DETERMINANTS OF NON-USE OF FEMALE CONDOMS AMONG UNDERGRADUATE STUDENTS IN EKITI STATE

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MATRIC NO.: DSS/12/0590

A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF DEMOGRAPHY AND SOCIAL STATISTICS, FACULTY OF SOCIAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc) HONS IN DEMOGRAPHY AND SOCIAL STATISTICS, FEDERAL UNIVERSITY OYE-EKITI, NIGERIA

SEPTEMBER 2016

CERTIFICATION

This is to certify that **ADELOLA, ADEDOTUN BABAJIDE** of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic "DETERMINANTS OF NON-USE OF FEMALE CONDOMS AMONG UNDERGRADUATE STUDENTS IN EKITI STATE" in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc.) in Federal University Oye-Ekiti, Nigeria under the Supervision of:

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DEDICATION

This research project is dedicated to my mother, Mrs. Modupeola Racheal Adelola

ACKNOWLEDGEMENT

This research project was not a solo effort, Special thanks to Almighty God for his love and kindness towards me and for giving me the strength to execute this project.

I thank my mother, Mrs.Modupe Adelola for her moral advice and financial support for this project as well as for funding my academics. I also thank my siblings, Miss.Dolapo Adelola and Master Doyin Adelola for their encouragement.

I acknowledge the tireless effort of my project supervisors, Miss.Christiana Alex-Ojei and Dr.Gbemiga Adeyemi on this research.

Gratitude goes to a very special woman in my life, Miss.Amaka Ihemelendu for her love and encouragement.

Finally, I appreciate my colleagues, Master Bamiro Idowu, Master Ubah Somtochukwu and Master Udeze Joshua Chiwendu for their support during data collection.

ABSTRACT

Background: Consistent theoretical use of condom is the most effective way of preventing STDS transmission and unwanted pregnancies. Various studies have suggested that women are more likely to get infected with sexually transmitted diseases than men and to bear the consequences associated with unplanned pregnancies, and STDs. The use of the female condom is seen as a way of providing protection to women against sexually transmitted infections and unwanted pregnancies.

Objective: The main objective was to examine the determinants of non-use of female condoms among undergraduate students in Ekiti state.

Methodology: This study was a cross sectional study. It used a quantitative data collection method. Data was collected from 250 female undergraduate students in Ekiti State. Three tertiary institutions were selected for the study. These were Ekiti State University, Ado-Ekiti; Federal Polytechnic, Ado-Ekiti;and, the College of Health, Science and Technology, Ijero-Ekiti.

Results: The findings revealed that knowledge was a key determinant of usage of female condoms ($p=0.000$). Lack of knowledge was responsible for non-use. Some other factors responsible for non-use were: preference for other methods stated as barrier by 32.0% of the respondents, non-availability of female condoms was stated by 38.4%, lack of trust as far as protection was concerned was stated as a barrier by 21.6% of the respondents. Preference for unprotected sex was a barrier for 18.8% of the respondents. Although awareness of female condom as a method of contraception was high (80.4%), Consistent use was discovered to be very low (4.0%).

ABBREVIATIONS AND MEANINGS

AIDS:	ACQUIRED IMMUNO DEFICIENCY SYNDROME
CDC:	CENTRE FOR DISEASE CONTROL AND PREVENTION
CSO:	CENTRAL STATISTICS OFFICE
FC:	FEMALE CONDOM
HIV:	HUMAN IMMUNO VIRUS
NACA:	NATIONAL AGENCY FOR CONTROL OF AIDS
STI:	SEXUALLY TRANSMITTED INFECTION
STD:	SEXUALLY TRANSMITTED DISEASE
UNAIDS:	UNITED NATIONS PROGRAMME ON HIV/AIDS
HPV:	HUMAN PAPILLOMA VIRUS
UNFPA:	UNITED NATIONS FUND FOR POPULATION ACTIVITIES
CHW:	COMMUNITY HEALTH WORKER
HF:	HEALTH FACILITY
H/F:	HAUSA/FULANI
P.M.T:	PARENTAL MARRIAGE TYPE

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CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Consistent theoretical use of condom is the most effective way of preventing STDS transmission and unwanted pregnancies. Various studies have suggested that women are more likely to get infected with sexually transmitted diseases than men and to bear the consequences associated with unplanned pregnancies, and STDs. The use of the female condom is seen as a way of providing protection to women against sexually transmitted infections and unwanted pregnancies. Physiologic susceptibility and gender inequalities are well known drivers of relatively higher global HIV/AIDS prevalence among girls and young women that are greater than among males of the same age.

Sub-Saharan Africa has the most serious HIV and AIDS epidemic in the world. In 2013, an estimated 24.7 million people were living with HIV, accounting for 71% of the global total. In the same year, there were an estimated 1.5 million new HIV infections and 1.1 million AIDS-related deaths. HIV prevalence for the region is 4.7% but varies greatly between regions within sub-Saharan Africa as well as individual countries. For example, Southern Africa is the worst affected region and is widely regarded as the 'epicentre' of the global HIV epidemic. Swaziland has the highest HIV prevalence of any country worldwide (27.4%) while South Africa has the largest epidemic of any country - 5.9 million people are living with HIV. By comparison, HIV prevalence in West and East Africa is low to moderate ranging from 0.5% in Senegal to 6% in Kenya (UNAIDS, 2014).

While many countries have large, generalised epidemics, research has shown how groups such as young women and men who have sex with men are particularly at risk of HIV. Although, the vast majority of new HIV infections in sub-Saharan Africa occur in adults over the age of 25, HIV disproportionately affects young women. More than 4 in 10 new infections among women are in young women aged 15-24. 15-19 year olds are particularly at risk equating to higher HIV prevalence rates when they are older. For example, in Mozambique, HIV prevalence is 7% among 15-19 year olds but rises to 15% for 25 years olds. Likewise, in Lesotho, HIV prevalence rises from 4% among 15-19 year olds to 24% among 20-24 year olds (UNAIDS, 2014).

Sub-Saharan Africa also accounts for about70% of all new HIV infections. A major problem is the fact that about 3.3 million youth are living with HIV/AIDS in Sub-Saharan Africa, and 75% of these youth are girls. In 2008, it was estimated that 500 million globally were infected with one of syphilis, gonorrhea, chlamydia or trichomoniasis. At least an additional 530 million people have genital herpes and 290 million women have human Papilloma virus. STIs other than HIV resulted in 142,000 deaths in 2013. In the United States there were 19 million new cases of sexually transmitted infections in 2010 (S.T.I Fact sheet, 2014).

Young women, particularly unmarried women, may disproportionately experience unmet need for family planning due to their unique fertility preferences associated with this stage of the life course. Alternately, they may experience higher levels of unmet need where they lack full knowledge of their options, access to services is lacking (particularly those designed for young people or for spacing needs generally), or where programs underestimate needs of youth. Unmet need for family planning is higher, on average, among young unmarried women than among young married women. Unmet need among young unmarried

women is highest, around 40 percent, in the two African regions (41.7% in West and Central Africa; 39.8% in East and Southern Africa) Africa. Among individual countries, it is highest in Senegal (69.5%) and lowest in Ukraine(7.3%).Unmet need for family planning among young married women is highest in the West and Central Africa region (averaging 29.3%), followed by the East and Southern Africa region (25.5%); the region with the lowest level of unmet need is the Middle East and North Africa (10.8%). Among individual countries, unmet need is highest in Ghana (45.7%) and Haiti (44.8%) and lowest in Egypt (8.8%) and Indonesia (8.0%). Overall, unmet need for family planning has declined over time among young women age in many countries especially among young married women. However, levels of unmet need remain substantial in West and Central Africa.

In general, more often than not, sexually active unmarried women age want to avoid pregnancies than do married women. Unmet need is generally higher among unmarried women than married women, and higher among younger women than older women. Of the 213 million pregnancies worldwide in 2012, 40%, about 85 million, were unintended. This is about the same proportion as in 2008, when 42% of all pregnancies globally were unintended. The highest proportions were in Latin America and the Caribbean (56%) and North America (51%), and the lowest were in Africa (35%), Oceania (37%) and Asia (38%); Europe's proportion was the closest to the global average (45%). The average annual decline in the global unintended pregnancy rate between 2008 and 2012 was very small, compared with the average annual decline between 1995 and 2008. In 2012, there were 53 unintended pregnancies per 1,000 women aged 15-44, compared with 57 in 2008. Overall, between 2008 and 2012, the unintended pregnancy rate remained steady in developed regions, on average but it remained higher than average in North America (51).

In less developed regions, it declined from 59 to 54; most of this decline resulted from declines in the Latin American and Caribbean region (76 to 68) and in Africa (86 to 80).

There was less of a decline in Asia, where the rate (46) was more comparable to that in Europe (43) and in Oceania (43). These 85 million unintended pregnancies take a serious toll on women, families and ultimately nations, impeding efforts to reduce poverty and spur development. In 2012, 50% of all unintended pregnancies ended in abortion, 38% in unplanned births, and 13% in miscarriage. Overall, the proportion of unintended pregnancies ending in abortion was higher in developed regions than in developing regions (54 and 49%). Each year in the developing world, thousands of women die and many more are seriously injured as a result of unsafe clandestine abortions. (Gilda Sedgh et al, 2012).

