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J B C R S

# A Survey of Clients and Ethical Perspectives of Voluntary Tubal Ligations in the South-Western Nigeria

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## ABSTRACT

**Background:** Acceptance of voluntary tubal ligation is gradually gaining wide acceptability in the developing countries. **Aim:** This study described the sociodemographic characteristics of acceptors of voluntary female surgical sterilizations (VSS) and assessed clients' perception of compliance of health care providers with ethical, statutory, and policy requirements in family planning (FP) practices. **Subjects and Methods:** Retrospective, analytical study of VSS within the period January 2012 and June 2013, followed by a descriptive cross-sectional study of 96 sterilized clients from randomly selected health facilities in the South-Western Nigeria. The resultant data collected using interviewer-administered questionnaires were analyzed using SPSS software version 17.0 (Chicago, IL, USA). **Results:** Seventy-two (75.0%) had the VSS procedure carried out during the cesarean operations. All clients were counseled by the surgeon/gynecologists on benefits of the procedure, though only 13.6% (13/96) received additional counseling from the FP care providers. All were counseled on benefits of the procedure while 75.0% (72/96) were counseled on the risk associated with the procedure and 67.7% (65/96) were offered alternatives to the procedure. No respondent was offered incentives for accepting tubal ligation. There was a statistically significant association between having a voluntary sterilization done on clients and having counseled client on benefits of the procedure ( $P = 0.01$ ), having sterilization done based on both client and her husband's decision ( $P = 0.05$ ), and clients voluntarily accepting sterilization ( $P = 0.02$ ). **Conclusion:** Statutory and ethical requirements being followed in VSS were performed and reviewed in this study. Clinical specialist working in the areas of tubal ligations should always endeavor to send their clients to FP clinics for a more thorough secondary counseling on their chosen method.

**KEY WORDS:** Compliance, statutory and policy requirements, sterilization, tubal ligation

## INTRODUCTION

In Nigeria as in many other developing countries, unwanted pregnancies, unsafe induced abortions, high fertility and maternal mortality rates, and sexually transmitted infections rates including HIV/AIDS are all serious reproductive health problems that require urgent attention.<sup>[1-4]</sup> Family planning (FP) is a human right and is essential to women's empowerment. It is central to reduction and prevention of mortality and morbidity, and efforts to reduce poverty, promote economic growth, and raise female productivity.<sup>[5,6]</sup> It is a cost effective strategy in combating many of reproductive health problems toward the achievement of the Millennium Development Goals. In Nigeria, the contraceptive prevalence rates range between 5% and 15%,<sup>[7]</sup> and this is in spite of a high awareness of contraception reported in the country.<sup>[8,9]</sup>

Voluntary surgical sterilization (VSS) is an FP method with slowly increasing acceptance all over the world. It is a reliable and safe method for those who do not wish another child or who want to terminate their fecundity. Men can opt for a vasectomy as a permanent method of sterilization, but in most cases women undergo the procedure by having their tubes ligated. Because of the psychological and physiological side-effects, the surgical removal of the ovaries is not generally carried out for contraceptive reasons alone. This can be done at cesarean

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section, during or in the 1<sup>st</sup> week after delivery or as an interval procedure.

Of the contraceptive methods, knowledge and acceptability of surgical method is lower when compared to other methods,<sup>[10]</sup> with an afterthought that it is a way of deliberate castrating the women at the expense of unpredictable reproductive life and advances of men. In this part of the world, the mere mention of surgery sends jitters through the spine of many and surgical contraception is no exemption to this. The increase in female sterilization has been especially notable, despite earlier predictions that this method would never gain acceptance in Africa.<sup>[11]</sup> In Nigeria, the majority of those who had a tubal ligation have done so by using the opportunity of a cesarean section (CS) for delivery to do the procedure.<sup>[12]</sup>

Sterilization requires great attention and special care as a permanent method of contraception. Clients need to be thoroughly counseled and allowed to weigh the benefits and risks of the procedure toward making a voluntary decision. There are numerous ethical issues that should be addressed for the procedure to meet international standards in FP practices,<sup>[13]</sup> and many of these are well documented and routed in the United States of America.<sup>[14]</sup> Some other countries of the world have ethical, statutory policy, and legislative requirements that should be met before this procedure could be carried out so as to promote good ethical practice as well as reduce possible occurrences of litigations.

