

## **Socio-Cultural Factors Influencing Choice of Bilateral Tubal Ligation Among Women Attending University of Ilorin Teaching Hospital**

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**Abstract.** The study examined socio-cultural factors influencing choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital. Increase in child bearing subject women to reproductive health problem of ruptured uterus, miscarriage and abortion due to unwanted pregnancy which leads to high maternal mortality. A descriptive research design of survey type was used for this study. The population for this study comprised all child bearing age women attending Family Planning Clinic in University of Ilorin Teaching Hospital. Multistage sampling technique was used to select 300 respondents from 749 women attending the Family Planning Clinic, University of Ilorin Teaching Hospital. Researchers' structured questionnaire was used to collect data. The questionnaire was validated by three experts. A correlation co-efficient of  $r = 0.73$  was obtained through test re-test method using Pearson Product Moment Correlation. Questionnaire was administered by the researchers and three (3) trained research assistants. The three null hypotheses were tested using inferential statistics of chi-square at 0.05 alpha level of significance. The results revealed that educational status, psychosocial factors and religious belief have significant influence on the choice of bilateral tubal ligation among women

attending family planning clinic, in University of Ilorin Teaching Hospital. Therefore, it was recommended that there should be health education programmes for women through seminars to improve their knowledge on choice of bilateral tubal ligation. Women should be provided with adequate information by health care provider to be guided on psychosocial issue(s) such as fear of surgery and anesthesia complications.

**Keywords:** Bilateral Tubal Ligation, socio-cultural factors, educational status, psychosocial factors, religious belief

### **1. Introduction**

In this modern era women are saddled with a lot of responsibility both home and in the circular world. Therefore, the reproductive health need of women cannot be over emphasized. Women that handled their reproductive health issue(s) with levity encounter problems later in life and some do not even live to tell the story. Women are faced with reproductive health problems of pelvic inflammatory diseases, ruptured uterus, miscarriage, cancer, fibroid, abortion due to unwanted pregnancy among others. In particular, abortion and miscarriage which can be traced to

increase in number of child bearing. These can be salvage or prevented through bilateral tubal ligation (Omokanye, Salaudeen, Jimoh, Panti, Saidu & Balogun, 2012).

According to the World Health Organization (1999), bilateral tubal ligation is safe, cost effective and widely used method of family planning in the world especially in developed countries such as United States of America and Europe. Engender Health (2002) stated that approximately 222 million women of reproductive age in the world are protected from unintended pregnancy through bilateral tubal ligation. In Africa, bilateral tubal ligation uptake is low because of deep rooted socio-cultural and religious hindrances, poverty, inadequate counseling and limited facilities and trained personnel (Omole, Ohonsi, Ashimi & Attah, 2010; Igwigbe, Ugboaja & Monago, 2009). Bilateral tubal ligation is not popular method of family planning in Nigeria, for instance, in Kwara State; only 0.6 percent of women of reproductive age 15-49 years used bilateral tubal ligation (Nigeria Demographic Health Survey, 2013). Also University of Ilorin Teaching Hospital (UIITH) only 6 bilateral tubal ligation was performed from January, 2008 to June, 2015 (UIITH, Ilorin, 2015).

World Health Organization (2012) affirmed that Nigeria maternal mortality ratio of 630 deaths per 100,000 births is among the ten highest of such rates in the world. United State Agency for International Development (USAID) (2013) pointed out that one out of eighteen women die each year due to complication during child birth. Nigeria has more than 42 million women of reproductive age is 15-49 years with high total fertility rate of 5.7 life time birth per women (USAID, 2013) while the North central has total fertility rate of 5.4 and Kwara State has total fertility rate of 4.5 (Nigeria Demographic Survey, 2013). Many of these women are at risk of poor maternal health outcomes due to increase in child bearing (USAID, 2013).

Omokanye, Salaudeen, Jimoh, Panti, Saidu and Balogun (2012) reported that bilateral tubal ligation is not a common method of family planning with the ratio of 0.8 per 1,000 births out

of which incidence of 0.37 is through minilaparotomy while 0.43 per 1,000 deliveries through caesarean section from January 2002 to December 2011 in University of Ilorin Teaching Hospital. Attah and Omole-Ohonsi (2014) reported likewise that bilateral tubal ligation uptake is low especially postpartum and interval bilateral tubal ligation in Kano teaching Hospital from January 2008 to December 2012.