Coupled with the fact that female condom use is controlled by the woman and that it can be inserted several hours before intercourse, the female condom is estimated to be 94 – 97% effective in reducing the risk of STDS as well as pregnancy if used correctly and consistently. The female condom has a 5%failure rate. Inconsistent or incorrect usage has been shown to result in a 21% failure rate. Some benefits of female condoms over other methods of birth control include: they allow women to share in the responsibility of preventing STIs, they are easy to access (relative to methods requiring a visit to a medical provider) and can be purchased in drugstores and some supermarkets, they are safe to use for people with a latex allergy, they can be used with both water-based lubricants and (unlike latex condoms) with oil-based lubricants, they have no effect on a woman's natural hormone levels ,they can be purchased without a prescription, they may enhance sex and sexual play for both partners, they are not dependent on a male partner to maintain his erection in order to stay in place.

The female condom has remained the only female-initiated means of preventing both unintended pregnancy and sexually transmitted infections, including HIV/AIDS, gonorrhea, syphilis. The female condom is basically a sheath made of polyurethane or latex, with one

end sealed, and is formed by two different sized flexible rings; it has to be inserted into the vagina, and can be positioned up to 8 hours before sexual intercourse, during which it forms a physical barrier between the penis and the vagina. The smaller ring at the closed end of the sheath is inserted deeply into the vagina, while the bigger ring remains to the exterior and covers the external genitalia. Polyurethane is a very thin material, stronger than the latex of which male condoms are made, and can be used with any kind of lubricant. It conducts heat so well that sexual sensitivity and natural pleasure are preserved. Furthermore, it is not affected by changes in temperature and humidity, produces no side-effects, and causes neither alterations of the vaginal flora nor significant allergic or dermatological reactions. It can also be used by people who are allergic to latex. Unlike the male condom, it doesn't constrict the penis (Laura Spizzichino et al, 2008.)

Invented by Lasse Hessel, from Denmark, the female condom is worn internally by the female partner and creates a physical barrier to prevent exposure to ejaculated semen or other body fluids. The female condom has emerged as an alternative barrier method to the male condom. In order to promote the access to the female condom, its awareness, availability and ultimately its use, mass media campaigns have been undertaken worldwide and studies aimed at evaluating impact of these campaigns were conducted. There is also need to increase the availability of female condoms and to provide the populations with education on their use (Stockman, 2011).

Despite the efficacy of the female condom in preventing STDS and pregnancy, relatively low or non-use of female condoms rates are still reported, especially in the developing countries. Inadequate knowledge and socio cultural barriers could partly explain this. The patterns and key determinants of female condom use, amongst university students, could be of importance for public health actors and health planners as regards planning and

execution of effective female condom related programs (American Journal Health Research, 2014)

Most undergraduate students in Nigeria are sexually active and also engage in high risk sexual behaviors which lead to spread of STDS as well as unintended pregnancies. The aim of this study is to assess the determinants of non-use of female condoms in the context of STDS and pregnancy prevention in order to provide basic information that can stimulate female condom and family planning programmes to promote sexually transmitted diseases and unwanted pregnancies prevention among youths in tertiary institutions.

Used correctly, the risk rate of unwanted pregnancies of the device at 5% is lower if compared to the 6% figure of diaphragm and spermicide use and is closer to the 3% rate of male condom use. Invitro studies have shown that the female condom provides an effective barrier to the passage of even the smallest STD-causing organisms, including the HIV virus. Unfortunately, its usage in most developing countries has been low thus precluding the realization of the dual benefits of this device.

1.1 Statement of Research Problem

Studies have observed positive results from the introduction of the female condom to women of all ages. When used consistently and correctly, latex condoms are highly effective in preventing the sexual transmission of HIV (during vaginal, oral, or anal intercourse). Latex condoms are also effective in preventing pregnancy and several sexually transmitted infections (STIs). Using condoms lowers women's risk of developing cervical cancer, a disease associated with Human Papilloma Virus (HPV). Consistent use of condoms can also help people clear HPV infection and/or reduce their risk of re-infection (Centers for Disease Control & Prevention, 2002).

Gonorrhea, chlamydia, and trichomoniasis are transmitted when infected semen or vaginal fluids contact mucosal surfaces. Because condoms block the discharge of semen or protect the male urethra against exposure to vaginal secretions, condoms provide a greater level of protection against these STIs. Condoms also provide some protection against genital ulcer STIs—such as genital herpes, syphilis, and chancroid which are transmitted through contact with mucosal surfaces or infected skin, because these STIs may be transmitted across surfaces not covered or protected by the condom, condoms provide a lesser degree of protection against them. Genital ulcer diseases and HPV infections can occur in both male or female genital areas that are covered or protected by a latex condom, as well as in areas that are not covered. Correct and consistent use of latex condoms can reduce the risk of genital herpes, syphilis, and chancroid only when the infected area or site of potential exposure is protected. While the effect of condoms in preventing human papilloma virus infection is unknown, condom use has been associated with a lower rate of cervical cancer, an HPV-associated disease.(Centres for Disease Control & prevention, 2002).

Apart from this benefit, the female condom is designed to empower women and girls make informed reproductive health choices. Unfortunately, the female condom is most times overlooked and hardly used. For instance, statistics show use of female condoms by only 2% of Nigerian women, which is in contrast to 35% of unmarried women using male condoms(UNFPA,2014)

Globally women comprise about half of all people infected with Human Immune-deficiency Virus (HIV) leading to Acquired Immune Deficiency Syndrome (AIDS), though in sub-Saharan Africa women form the majority (58%). This region accounts for the largest proportion of HIV-positive and the prevalence among women aged 15 - 24 years (3.1%) is more than twice the prevalence rates for men (1.4%). This gender difference originates from biological, socio cultural, economic and political factors. Sub-Saharan Africa has the highest

percentage of women with an unmet need for contraceptive methods (about one quarter of women between 15-49 years: 47 of 195 million) (Peters et al, 2010).

Under these circumstances, accessibility to both male and female condoms appears important, since condoms are the only evidence-based technologies that provide dual protection. The female condoms allow women to protect themselves, and have proved to help them gain more control over their sexuality. Although it has been on the market since 1993, consumers, especially women in sub-Saharan Africa or women with low purchasing power are not in a position to access it. The limited spread of female condoms is remarkable, given the widespread ambition to curb the AIDS epidemic and reduce high fertility rates, and moreover, according to the current international agenda, to enhance women's sexual and reproductive rights. While the promotion of the female condom seems obvious in this context, global health agencies often express their concern about the low acceptability and low usage rates of the female condom. Uptake of the female condom in most developing countries has been lower than was initially anticipated, showing that the successful introduction will not be as straight forward as thought. While all these efforts are being made, the rapid spread of STDS including HIV/AIDS continues unabated and still remains the one of the greatest challenge facing humanity in the 21stcentury (Kaler et al,2007).

As of 2012 in Nigeria, the HIV prevalence rate among adults ages 15–49 was 3.1 percent. Nigeria has one of the largest number of people living with HIV. The HIV epidemic in Nigeria is complex and varies widely by region. In some states, the epidemic is more concentrated and driven by high-risk behaviors, while other states have more generalized epidemics that are sustained primarily by multiple sexual partnerships in the general population. Youth and young adults in Nigeria are particularly vulnerable to HIV, with young women at higher risk than young men. There are many risk factors that contribute to the spread of HIV, including prostitution, high-risk practices among itinerant workers, high

prevalence of sexually transmitted infections (STI), and clandestine high-risk heterosexual and homosexual practices.

In Nigeria, adults aged 15 and above living with HIV/AIDS are about 3 million of which women about 2million (UNAIDS,2015). Although they bear the heaviest burden of sexually transmitted infections and even unintended pregnancies , it is interesting to note that majority of women shun the female condom which is a female initiated method and has the potential to empower women to better protect themselves and negotiate for safer sex. Unlike other methods of contraceptive, the female condom has remained unpopular and often overlooked. This study seeks to investigate determinants that lead to non-use of female condoms basically among undergraduate students after many decades of education and promotion. The study focuses on undergraduates because they represent the age group hardest hit by STD pandemics and situations of unwanted pregnancies.

1.2 Research Question

The research questions meant to be answered by this study are as follows:

- What knowledge do undergraduate students in Ekiti State have about female condoms?
- What is the prevalence of female condom use among undergraduate students in Ekiti State?
- What are the determinants of non-use of female condom among undergraduate students in Ekiti State?

1.3 Research Objectives

The general aim of this study is to assess the determinants of non-use of female condoms among undergraduate students in Ekiti State. In order to realize this goal, the specific objectives pursued are:

- to assess knowledge of female condom among undergraduate students in Ekiti State;

- to examine the prevalence of use of female condom among undergraduate students in Ekiti State; and,
- to examine the determinants of non-use of female condom among undergraduate students in Ekiti State.

1.4 Justification for the Study

Ekiti state has one of the lowest HIV/AIDS prevalence rate in the country, about 0.2% (N.A.C.A, 2015). However, it is important to note that most undergraduate students engage in high risk sexual behaviour. More importantly, there still remains a major challenge of identifying factors contributing towards non-use of female condom.