United States Agency for International Development (USAID) funded projects for example adopted the Thirt and other amendments to guide and monitor health care workers (HCWs) and programs providing contraception services with funds from US government. How well HCWs have been able to counsel their clients irrespective of their own values, as well as conforming to ethical and statutory requirements is an important determinant of success of many FP programs most especially in developing countries where service surveillance is low. Studies in this regard would assist FP programs toward assessing compliance issues, serve as evidence to promote ethical standard in clinical practices among care providers, as well as contribute toward increasing acceptability of this method.

Studies had found out that HCWs had generally good knowledge of voluntary surgical contraception, but their attitude and concerns toward the procedure were not encouraging and were largely biased.<sup>[15]</sup> Such beliefs among HCWs tend to negatively influence the uptake of sterilization in the general population and may further deplete the low contraceptive use in many developing countries. This study was undertaken to study characteristics of acceptors

of female surgical contraception and to assess client's perception of HCW's compliance with some ethical and statutory policy requirements during surgical sterilization in the Southwestern Nigeria.

## SUBJECTS AND METHODS

### Study design

This study employed a retrospective design or analysis of case notes of all women who had sterilization procedure between the period January 2012 and June 2013, followed by a descriptive cross-sectional study of the women to assess health worker's compliance with ethical and international statutory and policy requirements in FP services.

### Study area

The Southwestern region of Nigeria consists of six states with numerous health facilities existing at both the primary and secondary health care levels and few at the tertiary level. Tubal ligations were performed at the secondary and tertiary health care levels.

### Sampling

Lagos and Osun States were selected at random using simple balloting. VSS done at the tertiary health care level were excluded from the study as most FP programs take place at the secondary level. Primary health facilities do not have the facility for VSS and were therefore excluded from this study.

In each state, two out of three senatorial districts were chosen randomly employing simple balloting. From a list of secondary level or general hospitals with comprehensive maternal and child health services in a district, two were chosen at random using the simple balloting technique. This makes a total of eight secondary level hospitals.

### Data collection

One hundred and eight clients identified to have had a tubal ligation in these health facilities within a period of January 2012 and June 2013 were recruited into the study. Their case notes were reviewed and their sociodemographic characteristics at the time of the procedure were recorded. This includes age, marital status, occupation, educational level, religion, gravidity, parity, and number of children alive. Eligible client in this study was those women who had sterilization and who can be physically traced and found on follow-up.

All clients were subsequently followed up with the aim of identifying them through their home addresses and phone numbers, 96 of them that we were able to follow-up were subjected to a semi-structured interviewer administered and pretested questionnaires. In order to ensure a good

level of reliability of the research instrument, pretesting was carried out among ten similar respondents attending a government maternity specialist hospital in Oyo State., and their responses was used in modifying the questionnaire for better clarity. Face validity of the research instrument were ensured by using simple english language and clearly stated items in the questionnaires. Content validity was carried out by ensuring that the content of the questionnaire were full and asked questions relevant to sterilization and ethical practices.

Study variables include some basic international ethical and policy requirements as regard the VSS they had. These include the nature of counseling given to clients, issues of incentives, denial of rights because of client's refusal to accept a method, issues of voluntarism, and informed consent.

### Ethical consideration

Ethical approval to conduct the study was obtained from LAUTECH Health Ethics Research Committee. Further permission was obtained from medical directors of samples health facilities. Written informed consent was obtained from every respondent who took part in the study.