Monjok, Smesny, Ekabua and Essien (2010) pointed out that male children in Northern Nigeria, as key influence of uptake of modern contraceptive especially bilateral tubal ligation. Swende and Akinbuwa (2009) claimed that bilateral tubal ligation low utilization may be as a result of low awareness in addition with socio-cultural and psychological aversion such as fear of re incarnation without fallopian tubes. Also, death of spouse and fear of surgery involve in bilateral tubal ligation and because of regret encounter by those individual after death of a child (Swende & Hwande, 2010). Adeyemi, Loto, Ijadunola, Asa, Ajenifuja and Ofili (2011) stated that fear of going through the operation couple with the use anaesthesia lead to low utilization of bilateral tubal ligation. Adeyemi, Loto, Ijadunola, Asa, Ajenifuja and Ofili (2011) further explained that increase in child bearing are related to extreme poverty, early marriage and early child bearing, intense social pressure to bear male children, polygamous competition that exist among wives to bear more children and poor level of education.

Mairiga, Kullima, Bako and Kolo (2010) claimed that women objection to bilateral tubal ligation as a modern family planning method is due to disapproval by their husbands, damage to reproductive organ (s) and the belief that modern contraceptive was introduced to reduce Muslim populations. Likewise Salako (2013) stated that Islam does not support bilateral tubal ligation because is seen by Islamic Jurists as permanent hindrance to fertility. Coupled with Christian faithor believe like the Catholics, who are against the use of barrier methods of modern family planning (Engender Health, 2002).

World Health Organization (1999) defined bilateral tubal ligation as the blockage of the two

fallopian tubes, so that eggs cannot reach the uterus (womb). International Parenthood Federation (2012) affirmed that in most cases, bilateral tubal ligation is more than 99% effective and only one in 200 women will become pregnant after the operation. The operation involves cutting or blocking of the fallopian tubes, which prevent eggs from being fertilized by the sperm. It is a fairly minor operation with many women returning home the same day.

Ikojo, Ezegwu and Nweze (2009) asserted that bilateral tubal ligation is a one-time procedure that can be carried out either as an out-patient or in-patient basis, it is usually post partum during caesarean section. Ikojo, Ezegwu and Nweze (2009) further explained that it is usually considered a permanent method of contraception often done by minilaparotomy under local anesthesia for post partum which is usually within 48 hours after delivery procedures. Minilaparotomy performed for bilateral tubal ligation is a safe procedure and cost-effective (Abiodun, Esuga, Balogun, Fawole & Jimoh, 2010).

Omole-ohonsi, Ashimi and Attah (2010) stated that bilateral tubal ligation results in blockage or interruption of the two fallopian tubes to prevent sperm from fertilizing the egg. Isah and Nwobodo (2009) reported that it is ideal for women who want a permanent method of contraception and are free of any gynecologic pathology such as history of bladder cancer. Campbell, Sahin-Hodogylugil and Potts (2006) pointed out that bilateral tubal ligation is also ideal for women in whom a pregnancy could represent a high social and medical risk. Family planning refers to actions by individuals and couples to plan the number, timing and spacing of the children they want so as to promote the health and well being of the family group (Sheu & Burodo, 2013). Bartzand and Greenberg (2008) affirmed that bilateral tubal ligation offers effective protection against pregnancy, eliminates the need for long-term contraceptive supplies, and has a low risk of exposing women to complications when carried out according to standards. Swende and Akinbuwa (2009) claimed surgical

complications of bilateral tubal ligation include wound infection, excessive intraperitoneal bleeding and these occur in less than 1% of the procedures. Minor complication such as wound infection occurred in 7.5% of patients in University of Ilorin Teaching Hospital (Aisen & Oronsaye, 2007).

Women are the most vulnerable group when it comes to issues associated with pregnancy and childbirth. These have adverse effects on the reproductive health status of women such as rupture uterus, abortion due unwanted pregnancy and pregnancy related hypertension among others. These can be avoided or prevented through limiting the number of child bearing by the use of bilateral tubal ligation which is an effective long acting contraceptive method especially for those that have given birth to their desire number of children.

