MARRIED WOMEN'S KNOWLEDGE OF AND INTENTION TO USE FEMALE CONDOM IN IBADAN SOUTH WEST LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF HEALTH PROMOTION AND EDUCATION, FACULTY OF PUBLIC HEALTH, COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH (HEALTH PROMOTION AND EDUCATION) OF THE UNIVERSITY OF IBADAN, NIGERIA

DECEMBER 2008

DEDICATION

To God Almighty, the Fountain of all Wisdom and Knowledge

And

To all Women who have a story to tell. Victoria Asseital

ABSTRACT

Women constitute over 50% of those infected with HIV/AIDS in sub-Saharan Africa where the pandemic poses major public health problems and one-third of these women are married. Although various protective devices against HIV infection exist, only the female condom currently serves as a woman-initiated protection method against unwanted pregnancies and Sexually Transmitted Infections (STIs) including HIV/AIDS. Few studies exist on women's level of knowledge about the female condom and their intention to use it. The objectives of this study were to assess knowledge and intention to use female condom among married women in Ibadan Southwest Local Government Area (LGA).

The study was a descriptive, cross-sectional survey involving a multi-stage sampling of married women. Six out of the 11 wards in the LGA were randomly selected. A total of 392 respondents were interviewed using semi-structured questionnaires, complemented by eight Focus Group Discussions (FGDs). The FGDs were transcribed and summarized while the quantitative data were analyzed using descriptive and chi-square statistics.

The mean age of the respondents was 28.8 ± 6.5 years. Majority of the respondents, (70.2%) were Christians while 29.3% were Muslims. Less than half, (40.6%) and (27.8%) had ever heard of and seen female condom. Only 4.3% of those who heard had ever used it. Seventy-one percent of those who had ever used female condom intended to continue, while 29.4% were not sure. Out of the 375 non-users, 13.8% intended to initiate use, 57.9% would not and 24.0% were unsure. Age, religion and level of education were not significantly associated with female condom use ($p>0.05$). Of the 15-30 and 31-49 age groups, 4.2% and 4.5% respectively had ever used female condom. The differences were statistically significant ($p< 0.05$). Nearly half, (46.3%) of the respondents with post-secondary education intended to use female condom as against 7.4% with no formal education. Perceived high self-efficacy was significantly associated with ever use of the female condom ($p<0.05$).

A majority (76.4%) of those who had ever used female condom reported that they had high self-efficacy. Major reasons adduced for future intention to use included prevention of STIs/HIV (7.4%) and unwanted pregnancy (2.1%) as well as for child spacing (1.5%). The reasons for continuation included feeling of being natural during use (23.5%) and prevention of unwanted pregnancy (17.6%). The reasons given by non-adopters included husband's disapproval (44.8%), and concern that it can drop into a woman's body leading to death (26.1%). Of all the FGD discussants, only one had ever used the female condom. The factors that influenced non-adoption of female condom among some FGD discussants were the large size of the product and a perception that it was dangerous. Most of the discussants would be willing to try it if trained on how to use it.

The use of female condom is low among the study group and few intended to adopt its use. Health education is needed to promote adoption of female condom through social marketing and training.

Key Words: Married Women, Female Condom, STIs, HIV/AIDS, Contraception

Word Count: 484

ACKNOWLEDGEMENTS

A tree cannot make a forest and so in creating this work towards increasing knowledge in the field of public health, numerous individuals and institutions have contributed greatly to enable this work to see the light of day.

I cannot find sufficient words to adequately thank my supervisor, Professor O. Oladepo for his immense contribution to the success of this study. He painstakingly took me through every step of this dissertation patiently and went the extra mile to make sure this work was completed successfully.

Special thanks also go to Dr. A. J. Ajuwon for mentoring me in various areas of public health especially in the area of proposal writing and in choosing the topic for my dissertation. He was always ready to clarify all my confusion even when it wasn't convenient for him to attend to me.

Also worthy of great thanks is Dr Oyedunni S. Arulogun for patiently going through my proposal so many times to make sure it was of standard quality. Her personal testimony and encouragements also made me to resume working on this work after I had stopped working on it for a very long time.

I wish to thank Dr. F. O. Osbiname for his great help in the area of my abstract. He sacrificed precious time to make sure it came out right and was also ready to offer useful advice when needed.

I also want to thank Professor J. D. Adeniyi and Dr. I. O. Olaseha for the knowledge passed unto me in the area of public health without which this dissertation may have been deficient in one way or the other.