The findings will intimate Health Care service Providers, Community Leaders and stakeholders with factors that encourage the non-usage of female condoms. Through recommendations, the study will point possible interventions that could be done to promote the female condom usage in the state. The research findings will guide the interventions to best reach females because they are mostly affected.

The Nigerian government has tried to ensure availability and accessibility of female condoms. Therefore it is very important to ascertain if the condoms were being put to use, if not why were they not being used, and what could be done to promote maximum use of female condoms. The research findings will inform the government, decision makers and other stakeholders on the success or failure of female condom, which is a female-initiated method and also aimed at empowering women on sexual matters. It will also inform the nation on how to improve the strategies to bring about the desired results.

This study will assist in contributing to the body of knowledge on the use of female condoms. Non-use of female condoms is a national issue and this study will inspire the national offices and other states to commission a national study and to research to explore this section of sexual life.

The study will also promote research initiatives as it will build capacity needed to conduct more researches to address challenge of adoption of the female condom as a method of contraception.

1.5 Definition of Concepts

Female Condom refers to a thin sheath made of polyurethane inserted into vagina women during sex to prevent conception and transmission of Sexually Transmitted Infections including HIV.

Intervention is systematic plan of activities aimed at addressing a certain problem/need to achieve a desired result.

Unmet Needs are women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child.

Contraception is the deliberate use of artificial methods or other techniques to prevent the consequence of sexual intercourse

Cross Sectional Design is a type of observational study that involves the analysis of data collected from a population, or a representative subset, at one specific point in time

Sexually Transmitted Infection is an infection that can be passed on through vaginal, anal or oral sex

CHAPTER TWO

LITERATURE REVIEW

2.1 History of Female Condoms

The female condom is a transparent, loose fitting, sheath inserted into the vagina prior to sexual intercourse (either vaginal or oral). A female condom is 17 cm long, and has a flexible ring at each end. One end of the condom is closed and this end is inserted into the vagina to capture male semen during heterosexual intercourse. The female condom was developed as an alternative to male condoms, in recognition that the decision to use male condoms was highly dependent on the willingness of the male sexual partner as the male condom is fitted onto the male sexual organ.

As the female condom is applied to the female genital organs, it was hypothesised that women would find it easier to initiate the use of a female condom than they would with a male condom. Because of this, it was thought that the female condom would empower women, who often lack decision making power and control in sexual relationships, to take greater control their sexual health. The female condom has been widely labelled the only "female initiated" method of preventing STIs.The modern father of the female condom is without doubt Lasse Hessel, a Danish physician, who in 1984 developed a prototype female condom, which would later evolve into the FC1 condom. In terms of design, the female condom had the following features:

- a sheath that lines the vagina;
- an external ring that covers the external genitalia and prevents the condom from being pushed into the vagina;
- an internal ring which keeps the condom within the vagina and which also facilitates insertion into the vagina. (Laura frost & Michael reich, 2010)

The idea for the female condom first came during the year of 1937. That year, an example of what a female condom might look like surfaced, but the female condom was not actually invented until the 1980s, when Lasse Hessel devolved a prototype for the first female condom, it contained three important aspects that successfully reduced the risk of sexually transmitted infections and that protected against unintended pregnancy. First, it contained a sheath that lined the vagina. Second, it included an external ring that covered any external genitalia, and that prevented the condom from being pushed deep into the vagina during intercourse. Lastly, it had an internal ring which both assisted with initial insertion into the vagina and prevented the condom from being pushed into the cervix, which could be very painful. The first generation female condom, named FC1, is made from polyurethane. The second generation female condom named FC2 is made from synthetic nitrile. The FC2 was designed to take the place of FC1, as it provided the same safety and efficiency but at a lower cost. It was also designed to make less distracting (and potentially mood-killing) crinkling noises compared to the FC1.With perfect use, the female condom has a5% failure rate. (Female Health Company, 2013)

However, with typical use(usually have some leakage or not inserted perfectly) it has a 21% failure rate. The female condom can also be used by homosexual males during anal sex. The worldwide use of female condoms is much lower than that of male condoms.

2.2 Review of Past Studies

The use of condom is one of the most effective way of preventing HIV/AIDS transmission and unwanted pregnancies. Past studies suggest that women are more likely to get infected with sexually transmitted diseases than men. They also bear the consequences associated with unplanned pregnancies, and STDs. Correct and consistent condom use reduces the risk of

HIV transmission by more than 90%. Indeed condom has been found to be 90% effective in preventing HIV Transmission (Hearst &Chen, 2004). The female condoms effectiveness is also rated between 94% to 97% by the Food and Drug Administration (FDA). Therefore, condom promotion has received considerable attention in the fight against AIDS pandemic because of high effectiveness (Peltzer, 2000).

Several studies have shown that amongst the factors affecting condom use are: unavailability, shortage, partner trust, and knowledge and gender inequality. Cultural factors such as desire for children and female sexual compliance as a way to achieving economic status are a hindrance to use (Lule&Gruer: 1991; Peltzer, 2000). Also lack of acceptance of the family planning concept has often evidenced itself as a barrier to condom use (Peltzer, 2000).A review of 45 studies across sub-Saharan Africa found that relationships between young women and older men are common and associated with unsafe sexual behaviour and low condom use, which heightens their risk of HIV infection (Leclerc-Madlala, 2008).

Many countries including those in the sub-Saharan African also embarked on strategies to fight HIV and AIDS, through the promotion and use of condoms, and indeed condoms are widely and freely distributed with the aim to improve access. Another study by Lule&Gruer has demonstrated that limited skills and knowledge of Health Care service providers has impacted on condom uptake, as the consumers do not gain confidence with regards to use. 81.1% of men and women aged between 15-49 years, who had sexual intercourse with more than one partner in the last 12 months reported condom use. In addition, the same age group who had sex with casual partners and used a condom stands at 6.0%. A large number of commercial sex workers reported the use of condom with their most recent clients (88.7%). Several clinical trials such as the studies on Microbicides have been

conducted, as a way of giving women options when it comes to HIV prevention (Central Statistics Office,2009).

Evidence from a quantitative study conducted in August, 2011 shows that repeated use of the female condom is still a major challenge among users, while the number of female condom distributed annually has been on the increase, in Nigeria, this increase has largely been because of the introduction of the product to new users. Available evidence shows that 67% of those who have ever used female condom stopped using the product, 7.4% stopped but resumed use while only 29.6% have used a female condom and are still using it within the last 12 months (Leclerc-Madlala, 2008).Of those who stopped using female condom within the last 12 months, only 28.6% intends to use it in the future. The study conducted in 2011 was conducted among women and men of reproductive age in three Nigerian States: Edo, Delta and Lagos, with a sample size of 1,652 (male: 542 and females: 1,020).

The long term sustained use of female condom requires that users are satisfied with the product and continue using it. Repeated use of female condom ensures acceptance that will continue to drive demand for the product, thereby ensuring programme sustainability. There are several obstacles related to introducing female condom to potential users. These include getting people to change their sexual behaviour, overcoming deeply rooted biases especially among providers and addressing gender disparities. Other obstacles include lack of communication between sexual partners and between providers and patients, and the stigma attached to all condoms (Warren et al., 2003). They suggested that to overcome the barriers, quality information should be made available, quick response to requests for information and supplies of the female condom, support should be given to the development of introductory strategies, and new ideas should be catalyzed to expand good practices. A study to assess the viability of the use of the female condom among Spanish university students showed that

gender and type of couple (steady versus casual) condition the use of the female condom. The study also confirms that knowledge and experiences gained by young people in the use of the male condom will tend to bias them unfavourably against the female condom in favour of the more familiar male one (Fernandez et al., 2006).

Refusal and initial difficulty collectively affect the use of female condom among a large proportion of women. The refusal to try female condom largely reflects aversion to insertion; women who try but experience difficulties have different profiles, which implies that these women have different programmatic needs, and different interventions are needed to promote the use of female condom among them (Artz et al., 2002).The Harriet and Robert Heilbrunn Department of Population and Family Health, Columbia University in a survey placed the effectiveness of female condom at 95% with perfect use and 80% with typical use, but noted that the shortfall of female condom as a preventive measure is the fact that it is more expensive than male condom and also the challenges to use in a relationship with weak partner cooperation and/or intimate partner violence coercion and latex allergy. In summary, the research suggested that teaching women possibility of unforeseen occurrences and proper usage will help in promoting female condom usage.

The Women Health Line (2009) suggested that the unappealing or unusual appearance of the female condom, inadequate data regarding its effectuality and safety, and the one-size-to-fit-all female condoms that are available might not favour many women. Some women also feel self-conscious because of the visible outer ring or frame outside the vagina (Beksinska et al., 2010). Beksinska et al. (2010) also mentioned that hardness to insert and remove the condom might also pose a problem to some women. They also suggested that adding more lubricant to the FC2 female condom can lessen these problems. The author also highlighted the issue of accessibility and limited availability. The wider use of the female condom in countries with severe HIV and acquired immune deficiency syndrome (AIDS)

epidemics depends on the commitment of governments and other major donors. He recommended that to achieve its full potential, much greater effort needs to be made worldwide to make the female condom more affordable, accessible and acceptable.