## 2. Statement of the problems

The reproductive health of child bearing age women is of great. Ruptured uterus, abortion due to unwanted pregnancy and miscarriage is on the increase among child bearing age women attending University of Ilorin Teaching Hospital. The increase in child bearing leads to high maternal mortality; Kwara State maternal mortality rate is 980 per 100,000 live births in 2009 (Hassan, 2009). This alarming rate of maternal mortality continues to pose threat to the existence of human race in terms of social and economic implications to the family and society at large. The researcher also observed, during her practicum exercise at University of Ilorin, Family Planning Clinic of child bearing age women, especially those having five children and above confessed that it was a narrow escape from death with their last delivery. Therefore, this study examined socio-cultural factors influencing choice of bilateral tubal ligation among women in University of Ilorin Teaching Hospital.

## 3. Research Hypotheses

The following hypotheses were tested to guide the study:

- (i) Educational status will not significantly influence the choice of bilateral tubal ligation among women attending university of Ilorin Teaching Hospital.
- (ii) Psychosocial factors will not significantly influence the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital
- (iii) Religious belief will not significantly influence the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital.

#### **4. Methodology**

The descriptive research design of survey type was used for this study. The study population comprised of women 15-49 years old attending the family planning clinic at University of Ilorin Teaching Hospital. Multistage sampling technique was used to select women age 15-49 years. First stage, purpose sampling technique was used to select women 15-49 years old. Second stage, proportionate sampling technique was used to select 40% of 749 women attending family planning clinic of University of Ilorin from January 2013 to May 2015. Third stage, simple random sampling was used to select 300 women that participated in the study through lucky dip method of Yes/No; those who pick yes participated in the study. According to Daramola (2006) sample is a fair representation of the entire population of interest.

The instrument used for this study was a researchers' structured questionnaire which comprised of twelve (12) items based on influence of socio-cultural factors such as educational status, psychosocial factors and religious belief of women attending University of Ilorin Teaching Hospital. Validity of the instrument was established by given draft of the questionnaire to three experts from the relevant fields. The test re-test method was used to establish the reliability of the instrument. Twenty (20) copies of the questionnaire were administered to women in civic service clinic and after two weeks of the first administration, the questionnaire was re-administered. The two results of the administration were correlated using Pearson Product Moment Correlation, the correlation coefficient of 0.73r. The researcher with the aid of three trained researcher assistants administered the instrument to the respondents. Respondents' consents were sought after having obtained permission from the Head of Family Planning Clinic University of Ilorin Teaching Hospital through the letter of introduction collected from the Head of Department of Health Promotion and Environmental Health Education. Both descriptive statistics of percentages and inferential statistics of chi-square were used to analyze the data collected.

#### **5. Results and Discussion of Findings**

The results obtained from the three hypotheses tested for the study are shown on the tables below:

Hypothesis 1: Educational status will not significantly influence the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital

**Table 1: Chi-square Analysis showing influence of educational status on choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital**

S/N	ITEM	SA	A	D	SD	Row Total	Cal $\chi^2$	Df	Crit. Value	Rem.
1	Primary school holders women do not use bilateral tubal ligation because they lack knowledge of the method.	88 (29.8%)	177 (59.0%)	27 (9.0%)	8 (2.7%)	300	180.2	9	16.92	Ho Rej.
2	Secondary school holders will not utilize bilateral tubal ligation due to lack of enlightenment about the method.	80 (26.7%)	184 (61.3%)	34 (11.3%)	2 (0.7%)	300				
3	Women level of health literacy may affect the use of bilateral tubal ligation.	92 (30.6%)	167 (55.7%)	33 (11.0%)	8 (2.7%)	300				
4	Women that are OND/NCE holders and above may feel that bilateral tubal ligation is only meant for those women who have had more than three caesarean sections	64 (21.3%)	106 (35.3%)	112 (37.3%)	18 (6.1%)	300				

Table 1 reveals that 265 (88.3%), 264 (88%), 259 (86.3%) and 170 (56.6%) of respondents agreed that child bearing age women do not utilize bilateral tubal ligation because of lack of knowledge of the method, lack of enlightenment, level of health literacy may affect the use and also feel that bilateral tubal ligation is only meant for those women who have had more than three caesarean sections. Therefore, educational status determines the choice of bilateral tubal ligation in the study area. The result of table 1, showed that the

calculated value of 180.20 is greater than the critical value of 16.92. Thus, the null hypothesis was rejected. This implies that educational status of women in the study area significantly influence their choice of bilateral tubal ligation as a method of family planning.