Special appreciation goes to my two senior colleagues, Ms Bimbo Lawal and Mrs Moji Fayemi for their help in analyzing of the data, and also to Mr. Nathaniel Afolabi of the Epidemiology, Medical Statistics and Environmental Health (EMSEH) department of the University of Ibadan in this regards. I also cannot forget the role my senior colleague, Mrs. Busola Oyeyemi played in the compilation ofthis work.

The non-academic staff of the Health Promotion and Education Department Faculty of Public Health University of Ibadan also deserves thanks for their help one way or the other that helped my work to progress. I also want to thank Mr. A. R. Adewole in the computer room of the Community Medicine Department, Faculty of Public Health, University of Ibadan for his assistance during the last stage of the work.

Special thanks go to the research assistants who participated in data collection during the Focus Group Discussions and the houschold survey.

I wish thank all the Focus Group Discussants and Survey Respondents for their cooperation without which I would not be submitting a dissertation on the knowledge and intention of married women to use female condom in Ibadan South West LGA.

I thank the Centre for Population and Reproductive Health University College Hospital (UCH) Ibadan, John Hopkins University Baltimore, USA and the Bill and Melinda Gates Foundation USA for the support they provided that enabled me study in the sub-field of Population and Reproductive Health Education

I also want to thank Family Health International Country Office Abuja for the use of their resource centre while writing my literature review. Worthy of mention is the assistance rendered by Mr. Sani Salihu, the resource centre staff whenever I came around.

In this regard, many thanks also go to the staff of Popline, an online affiliate of John Hopkins University who provided 80% of the materials I used in my literature review. They took time to send them by snail mail as requested.

I cannot forget to mention the supportive roles played by staff of Association for Reproductive and Family Health (ARFH), a non-governmental organization in Ibadan. The President/Chief Executive Officer, Professor O. A. Ladipo sent me to a UNFPA-supported female condom programming meeting in Lagos during my internship there in other to improve my knowledge on the topic of my dissertation and the director of the Evaluation and Operation Research (E&OR) department, Professor L. A. Adeokun provided me with materials during my proposal writing and granted me a key informant interview on the history of the introduction of female condom into Oyo State. Other staff of the E&OR department like Mr. Niyi Olaleye, Mr. Frank Oronsaye, Mrs. Grace Sadiq and Mrs. Ireti Sutton assisted me at various stages of writing this work

Special thanks also go to Mrs. M. M. Ojediran the family planning coordinator of the Oyo State Ministry of Health for the useful information she provided concerning female condom supply and distribution at the state level.

Lastly, I wish to express my appreciation to my family and friends (too numerous to mention) for their supports and encouragements. Of special note are Pastor and Mrs. Francis Madojemu who believed in my ability to make it and urged me on, and my friends, Pharmacists Olaiya Ojo and Rachel Dirisu whose support helped me go on when the zeal to continue was gone.

CERTIFICATION

I certify that this work was carried out by Dr. Grace Elcojo ABALAKA in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria under my supervision.

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DEFINITION OF TERMS

Antibody - A specific protein produced by the immune system in response to a specific foreign protein or particle called an antigen

Antigen - Any substance that stimulates the body to produce antibody.

CD4 - A type of protein molecule in human blood, sometimes called the T4 antigen that is present on the surface of 65% of immune cells.

Constitutional disease - A disease involving the entire body or having a widespread array of symptoms.

Contraception - a process or technique for the prevention of pregnancy by means of a medication, device, or method that blocks or alters one or more of the processes of reproduction in such a way that sexual union can occur without impregnation.

Contraceptive - an agent that so acts to diminish the likelihood of or preventing conception.

Herpes - Any of several viral diseases causing the eruption of small blister like vesicles on the skin or mucous membranes.

Immune system - A system in the body that produces substances to help it fight against infection and diseases.

Immunodeficiency — A condition in which the body's immune response is damaged, weakened, or is not functioning properly.

Immunosuppression - An abnormal condition of the immune system characterized by markedly inhibited ability to respond to antigenic stimuli.

Infection - An invasion of the tissues of the body by disease-producing microorganisms and the reaction of these tissues to the microorganisms and/or their toxins.

Kaposi's sarcoma - A type of cancer characterized by purplish spots which develop on the feet and spreads from the skin to the lymph nodes and internal organs; commonly seen in patients with compromised immune function, such as AIDS.

Lymphadenopathy - A condition characterized by an abnormal increase in the size of the lymph nodes or lymph vessels.