Napierala et al. (2008) identified the following as predictors of female condom uptake: interest in using female condom, liking female condom better than male condoms, and believing one could use them more consistently than male condoms. They also reported that though female condom may not be the preferred method for the majority of women, with access, proper education, and promotion, they may be a valuable option for some women.Choi et al. (2008) in a study on the efficacy of female condom skill trainings in risk reduction among women suggested that skills training can increase female condom use and protected sexual acts without reducing male condom use among women.

Many studies have been conducted on the use of the female condom in developing countries. Many have involved commercial sex workers who generally accept the device more quickly than other women. Most studies have shown high or moderate acceptability among sex workers, including those in China, Costa Rica, Côte d'Ivoire, Thailand, and Zimbabwe. But these studies also revealed a number of barriers to the use of the female condom, including clients' distrust of unfamiliar methods, inconvenience, insertion difficulties, discomfort or pain from the inner ring, and itching (Heidi Brown, 2003).

In Ghana, the Society of Women against AIDS in Africa achieved its programme goals by extending the female condom programme to communities and empowered individuals through trainings. The programme marked increased awareness and improved women health rights. However, the female condom initiatives have reflected some problems in other countries with regard to use. Some of the problems highlighted included: excessive oiliness, difficulty in inserting the condom, discomfort with the inner ring of the condom which sometimes causes pain, and also cultural contexts in which some cultures prefer "dry

sex". A study that was conducted in Zimbabwe highlighted the latter as causal factors to low female condom use.

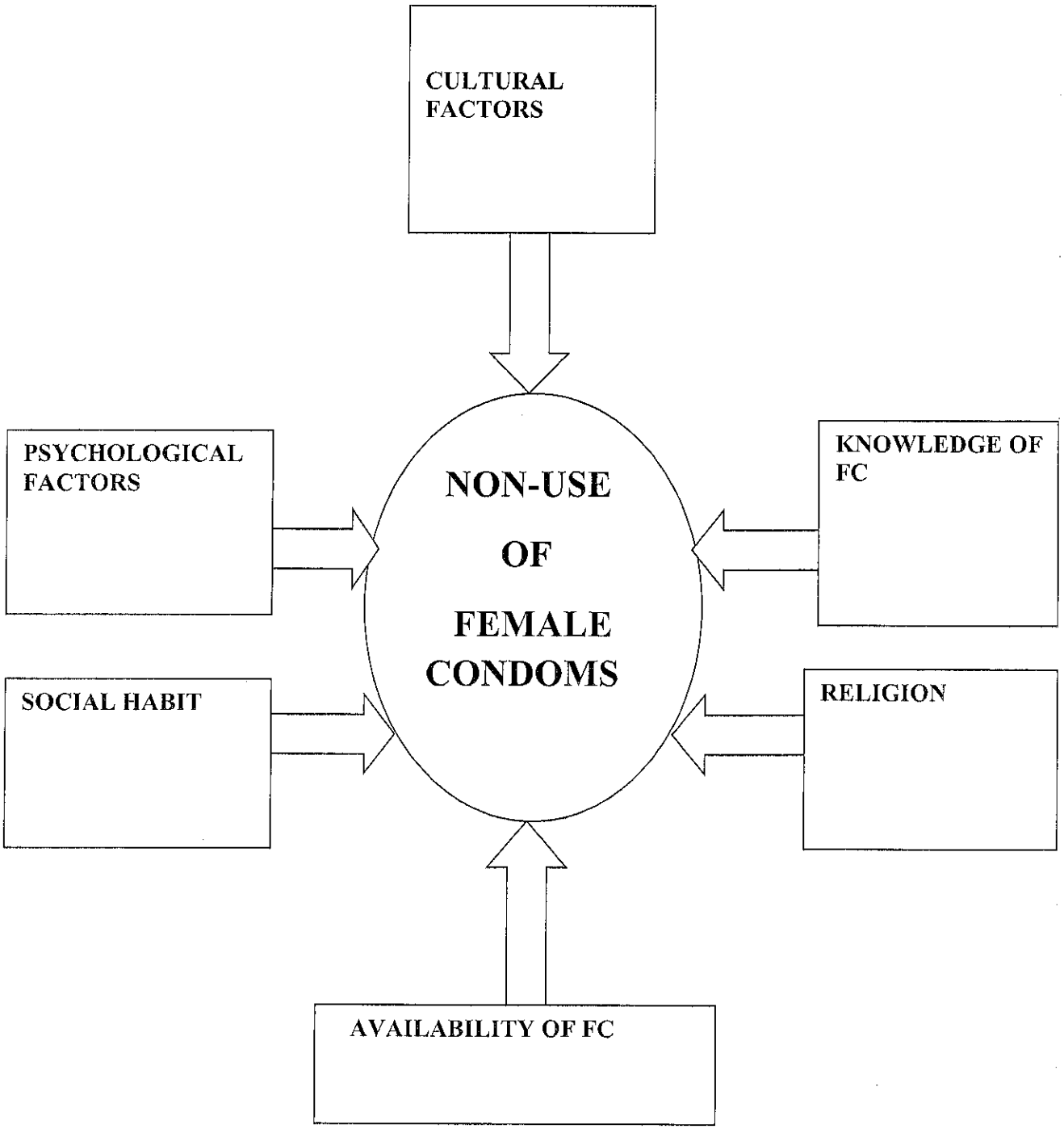
Power relations between men and women is stated as one of the factors that influence the extent to which condom use can be successfully negotiated, due to both social and economic factors that usually favor males (UNAIDS, 2004).Despite the availability of the female condom and theoretically based interventions to promote its use, studies suggest low levels of use among populations, it also suggests the need to improve both lack of knowledge and positive attitudes towards the female condom. (Holmes L. et al, 2008)

It is true that the female condom is not being used. It is said to be clumsy and not attractive so what people are asking is whether they should continue to pretend as if it is a tool when in fact it is not used. Some contend that the reluctance on the female condom is deep rooted on the socialization of some communities because they are not comfortable to look at female genitalia therefore as long as female genitals cannot be freely viewed, then a female condom will also be viewed in the same manner. But others have a different view and opine that the heart of the matter is not on visualization because even people in the Western countries who supposedly use the female condom do not freely view the genitalia, the problem is on the taste.

2.3 Conceptual Framework

Possible factors responsible for non-use of Female Condom among undergraduate students in Ekiti State form the focus of this study. These could be demographic factors e.g. age, culture, religion, socio economic factors, knowledge, and availability of female condoms amongst others.

The table below illustrates some of these factors.



2.4 Hypotheses

NULL HYPOTHESIS:

There is no significant relationship between socio-demographic determinants and non-use of female condom among undergraduate students in Ekiti state.

ALTERNATE HYPOTHESIS:

There is a significant relationship between socio-demographic determinants and non-use of female condom among undergraduate students in Ekiti state.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study Design

A cross-sectional design was adopted in this study, to investigate the determinants of the nonuse of the female condom among undergraduate students in Ekiti state, Nigeria. In the social sciences, a cross-sectional study (also known as a cross-sectional analysis, transversal study, prevalence study) is a type of observational study that involves the analysis of data collected from a population, or a representative subset, at one specific point in time that is, cross-sectional data.

3.2 Information on the Study Location

Ekiti State of Nigeria was created on 1st October, 1996 alongside other five by the late Head of State and Commander-in-Chief of Armed Forces of the Federal Republic of Nigeria, General Sani Abacha. The State, carved out of Ondo State, cover the former twelve local government areas that made up the Ekiti Zone of old Ondo State and is bounded on the South by Ondo State, on the North by Kwara State, on the East by Kogi State.

The people are mostly Muslims and Christians while some are still traditional religionists. They people of Ekiti have their own unique traditional way of Dressing, Dancing, Festival, religion and other ways of life. The dress for man in Ekiti is Bùbá (round neck shirt) and Sòkòtò (trousers)while women dress in Bùbá (blouse) and Ìró (wrapper) while their best food is Iyan (Pounded Yam) with melon Soup and Bush Meat. The State has 16 local Councils which include: Ado-Ekiti-East, Ekiti Southwest, Ekiti West, Ikere, Irepodun, Ijero, Oye, Ikole, Efon, Moba etc. Major towns include Ado-Ekiti, Efon Alaaye, Aramoko-Ekiti, Ikole Ekiti, Iyin-Ekiti etc.

Education is the most viable industry in the state. It is highly regarded and prioritized. The state has: 541 Primary Schools, 141 Secondary Schools, 4 Unity Secondary Schools, 4 Women Education Centres, 5 Nomadic Schools, 4 Technical Colleges, a College of Education, a Federal Polytechnic, a Federal University and a State University. The state is largely agrarian. Agriculture is the mainstay of the state economy. It employs 75% of the state working population. The State is one of the largest producers of Rice, Kolanut, oil palm and cocoa in the country. They also produce crops like cassava, yam, cocoyam, maize, cowpea, citrus, plantain and fruits like cashew, mango and orange. As the state is within the ecological belt known for abundant forest resources the state produces high quality woods which are raw material for wood based industries within and outside the state. Industrially, the state is arid with only few companies on the ground. However, the state government has embarked on an aggressive industrialization drive through the provision of necessary infrastructure while new industrial estates are being opened under World Bank Infrastructural Development Fund to cater for investors' needs. The state is endowed with abundant mineral deposits of value like Clay, Kaolin, Columbite, Cassiterite, Foundry Sand, Bauxite, Clarcomite and Charcoalnite Granite.