### Data management

Data was analyzed using the SPSS software version 17.0 (SPSS Inc, Chicago, IL, USA) after sorting out the questionnaires. Consistency of data entered was done by double entry and random checking. Data was presented in forms of frequency tables and the association between categorical variables was determined using Chi-square test of significance at a  $P < 0.05$ .

## RESULTS

Table 1 showed the sociodemographic characteristics of the clients at the time of sterilization. The mean age of respondents was 36.2 (1.4) years, with a mean gravidity and parity of 4.25 (2.2) pregnancies and 3.31 (1.6) children, respectively. Ninety (93.8%) were married, 87.5% (84/96) were Christians while only 12.5% (12/96) attained tertiary education level.

Table 2 showed compliance with ethical and statutory requirements during sterilization. Twenty-four (25.0%) of respondents had their sterilizations while not pregnant while 75.0% (72/96) had it during CSs. The mean number of CSs per client at sterilization was 2.0 (0.2). The cesarean operation were elective in 56.3% (54/96) of respondents. All clients were eventually counseled on benefits associated with the procedure. Thirteen point six percent (13.6%) clients received additional counseling by the FP care providers though all clients were initially counseled by the surgeon/gynecologist.

**Table 1: Sociodemographic characteristics of respondents (n=96)**

Sociodemographic characteristics of acceptors	Frequency (%)
Age in years	
<25	0 (0.0)
25-34	30 (31.3)
35-44	66 (68.7)
Above 44	0 (0.0)
Marital status	
Married	90 (93.8)
Nonmarried/separated	6 (6.2)
Religion	
Christian	84 (87.5)
Muslims	12 (12.5)
Others	0 (0.0)
Occupation	
Trading	48 (50.0)
Civil servant	12 (12.5)
Teacher	5 (5.2)
Accountant	6 (6.3)
Housewife	6 (6.3)
Nurse	7 (7.2)
Others	12 (12.5)
Education level	
Primary	30 (31.2)
Secondary	54 (56.3)
Tertiary	12 (12.5)
Number of pregnancies ever had	
1-4	69 (71.8)
Above 4	27 (28.2)
Number of children ever born	
1-4	84 (87.5)
Above 4	12 (12.5)
Number of children alive	
1-4	85 (88.5)
Above 4	11 (11.5)

**Table 2: Ethical and statutory compliance as described by respondents during interviews**

Clients variables (n=96)	Frequency (%)
Some ethical requirements	
Client had sterilization while not pregnant	24 (25.0)
Client had sterilization during CS	72 (75.0)
Client's CS was elective at sterilization	54 (56.3)
Client was counseled by surgeons/obstetricians	96 (100.0)
Client was sent to FP clinic for further counseling	13 (13.6)
Client had twins at this pregnancy	11 (11.5)
Client was eventually counseled on benefits of procedure	96 (100.0)
Client counseled on risk of procedure	72 (75.0)
Client offered alternative(s) to sterilization	65 (67.7)
Client allowed to make enquiries	82 (85.4)
Client had to go and discuss with husband	65 (67.7)
Findings at surgery discussed with client	48 (50.0)
Indication for CS among clients	
Completed family size	12 (12.5)
Completed family size plus obstetrics reasons	78 (81.3)
Completed family size plus obstetrics plus other health reasons	6 (6.2)
Some statutory requirements	
Client received incentives into accepting sterilization	0 (0.00)
Client received comprehensible information on all FP methods	61 (63.6)
HCWs was under pressure to carry out this procedure	0 (0.00)
HCWs said surgical procedure was part of an experiment or research	0 (0.00)
Decision to accept this method was basically client's own	72 (75.0)
Decision was basically that of both of client and her husbands	83 (86.4)
Client said she voluntarily accepted this method	93 (96.9)