Lymph nodes - Small, bean-shaped masses of tissue scattered along the lymphatic system that act as filters and immune monitors, removing fluids, bacteria, or cancer cells that travel through the lymph system.

Lymphocyte - A type of white blood cell that is important in the formation of antibodies and that can be used to monitor the health of AIDS patients.

Malignancy - A tumor that is cancerous and growing.

Neoplasm - An abnormal mass of tissue, the growth of which exceeds and is uncoordinated with that of the normal tissues.

Neurological - pertaining to or emanating from the nervous system.

Opportunistic infection - An infection that is normally mild in a healthy individual, but which takes advantage of an ill person's weakened immune system to move into the body, grow, spread, and cause serious illness.

T cell - A type of white blood cell produced in the thymus gland that regulates the immune system's response to diseased or malignant cells.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Family planning is a basic human right. Making choices about one's own course of life asserts a person's fundamental human dignity. By determining when she will have children and how many, a woman takes a step toward deciding how she will spend much of her life – whether to finish school, to give more attention to each child she has, to better manage household duties, possibly to earn an income so that she and her family can live more prosperous lives, or to contribute more to her community, and society as a whole. For many women, controlling their own childbearing, by using effective contraception, can open the door to education, employment, and community involvement (Population Reports, 1999). Contraceptive use helps women meet their practical and strategic needs by enabling women to control when and how many children to have. It also enables women to limit births to a woman's healthiest childbearing years and to avoid giving birth more times than is good for their health. Avoiding unintended pregnancies could prevent about one-fourth of all maternal deaths (Population Reports, 1999). Spacing pregnancies at least two years apart helps women have healthier children and improve the odds of infants' survival by about 50% (Population Reports, 1999). In essence, the woman who chooses when she has children, and how many, exerts an important measure of control over her own physical, emotional, and economic well being. She contributes to her children's well being, too.

Each year, 585,000 women die from complications of pregnancy, childbirth and unsafe abortion (Population Reports, 1999). Ninety-nine percent of these deaths occur in developing countries (WHO & UNICEF, 1996). Unintended and unwanted pregnancies may also increase a woman's health risk. About 50 million abortions take place each year. Almost half of these abortions take place in unsafe conditions, resulting in at least 75,000 maternal deaths. One in eight maternal deaths is due to abortion-related complications, and 90 percent of these deaths occur in developing countries (WHO, 1994; Tinker et al, 1993). In Nigeria, maternal mortality is 800 per 100,000 live births and fertility rate is 5% (Akinyele, 2005).

Safe contraception contributes to good health. When women avoid unwanted pregnancy, they avoid the risks of childbearing or abortion. Also birth spacing helps her children to survive. Children in poor countries whose mothers have died are themselves more likely to die. In addition, on average, a child born less than two years after the last birth is twice as likely to die as a child born after an interval of at least two years. It has been found that spacing pregnancies more than two years apart helps women have healthier children and increases their chances of survival by 50% (Population Reports, 1999).

At the same time, contraceptives are safer, more effective and more abundant than ever before. Reasons for lack of use are equally as abundant too. Fear of the health effects of modern contraceptive methods is frequently given as a reason for non-use. Some women fear long-term (systemic) problems related to contraceptive use while others are unable to tolerate the side effects which can affect their ability to work and care for their families.

According to analysis of Demographic and Health Survey (DHS) data, side effects are the primary reasons for discontinuation of hormonal methods (Shah, 1994) Another reason women gave in International surveys is that they don't have access to the methods they want (Population Reference Bureau & WHO, 1998).

Women's organizations involved in the WHO /HRP Creating Common Ground Meeting, (WHO, 1991 & 1994) as well as the UN International Conference on Population and Development, Cairo and The Fourth World Conference on Women, Beijing, had emphasized the need to develop contraceptive methods which are non-systemic and do not produce the side effects often associated with hormonal methods such as oral contraceptives, injectables, and implants (WHO, 1997). Women's health advocates have been encouraging the use of methods which women can control, which do not rely upon the assistance of a physician for use, and which are immediately reversible. Effectiveness continues to be important and being able to control one's own fertility remains an extremely high priority and is critical for women's health, development and empowerment

Family planning and concern about maternal health have long been linked. The hope to relieve women's suffering and save lives inspired early advocates of contraception in both developed and developing countries (Population Reports, 1994). Now, worldwide, policy makers recognize the importance of contraceptive use to women's health.