**Hypothesis 2:** Psychosocial factors will not significantly influence the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital

**Table 2: Chi-square analysis showing influence of psychosocial factors on the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital**

S / N	ITEM	SA	A	D	SD	Row Total	Cal $\chi^2$	Df	Crit. Value	Rem.
5	Emotional stress about surgical procedure in bilateral tubal ligation and anesthesia may result in bleeding and death makes women not to utilize it	81 (27.0%)	171 (57.0%)	37 (12.3%)	11 (3.7%)	300	208.2	9	16.92	Ho Rej.
6	Women may not be willing to use bilateral tubal ligation due to friend's experience of regret associated with it	65 (21.6%)	123 (41.1%)	83 (27.7%)	29 (9.7%)	300				
7	Fear of unknown future such as a result of accident makes women not to utilize bilateral tubal ligation	85 (28.3%)	167 (55.7%)	37 (12.3%)	11 (3.7%)	300				
8	Misinterpretation of choice of bilateral tubal ligation by spouse for excuse of promiscuity make women not to utilize it	124 (41.3%)	140 (46.7%)	24 (8.0%)	12 (4.0%)	300				
<b>Column Total</b>		<b>355</b>	<b>601</b>	<b>181</b>	<b>63</b>	<b>1,200</b>				

Table 2 reveals that 252 (84%), 188 (62.6%), 252 (84%) and 264(88%) of respondents agreed that child bearing age women do not utilize bilateral tubal ligation due to psychosocial factors such as emotional stress about the surgical procedure, friend's experience of regret associated with bilateral tubal ligation, fear of death of children in future as well as misinterpretation of choice of bilateral tubal ligation by spouse for promiscuity. The result of table 2 showed that the calculated value of 208.20 is greater than the critical value of 16.92

with 9 degree of freedom at 0.05 alpha level; the above stated hypothesis was rejected. This means that the psychosocial factors in the study area significantly influence the choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital.

**Hypothesis 3:** Chi-square analysis showing influence of religious belief on choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital.

**Table 3: Chi-square analysis showing influence of religious belief on choice of bilateral tubal ligation among women attending University of Ilorin Teaching Hospital**

S/N	ITEM	SA	A	D	SD	Row Total	Cal $x^2$	Df	Crit. Value	Rem.
9	Women may not utilize bilateral tubal ligation because of their religion is against it	148 (49.3%)	107 (35.7%)	34 (11.3%)	11 (3.7%)	300				
10	Religion doctrine(s) favour(s) natural birth control than modern family planning method (bilateral tubal ligation)	105 (35.0%)	147 (49.0%)	42 (14.0%)	6 (2.0%)	300				
11	Religions bilateral tubal ligation as a method of contraceptive in North Central Nigeria because of desire for life family size.	110 (36.6%)	132 (44.0%)	44 (14.7%)	14 (4.7%)	300	190.7	9	16.92	Ho Rej.
12	Women that indulge in bilateral tubal ligation are against God's commandment of fruitfulness and multiplication	70 (23.3%)	104 (35.3%)	91 (30.3%)	35 (11.7%)	300				
	<b>Column Total</b>	<b>433</b>	<b>490</b>	<b>211</b>	<b>66</b>	<b>1,200</b>				

Table 3 reveals that 255(85%), 252 (84%), 242 (80.6) and 174(58%) of respondents agreed that child bearing age women do not utilize bilateral tubal ligation due to religious belief such as their religion is against it, religious doctrine(s) favour(s) natural birth control than bilateral tubal ligation, and religion is against this method in North Central because religion supports the desire for a large family size and women that indulge in bilateral tubal ligation were perceived to be against God's commandment of fruitfulness and multiplication. Therefore, religious belief determines the choice of bilateral tubal ligation in the study area. The result of tested hypothesis three, above showed that the calculated value of 190.71 is greater than the

critical value of 16.92, null hypothesis three was rejected and the alternative hypothesis upheld that, there is significant influence of religious belief on choice of bilateral tubal ligation among women in the study area.

