Perception and acceptability of bilateral tubal ligation among women attending antenatal clinic at Usmanu Danfodiyo university teaching hospital Sokoto

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ABSTRACT

Background: Contraception can be defined as all temporary or permanent measures designed to prevent pregnancy. Bilateral tubal ligation is a surgical and permanent form of contraception offered to women who completed their family size or for limitation of family size due to medical condition. The practices of bilateral tubal ligation is limited in Sub-Saharan African countries, Nigeria inclusive because of great desire for a large family size, cultural and religious factors, misunderstanding and fear of the procedure. The aim of the study was to determine the perception and acceptability of bilateral tubal ligation as a form of contraception among women attending Antenatal clinic at Usmanu Danfodiyo University Teaching Hospital Sokoto.

Methods: This was a cross sectional study conducted among women attending antenatal clinic between 1st of May to 31st of July, 2018. The information was obtained using a structured questionnaire to obtain the respondent’s socio-demographic characteristics, questions on perception and acceptability of bilateral tubal ligation. Data analysis was done with statistical package for social sciences version 22 (SPSS Inc, Chicago, IL, USA).

Results: The study revealed that 73% of the respondents were aware of bilateral tubal ligation, but only 44% of them have good perception towards it. Majority of the respondents (63.8%) reject BTL for contraception. Most of their reasons were cultural believe (33.3%), regret (31.6%), religious believe (26.6%) and fear of surgery (8.5%).

Conclusions: There was poor perception and low acceptability toward bilateral tubal ligation among the study population, mostly due to cultural and religious believes, as well as fear of regret, despite awareness of BTL among majority of the respondents.

Keywords: Complete family, Nigeria, Tubal ligation

INTRODUCTION

The provision and expansion of family planning services is a public health need and a national development priority for many countries across Sub-Saharan Africa.¹ Contraception can be defined as all temporary or permanent measures, designed to prevent pregnancy.² Bilateral tubal ligation (BTL), also called tubal occlusion or female sterilization is surgical procedure which aims at permanent contraception.³ Female sterilization procedures were first performed in the late 1800s but did not become widely available until 1930s when the Pomeroy technique for ligating the fallopian tubes was introduced. For several decades most of the procedures...
were performed for medical reasons. However, the increasing trend towards smaller families in developed countries coupled with the availability of new simpler, safer and more effective surgical techniques led to an increased demand for female sterilization.

The United Nation estimates that 180 million couples have relied on surgical contraception to limit their families worldwide. An estimate of about 700,000 female sterilization procedures were performed each year. However, female sterilization is practice to a limited extent in African countries because of the aversion to the procedure. In Nigeria the acceptance rate of female sterilization is also low. The reasons for this low acceptance were rumours, misunderstanding and fear of a variety of health risk though to be associated with the procedure. Other limiting factors includes religious and cultural factors, great desire for a large family size, inadequate facilities, shortage of trained personnel and high infants and childhood mortality.

The surgical approaches for BTL include laparoscopy, laparotomy (concurrent with caesarean section) and mini-laparotomy. The laparoscopic approach is the preferred route for interval BTL procedures, whereas mini-laparotomy is used for post-partum BTL.

Bilateral tubal ligation has an important role on prevention of unplanned pregnancy and reduction of maternal mortality. The aim of this study was to determine the perception and acceptability of bilateral tubal ligation as a form of contraception among pregnant women attending antenatal clinic at Usmanu Danfodiyo University Teaching Hospital.

METHODS

This study was a cross sectional study among pregnant women attending ante-natal clinic at Usmanu Danfodiyo University Teaching Hospital Sokoto, within the period of three months (between 1st May, 2018 to 31st July, 2018).

The minimum sample size for the study was obtained using an acceptance rate of bilateral tubal ligation for contraception of 21.7% from a previous study done in Jos. The minimum sample size obtained was 282. Simple random sampling technique (by balloting) was used to select the participants and a verbal consent was obtained. Self-administered/interviewer questionnaires were administered to the participants. The questionnaires were used to obtain information on socio-demographic characteristics, knowledge, perception and acceptability of bilateral tubal ligation.

Statistical analysis

Data analysis was done with statistical package for social Sciences version 22 (SPSS Inc, Chicago, IL, USA).

RESULT

Most of the respondents were between the ages of 25 to 29 years. The youngest was 20 years while the eldest was 45 years. Majority of the participants were Hausa/Fulani (56.7%), followed by Yorubas (15.6%). Most of them were Muslim (77.7%) and all were married. Most of them were also in monogamous setting (74%). The socio-demographic characteristic of the respondents is shown in Table 1.