Tourism is another aspect which will become a veritable source of income for the state. Notable among its tourist attractions are the Ikogosi tourist centre which are referred to as the haven of tourism in Nigeria. At Ikogosi, the warm and cold water oozing out from different sources from the earth crust flow separately to meet in a pool each retaining its thermal identity. Facilities such as a modest non-chemical pools, standard Conference hall, opulent chalets, and a fascinating restaurant are provided to cater for the various needs of tourists. Other tourist centres are: Raw Material Display Centre, Arinta Waterfall at Ipole-Iloro, Ero Dam at Ikun-Ekiti, Fajuyi Memorial Park at Ado-Ekiti and hotels like Ikogosi Motel, Owena Motel, etc.

3.3 Study Population

The target population is made up of female undergraduate students in Ekiti State. This group is often the hardest hit by STDs. They also engage in risky sexual behaviours. Of the several tertiary institutions in the state, three tertiary institutions were selected. From these institutions, female undergraduate students are randomly selected for the research. In this study, the accessible population included female undergraduates in Ekiti State. The inclusion criteria were female undergraduate students who were present and willing to participate in the study during selection. Those who were not present on the day and time of data collection were excluded from the study

3.4 Sample Size and Sampling Technique

Three tertiary institutions were selected, from which an overall sample size of 250 female undergraduates were randomly selected. The institutions were Ekiti State University (EKSU), Ado-Ekiti; College of Health, Science and Technology Ijero-Ekiti; and, Federal Polytechnic Ado-Ekiti. A new prevalence rate of 20% was used in calculating the sample size because the initial prevalence rate of 2% was too low and resulted to a very low sample size.

$$\frac{Z^2 PQ}{D^2}$$

$$\frac{(1.96^2)\ (0.2)\ (0.8)}{(0.5)^2}$$

$$\frac{(3.8416)\ (0.2)\ (0.8)}{(0.0025)}$$

$$= \quad 245$$

A simple random sampling technique was used to select the sample for this study. Probability sampling was used because it increased the likelihood that all the elements in the population would have an equal chance of being included in the sample.

3.5 Data Collection Method

This study employed primary sources of data for first-hand information. This was collected through a self-administered anonymous questionnaire. The questionnaire was pretested on a sample of 20 female students in Federal university Oye-Ekiti (FUOYE) who did not take part in the actual study to ascertain clarity and consistency. Respondents in the selected institutions were given the self-administered questionnaires in English. They were closely supervised by two trained research assistants while filling-in the questionnaires.

3.6 Methods of Data Analysis

Data were edited, cleaned and coded. They were afterwards entered and analyzed using the Statistical Product for Solution Service (SPSS) version 16.0 software program and Stata. The data were analyzed to determine proportions of individuals with respect to their knowledge, sexual behaviour and female condom use as well as associations between personal characteristics and such features. For such purpose descriptive statistics and chi–square ($\chi 2$) and logistic regression test were used accordingly. The agreement and disagreement points were pooled into "agree" and "disagree" respectively.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF DATA

4.0 Analysis and Results

Univariate Analysis

Table1.0 Socio-Demographic Characteristics of the Sample

Variables	Frequency(N)	Percent
AGE		
15-19	71	28.4
20-24	148	59.2
25-29	25	10.0
30-34	5	2.0
35+	1	0.4
Total	250	100.0
MARITAL STATUS		
SINGLE	208	83.2
ENGAGED	31	12.4
MARRIED	11	4.4
Total	250	100.0
RELIGION		
CHRISTIANITY	198	79.2
CATHOLIC	8	3.2
ISLAM	43	17.2
TRADITIONAL	1	0.4
Total	250	100.0
INSTITUTION		
UNIVERSITY	100	40.0
POLYTECHNIC	75	30.0
COLLEGE	75	30.0
Total	250	100.0
LEVEL		
100	82	32.8
200	75	30.0
300	75	22.8
400	27	10.8
500	9	3.6
Total	250	100.0

ETHNICITY		
YORUBA	205	82.0
IGBO	30	12.0
HAUSA/FULANI	5	2.0
OTHERS	9	3.6
Total	250	100.0
PARENTAL MARRIAGE TYPE		
MONOGAMY	189	75.6
POLYGAMY	56	22.4
OTHERS	2	8
Total	247	98.8
HOUSEHOLD WEALTH STATUS		
POOR	2	0.8
MIDDLE CLASS	212	84.8
RICH	34	13.6
Total	248	99.2

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

Socio-Demographic Information

As shown in Table1, 250 undergraduates were selected all of whom were females. The majority of the undergraduates were between ages 20-24 years. Participants from 15 and 19 years were represented by 28.4% (n=71). The institutions were represented with 40.0% (n=100) from Ekiti state university, 30.0% (n=75) from College of health, science & technology, Ijero and 30.0% (n=75) from Federal polytechnic Ado.

First year undergraduate students accounted for 32.8% (n=82) of the respondents and the fourth and fifth levels were less represented. About 79.2% (198/250) of the respondents were Christians while Muslims and other religions were accounted for by 20.8%. The number of single respondents was the highest at 83.2% (n=208) and married respondents were 4.4%, 12.4% were engaged. Majority of the respondents were of the Yoruba ethnic group and were accounted for by 82.0%. Most respondents (84.8) were also from middle class homes.

Table2: Knowledge and Availability of Female Condom

	FREQUENCY	PERCENTAGE
EVER HAD SEX		
YES	172	68.8
NO	77	30.8
TOTAL	249	99.6
EVER HEARD OF FC		
YES	201	80.4
NO	49	19.6
TOTAL	250	100
HOW DID YOU FIRST HEAR		
HEALTH FACILITIES	88	35.2
MEDIA	30	12.0
FAMILY	12	4.8
PEERS	37	14.8
SCHOOL SETTINGS	42	16.8
OTHERS	3	1.2
TOTAL	212	84.8
FC PROTECTS AGAINST UNPLANNED PREGNANCY		
AGREE	209	83.6
UNDECIDED	19	7.6
DISAGREE	15	6.0
TOTAL	243	97.2
FC PROTECTS AGAINST HIV		
AGREE	215	86.0
UNDECIDED	17	6.8
DISAGREE	12	4.8
TOTAL	244	97.6
FC PROTECTS AGAINST STDS		
AGREE	211	84.4
UNDECIDED	24	9.6
DISAGREE	9	3.6
TOTAL	244	97.6
FC PROTECTS AGAINST CERVICAL CANCER		
AGREE	138	55.2
UNDECIDED	70	28.0
DISAGREE	34	13.6
TOTAL	242	96.8
RATE OF KNOWLEDGE		
NO KNOWLEDGE	51	20.4
LITTLE KNOWLEDGE	78	31.2
AVERAGE	68	27.2
KNOWLEDGE	33	13.2

VERY KNOWLEDGEABLE	19	7.6
TOTAL	249	99.6
DO YOU KNOW TO USE FC		
YES	83	33.2
NO	159	63.6
TOTAL	242	96.8
DO YOU KNOW WHERE TO GET FC		
GOVT. CLINIC	7	2.8
PRIVATE CLINIC	4	1.6
C.H.W	5	2.0
NGOS	1	0.4
CHEMIST	19	7.6
PHARMACY	40	16.0
FRIENDS	4	1.6
SHOP/SUPERMARKET/STORE	4	1.6
OTHERS	2	0.8
TOTAL	195	78.0

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

80.4% (201/250) of the respondents had heard of the female condom, mostly from health facilities (35.2%) and from school settings 16.8% (see Table 2). Many respondents (83.6%) agreed that female condoms protect against unplanned pregnancy. About 84.4% also agreed that female condoms protect against sexually transmitted diseases. However, 20.6% stated that they had no knowledge of female condoms, 27.2% rated themselves as having an average knowledge of female condoms and 13% claimed they were knowledgeable. Few respondents (7.6%) claimed they were 'very' knowledgeable. Most (63.6%) of the respondents lacked knowledge on how to use a female condom.