FP – Family planning, CS – Cesarean section, HCWs – Health care workers

Seventy-two (75.0%) were counseled on the risk associated with the procedure, and 67.7% (65/96) were offered alternatives to the procedure. Eighty-two (85.4%) were

allowed to make enquiries, 67.7% (65/96) had to go and discuss with husband first while 50.0% (48/96) had findings at surgery discussed with them after the procedure. Twelve (12.5%) had completed family size as reasons for opting for sterilization while 81.3% (78/96) had completed family size plus some other obstetrics and gynecological reasons as an indication for the sterilization. While no respondents were offered incentives for accepting the procedure, only 63.6% (61/96) received comprehensible information on all FP methods before they had the VSS procedure. None of the respondents felt that the HCWs was under pressure to carry out the procedure, even as being part of an experimental research, 72 (75.0%) of respondents said the decision was basically their own, 86.4% (83/96) said the decision was a collective one by them and their husbands, while 96.9% (93/96) declared that they voluntarily accepted this method.

Table 3 showed that there was a statistically significant association between having a voluntary sterilization done on clients and having counseled client on benefits of the procedure ( $P = 0.01$ ), having decisions to do sterilization based on both client and her husband's decision ( $P = 0.05$ ), and clients voluntarily accepting sterilization ( $P = 0.02$ ). No statistically significant association was observed between

having voluntary sterilization done and having sterilization while not pregnant ( $P = 0.06$ ) sending a client to FP clinic for further counseling ( $P = 0.43$ ), counseling client on risk of procedure ( $P = 0.12$ ), clients (mere) discussing with husband ( $P = 0.16$ ), and clients receiving comprehensible information on all FP methods ( $P = 0.18$ ).

## DISCUSSIONS

In this study, mean age at having sterilization (36 years) and mean no of children alive (2.9) among studied subjects supports similar studies in which the mean age at VSS was 33.1 years,<sup>[16]</sup> and above 30 years.<sup>[17]</sup> This constitutes the middle and late reproductive age, when women are naturally expected to have completed their desired family size or child bearing and may be looking for an end to her reproductive activities. In this study, most respondents were married and Christians. This supports another study in which almost all clients were Christians and were also married.<sup>[17]</sup>

In this study, one-third of clients having a level of education below the secondary school can be compared with another study in which the most respondents had an education level less than secondary.<sup>[17]</sup> Though these studies are supportive, it is still a reflective of a generally low literacy level among women in Nigeria, though sterilizations still appear commoner among the educated clients in this study. The average number of living children in the study was a bit lower when compared with another study,<sup>[16]</sup> and the mean parity in this study is also lower when compared with 5.0 children reported from another study.<sup>[16]</sup> In Nigeria as in many other parts of the world, fertility is gradually reducing most especially among urban dwellers. A better attitude towards reversible contraception justified by an appreciable increase in contraceptive rates in Nigeria, desire for fewer children, late age at marriage, and awareness of lactational infecundity could have contributed to these observations.

In this study, as many as four-fifth of clients had their sterilizations performed during cesarean operations and the most common indication was that of a completed family size. This observation is high when compared with another study in which only 14.9% were performed by cesarean section and the rest were through mini-laparotomy and laparoscopy.<sup>[18]</sup> The fear of surgery and that of losing a member of a family to life events constitutes some of the reasons why women don't want to voluntarily opt for permanent contraception, so most of them usually opt for it during CS when they have an opportunity to undergo a surgery or when they have no other option to passing through surgery.

The indications for tubal ligation observed in this study also supports an American survey by Centers for Disease Control

**Table 3: Association between having sterilization done and some variables related to sterilization practices and ethical compliance**

Variables	Had sterilization done n=96 (100%)	Fisher's exact test value	P
Sterilization while not pregnant			
Yes	12 (12.5)	1.166	0.06
No	84 (87.5)		
Client was sent to FP clinic for further counseling			
Yes	13 (13.6)	1.166	0.43
No	83 (86.4)		
Client was eventually counseled on benefits of procedure			
Yes	96 (100.0)	1.137	0.01
No	0 (0.0)		
Client counseled on risk of procedure			
Yes	72 (75.0)	0.310	0.12
No	24 (25.0)		
Client had to go and discuss with husband			
Yes	65 (67.7)	0.126	0.16
No	31 (32.3)		
Client received comprehensible information on all FP methods			
Yes	61 (63.6)	0.067	0.18
No	35 (36.4)		
Decision was basically that of both of client and her husbands			
Yes	83 (86.4)	1.017	0.05
No	13 (13.6)		
Client said she voluntarily accepted this method			
Yes	93 (96.9)	5.316	0.02
No	3 (3.1)		

