universal and in a number of African countries, majority of men know at least one or two methods of FP. Men are also likely to know more about modern methods than natural methods of FP. the OCP is the best known female method among men due to the traditional focus on it (and other female contraceptive methods) by FP service providers^{7,9}. In Kenya ¹⁸ a study conducted among men showed that the level of unprompted knowledge was low for all methods except for the OCPs and Injectables. Among African men, knowledge about the Condom is also very high due to the intense advertisement occasioned by the HIV/AIDS pandemic and the advantage of it also being a contraceptive method. Of all FP methods, African men know the least about Vasectomy because given the low demand for limiting childbirth, permanent methods of FP like Vasectomy are not likely to be well known or used; contributing to this is the fact that service providers fail to mention the existence of such a method among clients. For example, in a survey of truck drivers who transverse Africa, it was found that only 4% had heard about Vasectomy'.

Even though African men may have high levels of awareness about the concept and some methods of FP, there are huge gaps between their overall knowledge, attitude and practice of FP. This may be explained by the fact that most African men have limited knowledge and poor perception about FP and are not properly guided and motivated towards adopting it as a way of life; the NDHS ⁴ in Nigeria for example found that on the average, men in Nigeria know 5 FP methods out of very many modern and traditional methods available for use.

Majority of respondents were not aware of the common side effects of contraceptives like nausea, vomiting, unwanted weight gain, irregular menstruation, pain and reduced sexual satisfaction and at least 25.0% of respondents had no knowledge of any adverse effects that could arise from contraceptive use. In general, use of contraceptive methods is often associated with mild side effects and many people promptly discontinue the FP method in use because they had not been properly counseled before starting the use of such methods^{5,7,10,19,20}. Of significance is that, many respondents (12.4%) mentioned infertility as one of the side effects of contraceptive use. The ability to ensure and maintain childbearing is considered very important among African men (and women to a particular degree), as fertility is considered as a measure of good health and most people (especially men) will not like to interfere with their ability to ensure continuous childbearing (even when they require no more children)^{5,21}. Many respondents (50.8%) in the study mentioned method failure resulting in pregnancy

as a side effect of contraceptive use; this uncommon complication of FP, usually occur when FP methods are not used according to instructions²².

The common sources of FP information for Ganmo men were the radio, television, newspapers and friends and rarely from health professionals or their wives. African men usually learn about FP from their wives, friends, or the mass media but seldom from health professionals and this may cause them not to be properly informed about it, especially as there is limited communication about reproductive matters between couples ^{5,7,9,21,23}. In many African countries, most men don't know where to obtain FP services or supplies and this may constitute a barrier to their practice of FP^{7,9}.

Ganmo men's attitude to family planning can be considered as relatively poor, as some 52.7% and 54.8% of respondents approved of both FP and the National Population Policy of "four children to a woman". Among Nigerian men, approval for FP varies depending on location; in a Lagos⁹ survey for example, 79.0% of studied men approved of FP while in another Nigerian study in which seven states were purposively sampled, 53.2% of men approved of FP²⁴. In the Northern states of Nigeria, the attitude of men towards FP was found to be generally poor²⁵. Compared to the rest of Africa, men from West Africa (with the exception of Ghana) are the least likely to favor FP because of traditional, cultural, religious and economic reasons^{5,6,8,25,26}. In Africa, approval of men for FP is important (even for their spouses) because they are socio-culturally and economically dominant and generally regard themselves as the sole decision maker for the family^{5,7,23}-²⁵. In Africa and elsewhere, men play important roles in starting and influencing how long their wives continue to use FP methods^{1,9}. For example, in Ilorin ¹¹ and Benin ²⁷ (both urban cities in Nigeria), about 20.0% and 31.4% respectively of married women at the risk of pregnancy were not using contraceptives because their husbands disapproved of it. In Ghana 23 with respect to reproductive matters, spousal influence rather than being reciprocal was considered to be an exclusive right of the husband and in Northern Nigeria^{5, 25}, women cannot obtain FP services without the formal consent of the husband.

The characteristics that strongly favour a positive attitude to FP among respondents were, being educated, being married with children and to a lesser extent being a Christian. Globally, it is known that educated men are more likely to approve of FP; in Jordan for example 10, it was revealed that men with at least secondary education were more likely to approve of FP. Uneducated men are less likely to approve of FP because of their dependence on children and wives as

cheap sources of labour on the farms and in other family businesses, because of the benefits derived from competition between wives and their children, for egoistic reasons and their dependence on children as a source of economic support in old age 5.6.24.

African men disapprove of modern contraceptive use for a variety of reasons of which the major ones are the fear of its adverse side effects on the health of the family, the feeling that it will undermine their authority as the head of the family and the erroneous belief by some that it will encourage their wives to be unfaithful^{5,24,26}. The fear of side effects associated with contraceptive use occur mainly because of rumours of how FP methods can negatively affect the health of people who use it 9, 22, ²⁶. In Africa, rumours about FP usually spread by word of mouth, do constitute a major barrier to the practice of FP. Some of these negative rumors, myths, and beliefs are for example, that the use of FP methods, even temporary ones, causes primary and secondary infertility, obesity, frequent disappearance of loops, castration and loss of sexuality 7,9,22,26

It is hereby concluded that even though more men than women are aware about the concept of FP and modern contraceptive methods, they have limited information and knowledge about it; and also, their attitude to FP can also be considered to be relatively poor when compared to the attitude of men from other parts of Africa and the world in general. It is thus recommended that, FP programs and services that target men especially those living in rural areas, should be implemented without delay. Such educational programs should seek to increase the depth of men's knowledge and change their perception about FP methods, inform men on where to access quality FP services and improve communication between couples with respect to FP. Emphasis should be on the benefits that men derive from adopting the practice of FP especially in view of socio-economic reforms that are ongoing in the developing countries of sub-Saharan Africa. In this regard, Family planning clinics should be made more male friendly and health workers trained on how to counsel and handle male clients appropriately. In countries where such programs had been instituted in the past e.g. Zimbabwe 28 and Malawi 26 and Indonesia 29, the attitude and behavior of men with respect to FP had improved substantially as men exposed to the motivational campaigns were significantly more likely than other men to make the decision to use FP and to say that both spouses should decide how many children to have.