Bivariate Analysis

Table 3: Source of First Information about Female Condom

VARIABLES	HF	MEDIA	FAMIY	PEERS	SCHOOL	OTHERS	P-VALUE
AGE							0.080
15-19	20(33.9)	13(22.0)	3(5.1)	12(20.3)	11(18.6)	0	
20-24	59(48.0)	14(11.4)	6(4.9)	20(16.3)	23(18.7)	1(0.8)	
25-29	6(24.0)	3(12.0)	2(8.0)	4(16.0)	8(32.0)	2(8.0)	
30-34	3(75.0)	0	1(25.0)	0	0	0	
35+	0	0	0	1(100.0)	0	0	
MARITAL STATUS							0.006*
SINGLE	74(42.3)	28(16.0)	12(6.9)	26(14.9)	34(19.4)	1(0.6)	
ENGAGED	8(28.6)	1(3.6)	0	10(35.7)	8(28.6)	1(3.6)	
MARRIED	6(66.7)	1(11.1)	0	1(11.1)	0	1(11.1)	
RELIGION							0.013*
CHRISTIAN	77(44.3)	22(12.6)	11(6.3)	31(17.8)	31(17.8)	2(1.1)	
CATHOLIC	4(57.1)	0	0	1(14.3)	2(28.6)	0	
ISLAM	7(23.3)	8(26.7)	0	5(16.7)	9(30.0)	1(3.3)	
TRADITIONAL	0	0	1(100.0)	0	0	0	
INSTITUTION							0.000*
UNIVERSITY	22(25.9)	16(18.8)	9(10.6)	24(28.2)	11(12.9)	3(3.5)	
POLYTECH	15(41.7)	9(25.0)	1(2.8)	5(13.9)	6(16.7)	0	
COLLEGE	51(56.7)	5(5.6)	2(2.2)	7(7.8)	25(27.8)	0	
LEVEL							0.002*
100	27(39.7)	11(16.2)	4(5.9)	10(14.7	16(23.5)	0	
200	31(47.7)	10(15.4)	3(4.6)	10(15.4)	10(15.4)	1(1.5)	
300	25(52.1)	4(8.3)	2(4.2)	7(14.6)	10(20.8)	0	
400	4(18.2)	5(22.7)	0	6(27.3)	6(27.3)	1(4.5)	
500	1(11.1)	0	3(33.3)	4(44.4)	0	1(11.1)	
ETHNICITY							0.642
YORUBA	76(43.2)	21(11.9)	9(5.1)	30(17.0)	37(21.0)	3(1.7)	
IGBO	8(32.0)	7(28.0)	1(4.0)	5(20.0)	4(16.0)	0	
H/F	2(66.7)	0	1(33.3)	0	0	0	
OTHERS	1(14.3)	2(28.6)	1(14.3)	2(28.6)	1(14.3)	0	
P.M.T							0.808
MONOGAMY	67(41.9)	26(16.2)	8(5.0)	26(16.2)	30(18.8)	3(1.9)	
POLYGAMY	19(39.6)	4(8.3)	4(8.3)	11(22.9)	10(20.8)	0	
OTHERS	1(50.0)	0	0	0	1(50.0)	0	
H.W.I							0.149
POOR	0	0	0	2(100.0)	0	0	

MIDDLE	74(41.8)	25(14.1)	8(4.5)	31(17.5)	36(20.3)	3(1.7)
RICH	13(41.9)	5(16.1)	4(12.9)	3(9.7)	6(19.4)	0

	X2
AGE	29.4354
MARITAL STATUS:	24.6532
RELIGION:	29.8243
INSTITUTION:	50.0784
LEVEL:	42.7539
ETHNICITY:	17.1715
PARENTAL MARRIAGE TYPE:	6.0916
HOUSEHOLD STATUS:	14.5668

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

Socio-demographic variables such as marital status, religion, type of institution and levels were associated with sources of first awareness of female condoms. Most younger (15 – 19 years) respondents (39.5%, n=122) became first aware of the female condom from health facilities as well as those between 20-24 (48.0%) while a large number of older respondents (25-29) indicated that school settings was their primary sources of information on female condom. Indeed, sources of first awareness of the female condom were associated with participants' educational level: a high proportion of first year students and second year indicated that health facilities was their first source of awareness of female condoms, school settings and peers was the first source for most fourth year students as shown in Table 3. Many single respondents (42.3) stated they first heard of female condoms from health

facilities as well as married respondents. With respect to religion, many Christians (44.3%) and Catholics (57.1%) also got their first awareness from health facilities, this was the same with those in different institutions.

Bivariate Analysis

Table 3.1 Socio-Demographic Characteristics and Knowledge

	KNOWLEDGE OF HOW TO USE FEMALE CONDOMS			
VARIABLES	YES	NO	X2	P-VALUE
AGE 15-19	17(25.0)	51(75.0)	9.6380	0.047*
20-24	51(35.7)	92(64.3)		
25-59	10(40.0)	15(60.0)		
30-34	4(80.0)	1(20.0)		
35+	1(100.0)	0		
MARITAL STATUS			7.3014	0.026*
SINGLE	62(30.8)	139(69.2)		
ENGAGED	14(46.7)	16(53.3)		
MARRIED	7(63.6)	4(36.4)		
RELIGION			4.9283	0.177
CHRISTIANITY	64(32.8)	131(67.2)		
CATHOLIC	5(62.5)	3(37.5)		
ISLAM	13(34.2)	25(65.8)		
TRADITIONAL	1(100.0)			
INSTITUTION			21.0030	0.000*
UNIVERSITY	17(17.7)	79(82.3)		
POLYTECHNIC	22(42.3)	30(57.7)		
COLLEGE	43(46.2)	50(53.8)		
LEVEL			20.7269	0.000*
100	19(24.1)	60(75.9)		
200	18(24.7)	55(75.3)		
300	31(57.4)	23(42.6)		
400	12(44.4)	15(55.6)		
500	3(33.3)	6(66.7)		
ETHNICITY			4.6740	0.322
YORUBA	64(32.3)	134(67.7)		
IGBO	13(43.3)	17(56.7)		
HAUSA/FULANI	1(20.0)	4(80.0)		
OTHERS	4(50.0)	4(50.0)		

P.M.T			6.1575	0.046*
MONOGAMY	56(30.8)	126(69.2)		
POLYGAMY	26(47.3)	29(52.7)		
OTHERS	0	2(100.0)		
HOUSEHOLD INDEX			7.1698	0.028*
POOR	2(100.0)	0		
MIDDLE CLASS	64(31.2)	141(68.8)		
RICH	16(47.1)	18(52.9)		

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

Table 3.1 shows socio-demographic determinants such as Age, marital status, level, type of institution, parental marriage type and household wealth status had significant association with knowledge of how to use the female condom. Only 25.0% (n=17) of younger ages (15-19) reported that they knew how to use the female condom. Majority of those aged 30-34 claimed they knew how to use female condoms. 63.6% of Respondents that were married (n=7) claimed they knew how the female condom was used (see Table 3.1). More respondents in year 3 (57.4%, n=31) also stated that they how that they had skills on how to use female condoms. Their percentage was more than those in other levels. Indeed, with regards to religious affiliation, more Catholics had knowledge on how to use female condoms as shown by Table 3.1. Most (67.7%) of those of the Yoruba ethnic group lacked knowledge of how to use female condoms as well as those of the Hausa/Fulani tribe. Most university students also lacked knowledge on use as well as those from polytechnics. The highest proportion was recorded from those from College of Health, science and Technology, Ijero. Most students in this study were from monogamous homes; however most of them (69.2%) had no knowledge on how to use female condoms.

Table 4: Showing Sexual Behaviour of the Sample

	Frequency	Percent
WHICH SEXUAL ACTIVITIES ARE YOU AWARE OF		
VAGINAL		
ANAL		
ORAL		
Total	200	80.0
PERSONS YOU HAVE HAD SEX WITH IN LAST 6 MONTHS		
SPOUSE/LIVE IN PARTNER	26	10.4
BOYFRIEND	88	35.2
CASUAL PARTNERS	7	2.8
Total	121	48.4
NO OF SEXUAL PARTNERS IN LST 12 MONTHS		
NONE	19	7.6
ONE	116	46.4
TWO	26	10.4
>TWO	11	4.4
Total	172	68.8
HOW LONG HAVE YOU BEEN WITH CURRENT PARTNER OR PREVIOUS PARTNER		
<A YEAR	65	26.0
A YEAR	22	8.8
>A YEAR	82	32.8
Total	169	67.6
HOW FREQUENTLY DO YOU HAVE SEX		
<ONCE A MONTH	109	43.6
1-5 TIMES A WEEK	17	6.8
>5 TIMES A YEAR	25	10.0
Total	151	60.4
DID YOU USE F.C THE LAST TIME		
YES	25	10.0
NO	144	57.6
Total	169	67.6
WHO SUGGESTED F.C USE AT THAT TIME		

MYSELF	9	3.6
MY PARTNER	7	2.8
JOINT DECISION	6	2.4
CANT REMEMBER	6	2.4
Total	28	11.2
WHY DIDN'T YOU USE F.C THAT TIME		
NOT AVAILABLE	26	10.4
TOO EXPENSIVE	1	0.4
PARTNER OBJECTED	4	1.6
DON'T LIKE THEM	14	5.6
TRUST MY PARTNER	5	2.0
DESIRED A PREGNANCY	6	2.4
USED OTHER METHODS	27	10.8
DIDN'T THINK IT WAS NECESSARY	8	3.2
DIDN'T THINK OF IT	17	6.8
DON'T KNOW ABOUT F.C	18	7.2
Total	126	50.4
EVER DISCUSSED F.C WITH PARTNER		
YES	61	24.4
NO	103	41.2
Total	164	65.6

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

With regard to sexual behaviour, the majority of respondents, (68.8%) reported having experienced sexual intercourse, 35.2% reported having it with their boyfriends, 2.8% stated it was with casual partners and 10.4% said it was with their live-in partners or spouse in the last six months before the study. Only few sexually active female students in this study, (n=25) reported having used female condoms during their last sexual encounters. Majority of sexually active undergraduates claimed they had sex once a month. 6.8% stated they had it 1-5 times a week and 10.0% stated they had it more than 5 times a month. Of those that used female condoms during their last sexual encounters, 3.6% stated they suggested its use

themselves while 2.8% indicated that their partners were responsible for using it at that time.