FP – Family planning

and Prevention in which the most frequently cited reasons for tubal ligation among women who had any births were that one or both partners wanted no more children. Among nulliparous women with tubal ligation, medical reasons and problems with their birth control method were cited most often.<sup>[19]</sup> However, this is in contrast to another Nigerian study in which the commonest indication (among half of respondents) for the tubal ligation during cesarean section was repeat cesarean section.<sup>[19]</sup> This supports findings of this study in which the sterilizations were carried out during a second cesarean operations (on the average) for clients studied.

It is important that clients do not make decisions to have tubal ligations in a hurry. It is also important for HCWs to respect ethical considerations by effectively discussing benefits, risks, and alternatives to the procedures with all clients. This supports a declaration that in sterilization, unlike any other method of FP, it is significant to make certain and complete decision before opting for it.<sup>[20]</sup> It is important to remember that if a client changes her mind to have children after accepting and accessing tubal ligation, reversal of tubal ligation is a more complex procedure with more risk factors and it is not fully guaranteed to restore.

In this study, a little less than half of respondents had an alternative to tubal ligation discussed with them. This supports a study in which many women said that they were sterilized because the doctor presented the procedure as the only method of pregnancy prevention, thus suggesting that those alternatives to tubal ligation were probably not discussed with such clients.<sup>[21]</sup> Acceptance of sterilization is expected to be easier when husbands give a go ahead to the wife to undergo sterilization. In this case, the husband is more likely to give all necessary support to the wife most especially when the two of them are convinced about the benefits of the surgical procedure and probably irrespective of the risks involved.

The United States of America and many other countries have a number of statutory, policy, and legislative requirements guiding the practice of FP including tubal ligations. FP providers were under obligation not to give incentives in order to stimulate a client toward accepting a method, neither is he or she allowed to withdraw any benefit from a client as a result of refusal to accept a method of FP. These and other requirements including the fact that clients should receive a comprehensible information on all methods from which to choose are useful and important requirements on the part of FP providers that should be adopted the world over in order to positively guide FP practices toward professional ethical standard.

The fact that the provisions of these requirements and ethical standards were followed in Nigeria as supported by findings from this study shows that Nigerian surgeons and FP providers are compliant with these international statutory requirements, as well as ensuring compliance with FP related policy regulations. This is also important for USAID funded projects existing in Nigeria and more so, FP is a social service that requires that clients access the high quality of care. It is thus important that all projects and relevant government agencies carry out monitoring visits in order to ensure that their providers are complaint with high ethical practice and standards.

The nonsignificant associations seen in this study does not preclude the need for surgeons offering tubal ligation to always send their clients to FP clinics for further additional counseling, most especially VSS that are not done during CSs. This would give the clients an opportunity of interacting with these specially trained counselors, ask questions and make further clarifications. One important limitation of this study was our inability to reach all women who had their case notes reviewed for further descriptive studies despite phone numbers and their addresses. In addition, only clients whose case notes could be found at the records department was reviewed. Recall bias on the part of subjects interviewed may also be a limitation.

## CONCLUSION

Though acceptance of surgical sterilization is still low in this part of the world, cases being carried out in Nigerian health facilities were being ethically done, clients were duly counseled before the procedure and there was high compliance with statutory and policy requirements related to FP. Specialist HCWs working in areas of tubal ligations should always endeavor to send their clients to FP clinics for a thorough secondary counseling on their chosen method. FP providers are enjoined to follow ethical principles and standards in dealing with clients being evaluated for voluntary surgical contraception.

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## Conflicts of interest

There are no conflicts of interest.

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