REFERENCES

 Kaushalendra KS, Shelah SB, Amy OT. Husbands' Reproductive Health, Knowledge, Attitudes and

- Behavior in Uttar Pradesh, India. Studies in Family Planning 1998; 29(4): 388 399.
- Stan B. Couples and Reproductive Health; a Review of Couples Studies. Studies in Family Planning 1996; 27(6): 291-306.
- 3. Park JE, Park K. Textbook of Preventive and Social Medicine: Barbasidas Bhanot (India) 1981: 507-9.
- National Population Commission, Federal Republic of Nigeria. Nigeria Demographic and Health Survey 2003. April 2004, ORC Macro Calverton, Maryland, USA.
- 5. Isiugo-Abanihe UC. Reproductive Motivation and Family Size Preferences among Nigerian Men. Studies in Family Planning 1992; 23(3): 211 215.
- 6. Lawoyin TO, Onadeko MO. Fertility and Childbearing Practices in a Rural African Community. West African Journal of Medicine 1997; 16(4): 204 207.
- Farzaneh R, Lori A. Men and Family Planning in Africa. Population Reference Bureau. Washington DC 1996. p 3-23.
- 8. Odu OO, Ijadunola KT, Parakoyi DB. Reproductive Behaviour and Determinants of Fertility among Men in a sub-Urban Nigerian Community. Journal of Community Medicine and Primary Health Care 2005; 17(1):13-19.
- 9. Population Reports. Men; New Focus of Family Planning Programs. Series J. 33. 1986;15 (5): 890 918.
- Wasileh P. Men's knowledge of and Attitudes towards Birthspacing and Contraceptive Use in Jordan. International Family Planning Perspectives 1999; 25 (4): 181-185.
- 11. Fakeye O., Babaniyi O. Reasons for Non-use of Family Planning Methods at Ilorin Nigeria; Male Opposition and Fear of Methods. Tropical Doctor 1989; 1: 114-117.
- Ojeifo JO, Singh B. Paternal Services: a Missing Link in Family Health Services. Presented at the 11th Annual NCIH International Health Conference, Arlington, Virginia, June 10-13, 1984;28.
- Federal Government of Nigeria. Population Dynamics in Nigeria. Department of Population Activities of the Federal Ministry of Health and Human Services Lagos, Nigeria. 1994. 1-18
- Federal Government of Nigeria. National Policy on Population for Development, Unity, Progress, and Selfreliance 1988:1-19.
- Federal Ministry of Health, Nigeria. National Reproductive Health Policy and Strategy; to Achieve Quality Reproductive and Sexual Health for all Nigerians. May 2001, Abuja, Nigeria.
- 16. National Population Commission. 1991, Population

- Census of the Federal Republic of Nigeria. Analytical Report at the National Level, April 1998, 22.
- 17. Fishers A, Lang J. Sample and Sample Size Determination in Research Designs, 1963. The Population Council, New York.
- Ityai M. Fertility Behavior and Contraception Use in Kenya: Findings from a Male Survey. African Journal of Fertility Sexuality and Reproductive Health. 1996; 1(2): 136-145.
- 19. Karin R. Factors that Determine the Prevalence of Use of Contraceptive Methods for Men. Studies in Family Planning. 1993; 24; 2: 88-99.
- 20. Green CP, Cohen SI, Belhadjel GH. Male Involvement in Reproductive Health Including Family Planning and Sexual Health. New York, United Nations Population Fund, Nov. 1995: p104.
- 21. Kodwani C. Men targeted for Family Planning in Zambia. Network Family Health International 1992; 13, 1:1-17
- 22. Federal Ministry of Health and Human Services, PHC Department, PHC Services Division; Guide to Family Planning In Nigeria. 1992.13.
- 23. Ezeh A.C. The Influence of Spouses on each Other's Contraceptive Attitudes. Studies in Family Planning 1993; 24(3): 163 174.
- Association for Reproductive and Family Health. Women's Reproductive Health, Empowerment and Male Involvement; Findings from Seven States in Nigeria 1998: 18-20.
- Elisha PR. Perception of Population Policy, Development and Family Planning Programs in Northern Nigeria. Studies in Family Planning 1996; 27, 3: 127-136
- 26. Bryant R, Drenan M. Male Participation in Reproductive Health. Network Family Health International 1998; 18 (3): 1-31
- 27. Onu AC, Unuigbe JA. Acceptance of Contraceptive Practice by Grand-multiparae in Benin City. Nigeria. International Journal of Gynecology and Obstetrics 1986; 24(2): 145 150.
- 28. Piotrow PT, Kincaid DL, Hindin MJ, et al. Changing Men's Attitudes and Behaviours: The Zimbabwe Male Motivation Project. Studies in Family Planning 1992; 23(6):365-375.
- Joesoef MR, Baughman AL, Budi U. Husband's Approval of Contraceptive Use in Metropolitan Indonesia: Program Implications. Studies in Family Planning 1998;19(3):162-168.