Table 1: Socio-demographic characteristics of the respondents.

| Characteristics     | Frequency | Percentage |
|---------------------|-----------|------------|
| Age                 |           |            |
| Less than 20 years  | 0         | 0%         |
| 20 to 24 years      | 79        | 28.0%      |
| 25 to 29 years      | 97        | 34.4%      |
| 30 to 34 years      | 69        | 24.5%      |
| Above 35 years      | 37        | 13.1%      |
| Ethnicity           |           |            |
| Hausa/Fulani        | 160       | 56.7%      |
| Igbo                | 36        | 12.8%      |
| Yoruba              | 44        | 15.6%      |
| Others              | 42        | 14.9%      |
| Religion            |           |            |
| Islam               | 219       | 77.7%      |
| Christianity        | 63        | 22.3%      |
| Family setting      |           |            |
| Monogamous          | 211       | 74.8%      |
| Polygamous          | 71        | 25.2%      |
| Occupation          |           |            |
| House wife          | 84        | 29.8%      |
| Petty trader        | 35        | 12.4%      |
| Business            | 33        | 11.7%      |
| Civil servant       | 100       | 35.5%      |
| Student             | 30        | 10.6%      |
| Educational status  |           |            |
| No formal education | 3         | 01.1%      |
| Primary             | 4         | 01.4%      |
| Secondary           | 86        | 30.5%      |
| Tertiary            | 189       | 67.0%      |
| Parity              |           |            |
| Primigravida        | 10        | 03.5%      |
| Multigravida        | 211       | 74.8%      |
| Grand multipara     | 61        | 21.6%      |
| Number of living children |       |            |
| None                | 14        | 05.0%      |
| One                 | 47        | 16.7%      |
| Two                 | 67        | 23.8%      |
| Three               | 93        | 33.0%      |
| Four                | 42        | 14.8%      |
| Five and above      | 19        | 06.7%      |
| Total               | 282       | 100%       |
Majority of the respondent (73%) of the respondents were aware of bilateral tubal ligation and 36.2% of them heard it from the health workers (Figure 1). However, only 169 (59.9%) knew that it is a form of permanent contraception (Table 2).

Among the respondents, 44% had good perception about BTL and 56% had poor perception (Figure 2). In addition, only 36.2% were willing to accept BTL for contraception (Figure 3). The main reasons were due to cultural desire for large family size and fear of regret. The various reasons for not accepting it are shown in Figure 4.

### Table 2: Knowledge and source of knowledge on BTL among the respondents.

| Response                      | Frequency | Percentage |
|-------------------------------|-----------|------------|
| **What form of contraception is BTL?** |           |            |
| Permanent                     | 169       | 59.9%      |
| Temporary                     | 28        | 09.9%      |
| I don’t know                   | 85        | 30.1%      |
| **Source of information**     |           |            |
| Health workers                | 102       | 36.2%      |
| Friends                       | 98        | 34.8%      |
| Radio/TV                      | 5         | 01.8%      |
| Internet                      | 1         | 0.4%       |
| None                          | 76        | 26.9%      |
| **Total**                     | 282       | 100%       |

DISCUSSION

Age is an important factor when it comes to decision for permanent contraception. Majority of the participants belong to this age group of 26-30 years which is within the middle of the reproductive age. This is similar to a study carried out at Osogbo south west Nigeria.¹⁷

Majority of the participants in this study were aware of BTL, this is similar to another study done at Ado Ekiti southwest Nigeria in which all the participants were aware of BTL.¹⁸ However, despite the high level of awareness of BTL among the participant, majority of them believed it is bad and this is similar to the study at Ado Ekiti where 61.1% of the participants believed it is bad.¹⁸ This may be due to ignorance on what exactly BTL entails and the strong desire for large family size in African culture.

In general, the acceptance rate of BTL in Africa is low because of deep rooted socio-cultural and religious barriers, poverty, inadequate counseling as well as limited facilities. The acceptance rate of BTL in this study of 36.2% is higher compared to a study done at Jos north central Nigeria in which the acceptance rate was
21.7%. This may be because majority of the participants in this study were aware of BTL, had tertiary level of education and most of them were civil servants.

Most of the reasons given by the participants in this study, why they cannot accept BTL for contraception includes: cultural believe which may be because majority of the participants in this study were Hausa/Fulani with cultural desire for large family size. Another reason is fear of regret for not being able to get another child again in case they lost the ones they had. This may be related to the high level of infants and childhood mortality rate in Sub-Saharan Africa. Religious believe is another reason given by some of the participants for not accepting BTL for contraception. These reasons are similar to the reasons given by the participants in a similar study conducted in Ado Ekiti.  

CONCLUSION

In conclusion, there is still high level of poor perception and low acceptability of bilateral tubal ligation as a form of contraception among the study population. The reasons for these were cultural and religious believes as well as fear of regret Therefore, more public enlightenment involving both the cultural and religious leaders as well as providing more measures to prevent infant and childhood mortality will go a long way in improving the acceptance rate of bilateral tubal ligation.

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