**6. Discussion of Findings**

Table 1 above revealed the influence of educational status on the choice of bilateral tubal ligation with chi-square value of 180.20 that was greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level, thus, the null hypothesis was rejected. This shows that of the majority of respondents 171 (57%) were Secondary School holders and below. The study outcome is in agreement with Monjok, Smesny,

Ekabua and Essien (2010); Adeyemi, Loto, Ijadunola, Asa, Ajenifuja and Ofili (2011) that low level of education is one of key influences of uptake of modern contraceptive especially bilateral tubal ligation.

Although, 129 (43%) respondents with high degree of education that is NCE holders and above opined that the choice of bilateral tubal ligation is not only meant for those woman who have had more than three caesarean sections. It shows that education serves as an agent of change through schooling which is also the belief of Daramola (2002).

Table 2 indicated influence of psychosocial factors on the choice of bilateral tubal ligation with chi-square value of 208.20 that was greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level, thus, the null hypothesis was rejected. This means majority of the respondents are having misconceptions based on their cognitive, emotional and social feelings towards choice of bilateral tubal ligation as a method of family planning. The outcome of this study is in agreement with Swende and Akinbuwa (2009); Swende and Hwande (2010) affirmed that psychosocial aversions such as death of spouse, regret and fear of surgery are responsible for low utilization of bilateral tubal ligation as a choice of family planning method. Especially fear of surgery, this could be trace to myths and rumors about the method leading to bleeding and death which is not true because of improved use of surgical procedure such as minilaparotomy. Engender Heath (2002) and Peterson (2008) pointed out that major intra-operative complication associated with bilateral tubal ligation by minilaparotomy is less than 1% of the procedures.

However 112 (37.3%) respondents claimed that friend's experience of regret associated with bilateral tubal ligation do not affect their choice of the method. That individual has their personal reason(s) for choosing a particular method. This means they exhibit volitional behavior of the choice of bilateral tubal ligation, which is in agreement with Karen, Barbara and Viswanath (2008) and Babalola (2012) that individual

choice tends to affect utilization of family planning method.

Table 3 revealed the influence of religious belief on the choice of bilateral tubal ligation with chi-square of 190.71 that was greater than the critical value of 16.92 with 9 degree of freedom at alpha 0.05 level, thus, the null hypothesis was rejected. This showed that majority of the respondents opined that religious belief significantly influence their choice of bilateral tubal ligation as a family planning method. Mairiga, Kullima, Bako and Kolo (2009); Omokanye, Salaudeen, Jimoh, Panti, Saidu and Balogun (2012) asserted that, religion is one of the limiting factors affecting the use of modern family planning methods especially the choice of bilateral tubal ligation due to the belief it was introduced to reduce the Muslim populations in Northern Nigeria. Christian's faith like Catholics are against the use of barrier method of modern family planning (Engender Health 2002).

However 126(42%) respondents claimed that those women that do bilateral tubal ligation are not against God's commandment that religion guides and supports women to do anything that is legal and beneficial to their health. This is also the submission of Amirrtha (2008) who observed that religious belief has the potential to influence the use of contraceptive by individuals (women) however; within religions different people may interpret religious teaching on contraceptive, bilateral tubal ligation in particular in varying ways and women may choose to ignore religious.

## 7. Conclusion

Based on the findings of this study, the following conclusions were drawn:

- (i) Educational status influences the choice of bilateral tubal ligation among women in the study area;
- (ii) Psychosocial factors influence the choice of bilateral tubal ligation among women in the study area;
- (iii) Religious belief influences the choice of bilateral tubal ligation among women in the study area.

## 8. Recommendations

Based on the findings and conclusions of this study, the following recommendations were drawn:

- (i) There should be health education programmes for women through seminars to improve their knowledge on choice of bilateral tubal ligation.
- (ii) Women should be provided with adequate information by health care provider through counseling to be guided on psychosocial issue(s) such as fear of surgery and anaesthesia complications.
- (iii) Religious institutions should enlighten their members through health talks to adopt bilateral tubal ligation, especially those who have given birth to their desired number of children to avoid regular visits to clinics on long lasting reversible family planning methods and its associated problems/complications.

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