2.4% said it was a joint decision.

Table 4.1: Showing Female Condom Use by the Sample

FEMALE CONDOM USE	Frequency	Percentage
DID YOU USE F.C DURING FIRST SEXUAL EXPERIENCE		
YES	10	4.0
NO	160	64.0
Total	170	68.0
DID YOU USE F.C DURING LAST SEXUAL EXPERIENCE		
YES	25	10
NO	145	58.0
Total	170	68.0
HAVE YOU EVER USED F.C DURING SEXUAL INTERCOURSE	44	17.6
YES	122	48.8
NO	166	66.4
Total		
REGULARITY OF F.C USE		
ALWAYS	10	4.0
MOST OF THE TIME	13	5.2
SELDOM	21	8.4
NEVER	123	49.2
Total	167	66.8
IF YES YOUR EXPERIENCE		
IT FELT GOOD	16	6.4
IT MADE NOISE	6	2.4
IT SLIPPED	1	0.4
IT PAINED ME	11	4.4
I DID NOT LIKE IT	4	1.6
OTHERS	4	1.6
IF NEVER WHY DON'T YOU USE F.C		

PREFERENCE FOR OTHER METHODS	Yes	80	32.0
	no	48	19.2
PSYCHOLOGICAL	Yes	65	26.0
	no	64	25.6
LACK OF TRUST WHEN PROTECTION IS USED	Yes	54	21.6
	no	75	30.0
PREFERENCE FOR UNPROTECTEDSEX	Yes	47	18.8
	no	82	32.8
MY RELIGION DOESN'T PERMIT CONTRACEP. USE	Yes	9	3.6
	no	120	48.0
THEY AREN'T AVAILABLE	Yes	96	38.4
	no	33	13.2
I HAVE NO KNOWLEDGE	Yes	60	24.0
	no	69	27.6

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

Majority of the sexually active undergraduate students did not use female condoms during their last sexual encounter. Only 10 sexually experienced students used female condoms during their first sexual encounter. In all, 44% stated that they had used female condoms during sex. About 32.0% of respondents cited preference for other methods as their reason for not using female condoms. 21.6% stated that there was lack of trust when protection is being considered while 24.0% stated they had no knowledge. Those with a preference for unprotected sex were about 18.8%. Religion was cited as a barrier by 3.6% of the respondents. The prevalence of consistent use of female condoms among the sexually active female students was low, as it was just 4.0%.

Table 5: Bivariate Analysis of Knowledge of Female Condom and Ever Used Female Condom

		USE OF FEMALE CONDOMS			
		NO	YES	X2	P-VALUE
DO YOU	YES	26	38	61.047	0.000*
KNOW TO	NO	93	4		
USE F.C					
total		119	42		

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

Table 5 shows a significant relationship between knowledge of how to use female condoms and usage. Knowledge is a significant determinant of female condom use.

Table 6 Showing a Logistic Regression of Socio-Demographic Determinants and Ever Used Female Condom

EVER USED FEMALE CONDOM		Odds Ratio	P VALUE	[95% Conf. Interval]	
AGE	15-19	RC			
	20-24	2.191904	0.207	.6475935	7.41892
	25-29	2.007941	0.418	.371199	10.86164
	30-34	1.290526	0.872	.057972	28.72866
M/STAT:					
SINGLE		RC			
ENGAGED		1.859017	0.311	.5597915	6.173626
MARRIED		1.002888	0.998	.1333722	7.541183
RELIGION:					
CHRISTIANITY		RC			
CATHOLIC		.406158	0.392	.0515642	3.199202
ISLAM		.5060427	0.271	.1503584	1.703126
INSTITUTION:					
UNIVERSITY		RC			
POLYTECHNIC		1.407598	0.599	.3941416	5.026952
COLLEGE		3.913107	0.021*	1.231392	12.43504
LEVEL:					
100		RC			

200	1.105843	0.866	.3442217	3.552621
300	2.012705	0.297	.5404067	7.496168
400	2.947651	0.217	.529211	16.41811
ETHNICITY:				
YORUBA	RC			
IGBO	3.481534	0.050*	1.002703	12.0884
OTHERS	3.403888	0.169	.5935951	19.51911
MARITAL STATUS:				
MONOGAMY	RC			
POLYGAMY	1.527378	0.400	.565403	4.126056
HOUSEHOLD STATUS:				
POOR	RC			
MIDDLE CLASS	2.69e-06	0.989	0	
RICH	3.82e-06	0.989	0	

SOURCE: ***AUTHOR'S FIELD WORK (2016)***

A multivariate analysis was used to check significance and likelihood between socio demographic variables and use of female condoms which was captured by 'EVER USED FEMALE CONDOM'. Significant determinants were type of institution and ethnicity. According to Table 6, undergraduates between the ages of 20-24 were twice more likely (OR=2.19) to use female condoms than those in the reference category. Those between ages 25-29 were also twice likely(OR=2.0) than the reference category. With respect to marital status, those who were engaged or married were more likely to use female condom than those that were single. Catholics or Muslims were less likely to use female condoms (OR=0.4) (OR=0.5) than those in the reference category.

With respect to the type of tertiary institutions female students were in, those from college of health, science and technology, Ijero were three times more likely to use female condoms than those in university. Igbo students were three times more likely(OR=3.48) to use female condoms than those that were from the Yoruba ethnic group.

Fourth year undergraduates were twice (OR=2.9) likely to use female condoms than those that were in their first year. With respect to parental marriage type, students from polygamous homes were more likely to use female condoms than those that were from monogamous homes. Respondents with rich household status were three times likely(OR=3.82) to use female condoms than those who were in the reference category, middle class students were also twice likely to use female condoms than the reference category.

4.1 Discussion and Findings

The purpose of this study was to assess the determinants of non-use of female condoms among undergraduate students in Ekiti state. Knowledge was the most significant determinant of non-use of female condoms. According to Luke & Gruer (1991) and Peltzer (2000) lack of knowledge of female condom use is a barrier to its uptake. Their findings concur with the findings of this study as it has revealed that the respondents believe female condoms have rules and regulation that need to be strictly followed. Awareness of the female condom was high, in that majority of the respondents had heard of it from health facilities (see Table 2) and other various sources. Females seem to visit health facilities more often, these facilities are also doing well to promote female condom usage, which explains the level of information on female condom from this source but most respondents still lacked adequate skills to use it. Although many respondents believed that it can be used to prevent unwanted pregnancies, STIs and HIV/AIDS, use of female condom was low as well as its consistence.

More research findings suggest that participants' awareness of the female condom was higher among studied populations just as it was in this study. In a recent study done in the University of Ibadan in Nigeria, the findings revealed that among the undergraduate females, over 80%

had knowledge of the female condom as a modern contraception method. Education level, marital status, parental marriage type and house-hold wealth status were associated with knowledge of the Female condom in this research like in other studies. Religion, marital status, type of institution and level were associated with sources of first information on female condom. Although the female condom awareness was high among respondents. Majority of the respondents agreed that female condoms protects against STDs including HIV infection. The female condom provides the opportunity for females to actively protect themselves from infection. It is a method they can choose and initiate. It enables them to be in a position where they learn about their reproductive health in general, which is an important building block in HIV prevention. When females can protect themselves, they have an increased sense of self-worth. This could prove to be one of the most important elements in fighting the AIDS epidemic. Systematic integration of the female condom into STDs prevention and reproductive and sexual health programmes can increase knowledge and use of the female condom. Examples of programmes where integration is possible include: HIV/AIDS prevention education, family planning services, STI clinics, adolescent health services, social marketing programmes, workplace initiatives, and gender sensitization activities.

In this study few respondents had got knowledge to use it. Students should be provided with general information regarding mechanics of use, protective functions and effectiveness. Female condom use is statistically associated with knowledge of the female condom. Research findings also suggest that skills training and increased knowledge of female condom can actually increase female condom use and protected sexual acts.

Also non-availability of female condoms was stated as a factor for non use by 38.4% of the respondents. 32.0% stated preference for other contraceptives was their major reason for non-use of female condom. Psychological barriers such as misconception about female condoms

were also cited by a number of respondents, (26.0%). Religion as a barrier was stated by only few respondents, (3.6%). Preference for unprotected sex was also stated as a barrier by 18.8% of the respondents. Lack of trust as far as protection was concerned was also a barrier according to 21.6% of the respondents. The availability of the female condom, though limited comparing to the male condom, can considerably increase its demand according to a study by Warren M.P (2003).

Meanwhile having female condoms available seem not to be the major potential concern. The use of female condom is low. According to Peters et al (2000), less than eight per cent had ever tried it and very few reported that it as their current contraceptive method. Unfamiliarity with the female condom has been associated with not wanting to try it. The low use of the female condom has been highlighted in many studies according to Cecil A et al (1998). The female condom use was still low following its social marketing campaign in Zimbabwe in and unused in parts of America. Chinpungu J. (1999) stated, there are cases in Zambia where women were recruited and instructed on the use of the female condom and encouraged to try it, but few women tried it. Findings from Sly D.F and Quandagno D. suggest that low use of the female condom has been associated with availability, access and difficulties in use compared the male condom.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Summary of Findings

5.0.1 Objective 1 was to assess knowledge of female condoms among undergraduate students in Ekiti state. Knowledge of how to use female condoms was discovered to be a significant determinant of usage of the female condom. Lack of knowledge on how to use female condoms was responsible for non-use. Although, most undergraduate students, (80.4%) were aware of female condoms as a method of contraception. Majority also agreed that it prevented pregnancy, STDs as well as HIV infection and reduce risk of cervical cancer. Many respondents, (63.6%) in this study were discovered to lack knowledge of how to use female condoms which would likely lead to non use. Only 33.2% knew how to use female condoms.

5.0.2 Objective 2 was to examine the prevalence of female condom use among undergraduate students in Ekiti state. Prevalence of Consistent use of female condoms was discovered to be low among the few who used them. The prevalence rate was 4.0%.

5.0.3 Objective 3 was to examine the determinants of non-use of female condoms among undergraduate students in Ekiti state. The only significant socio-demographic determinants of non-use were the Type of institution and Ethnicity. This can be explained with their level of knowledge. Most respondents from College of Health, Science and Technology, Ijero had more knowledge on how to use female condom than those from the

University and Polytechnic. Most respondents of the Igbo tribe also had more knowledge of female condoms use than those that were of Yoruba or Hausa/Fulani tribe.

Knowledge of how to use female condoms was discovered to be a significant determinant of usage of the female condom. Other factors for non-use of the female condom by sexually active females who don't use them were majorly non-availability and preference for other methods, stated as a factor by 38.4% and 32.0% of the respondents, respectively. A factor such as 'lack of trust when protection was used' was stated as reason for non-use by 21.6% of the respondents. 'Preference for unprotected sex' was stated as a factor by 18.8%. Religion as a barrier was the least reason, (3.6%) cited by those who don't use female condoms.

Some Socio-demographic characteristics such as age, marital status, religion, level, parental marriage type and household wealth status were found to be insignificant determinants of non-use of female condom because usage of female condom included use and non-use captured by 'EVER USED FEMALE CONDOMS : YES OR NO'. A bivariate analysis was run using a statistical software package (STATA), the 'USE' captured by 'YES' was dropped since the researcher was dealing with NON-USE. 'NON-USE' captured by 'NO' was compared with socio-demographic characteristics but no significance was shown because it could only show significance when the dependent variable had more than one category.

5.1 Conclusion

Awareness on the female condom was high but few respondents had knowledge to use it appropriately which is the reason for non-use by many sexually active undergraduates. Few sexually active students have used female condoms in Ekiti state, but the prevalence of consistent use is very low (4.0%). Most sexually active students stated that non-availability

and preference for other contraceptive methods were their reasons for not using female condoms. More quantitative and qualitative studies targeting females and male counterparts with regards female condoms could be very informative in setting up a comprehensive health education and STD prevention strategies.

5.2 Limitations of the study

1. This study was done in only Ekiti state and cannot be used to generalise for the whole south western part of the country.
2. This study was a cross sectional study, it is subject to the limitations of a cross sectional study.

5.2 Recommendations

Based on the findings of this research, the following recommendations are made:

- Female Condom promotion interventions should focus on acceptability and knowledge building.

- Government, Health facilities and NGOs should help in Improving Female condoms physical availability in all areas where there are other contraceptives especially were male condoms are available.

- Intensification of Female Condom promotion in the Ekiti state, and Nigeria in general. This should be done not only with materials, but also with ways on how to use it correctly.

- More quantitative studies should be conducted to examine the determinants of non-use of female condoms.

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APPENDIX

QUESTIONNAIRE

QUESTIONNAIRE CODE NUMBER.....

TOPIC: DETERMINANTS OF NON-USE OF FEMALE CONDOMS AMONG UNDERGRADUATE STUDENTS IN EKITI STATE

Good morning/afternoon/evening. My name is ADELOLA ADEDOTUN BABAJIDE. I am a 400 level student of Federal university oye-ekiti, Ekiti from the department of Demography & social statistics. I am here in this tertiary institution to carry out a research on the topic above. As this study is going on, I would be grateful if you could participate by answering some questions. All information supplied in this study will be treated with utmost confidentiality;Your name will not be written on this form, and will never be used in connection with any of the information you give.

SECTION1 (SOCIO-DEMOGRAPHIC DETERMINANTS)

Tick as appropriate

NO	QUESTIONS	CATEGORIES
101	Age at last birthday	1. 15-19..... 2. 20-24..... 3. 25-29..... 4. 30-34..... 5. 35+.....

102	MARITAL STATUS	1. Single..... 2. Engaged..... 3. Married.....
103	RELIGION	1. Christianity..... 2. Catholic..... 3. Islam..... 4. Traditional..... 5. Others.....
104	TYPE OF INSTITUTION	1. University..... 2. Polytechnic..... 3. College of Health,Science&Tech...
105	YOU ARE ON WHAT LEVEL CURRENTLY?	1. 100..... 2. 200..... 3. 300..... 4. 400..... 5. 500.....
106	ETHNICITY	1. Yoruba..... 2. Igbo..... 3. Hausa/Fulani..... 4. Others.....
107	PARENTAL MARRIAGE TYPE	1. Monogamy..... 2. Polygamy.....

		3. Others.....
108	HOUSEHOLD INCOME/WEALTH STATUS	1. Poor..... 2. Middle class..... 3. Rich.....

SECTION2 KNOWLEDGE & AVAILABILITY OF FEMALE CONDOM

Tick as appropriate

201. Have you ever had sex? 1. YES 0. NO

202. Have you ever heard about female condoms? 1. YES 0. NO

203. How did you first hear about female condoms?

Health facility..... media..... family..... peers.....

School setting..... Others (please specify).....

204. What is your take on the following statements:

FC protect against unplanned pregnancy	Strongly agree	Agree	Undecided	Strongly disagree	Disagree
	1	2	3	4	5

FC protect against the virus that HIV	1	2	3	4	5
FC protect against STDS	1	2	3	4	5
FC protects against cervical cancer	1	2	3	4	5

FC: FEMALE CONDOM STDS: SEXUALLY TRANSMITTED DISEASES

205. How would you rate your knowledge about female condoms generally

1. No knowledge .... 2. Little knowledge.... 3. Average....

4. Knowledgeable..... 5. Very knowledgeable....

206. Do you know how to use a female condom? 1. YES 0. NO

207. Do you know of a place where you can get the female condom?

Government Clinic.....1

Private health centre.....2

Community Health Worker.....3

NGOs.....4

Chemist.....5

Pharmacy store.....6

Friends.....7

Shop/supermarket/store.....8

Traditional Birth Attendants.....9

Others specify[ ].....

selecting multiple options is permitted

SECTION3 SEXUAL BEHAVIOUR

301. Which of these sexual activities are you aware of?

Vaginal sex 1

Anal sex 2

Oral sex.....3

Others (specify).....4

302. Which of these other forms of sex have you ever been involved in?

	Yes	No
Vaginal	1	0
Anal	1	0
Oral	1	0

303. Who are the persons you have had anal sex with through the anus in the last 6 months?

1. Your spouse(s) or live-in partners
2. Boyfriend
3. Casual Partners

304. How many sexual partners have you had in the past 12 months?

1. None 2. One 3. Two 4. More than two

1. How long have you have been with your current partner?, or if there is no current partner, how long were you with your previous partner?

1. Less than a year 2. A year 3. More than a year

305. How frequently do you have sex with a partner?

1. Less than once a month..... 2. One to five times a week..... 3. More than five times a month.....

306. The last time you had sex did you use a female condom?

Yes..... 1

No 0

307. Who suggested female condom use that time?

Myself.....1

My partner.....2

Joint decision.....3

Can't Remember.....4

308. Why didn't you use a female condom with your sexual partner that time?

Not available.....1

Too expensive.....2

Partner objected.....3

Don't like them.....4

Trust my partner.....5

Desired a pregnancy.....6

Used other contraceptive.....7

Didn't think it was necessary.....8

Didn't think of it.....9

Don't know about female condoms.....10

Others (please specify).....11

309. Have you ever discussed female condom use with your partner?

Yes 1

No..... 0

SECTION 4 FEMALE CONDOM USE

401. Did you use a female condom during your first sexual experience? 1. YES 0. NO

402. Did you use a female condom during your last sexual experience? 1. YES 0. NO

403. Have you ever used a female condom during sex ? 1. YES 0. NO

404. If yes, what was your experience when you last used a female condom

	Yes	no
It felt good	1	0
It made noise	1	0
It slipped	1	0
It pained me when I was using it	1	0
I did not like it	1	0

Others (please specify).....

405. HOW FREQUENTLY DO YOU USE FEMALE CONDOM

ALWAYS.....

MOST OF THE TIME .....

SELDOM.....

NEVER.....

406. If never, what are the reason you don't use female condoms

Preference for other methods	YES	NO
Psychological barriers	YES	NO
Lack of trust as far as protection is concerned	YES	NO
Preference for unprotected sex	YES	NO
My religion does not permit use of contraceptives	YES	NO
They are not available	YES	NO
I have no knowledge about female condom	YES	NO

Others (specify)	YES	NO