The ideal family planning method – one that is absolutely safe for all users, 100 percent effective, convenient, inexpensive, irreversible, and does not interfere with sexual intercourse has not yet been developed and may never be. The variety of contraceptive choices that exist today can meet most women and men's reproductive needs. Further, some of the methods carry additional health benefits, such as reduction in the risk of certain cancers, anaemia, and sexually transmitted infections (STIs) including HIV/AIDS.

Prior to the introduction of the female condom (FC), no effective, safe, reversible, female initiated and controlled contraceptive methods that prevented both unintended pregnancy and STIs, including HIV existed. Female condom was invented in the mid-1980s and approved by the US Food and Drug Administration (FDA) in 1993 (Gilbert, 1999).

The female condom is a strong, soft transparent sheath made of polyurethane. It is a woman-initiated and controlled method of protection against pregnancy and STIs including HIV. It is between 79 percent and 95 percent effective in preventing pregnancy (John Hopkins Bloomberg School of Public Health, 2003) In laboratory test, polyurethane female condoms have been proved to be impermeable to sperm and to infectious organisms including HIV (Feldblum, 1998). Some women want to use modern contraception but fail to do so because many methods require visits to clinics, which are often inaccessible or substandard. The use of the female condom does not require seeing a health care provider before use. Also, it can be used if breastfeeding and side effects are rare.

Many acceptability studies of the female condom have already been conducted in some parts of the world. While results are mixed, it is fair to say that the method is acceptable to some women and men. Included among the acceptors are first-time family planning users, indicating that the female condom increases the number of methods that can be used for disease prevention and contraception, and does not merely substitute for male condom use. The female condom has been shown to contribute to women's sense of empowerment, especially if supported by education and informational activities (WHO, 1997).

This study was carried out specifically among the married women to fill the gap of lack of research among married women in Nigeria on their awareness and intention to use the female condom. According to Williamson, Liku, Mcloughlin, Nyamongo and Nakayima (2006), twenty-five years into the HIV/AIDS epidemic, condom use among married/stable couples remain low and under-researched in developing countries, even countries with high HIV prevalence. Condoms are primarily seen as a method of protection against infection and not equally as a form of contraception, and their promotion to married or stable couples is considered too problematic to attempt (Ali, Cleland & Shah, 2004). This study will also indirectly raise an awareness amongst them about a modern method of contraception that has a dual role since it is a documented fact that the knowledge of modern methods of contraception is lower among currently married women (76%) than sexually active unmarried women (91%) in Nigeria (NDHS, 2003). The NDHS also showed that the knowledge of female condom is lower among currently married women (11.5%) as against that of unmarried sexually active women

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(23.6%) and not sexually active unmarried women (20.4%). In the 2003 NDHS survey, to be sexually active means the respondent has had sexual intercourse in the month preceding the survey and sexually inactive means not having sexual intercourse in the month preceding the survey.

It is crucial to study the knowledge of the female condom and intentions to adopt the use of the female condom among women as an important step towards selling the idea of a female initiated method of protection to the society on a large scale. This study essentially addressed the level of awareness and rate of utilization of the female condom among married women with the aim of providing data on how many married women were actually using the female condom and the factors that promotes or hinders the use of the female condom among them. It was expected that at the end of this survey, data will be available on the level of knowledge of the female condom, its rate of utilization and intentions to use the female condom among married Nigerian women living in Ibadan southwest local government area, which can be used as an indication of what the acceptability factor is in the state. The factors that enhance the usage of the female condom will also be known and worked upon to ensure that more women use the female condom. Also the factors that stop women from using the female condom will also be discovered so that more researches can be done on it in order to make it more acceptable and intervention programmes can also be planned to address the issues that evolved out of this survey. Most importantly it is expected that this research work will provide baseline information for programmers to plan intervention programmes aimed at improving utilization and access of the female condom. This data will hopefully help in

policy formation and towards any advocacy that will need to be done concerning the female condom.

1.2 Statement of the Problem

Women who are sexually active and would prefer to avoid becoming pregnant but nevertheless are not using any method of contraception are considered to have an unmet need for family planning. In developing countries, over 100 million women who are married or in union have unmet need for spacing or limiting births of which Nigeria accounts for 3.9 million of that figure (Population Reports, 1996). In Nigeria, there is an unmet need for family planning of 17 percent and a low level of contraceptive use, with 12 percent practicing family planning and only eight percent using modern methods (Constella Futures, 2006).

Rates of condom use are lower within marriage than among sexually active unmarried (Population Reports, 1999). Yet, many married couples need condoms both for family planning and for protection against sexually transmitted infections, including HIV. Narrowing the gap between female condom need and use is a major Public Health challenge.

Female condom was introduced into Oyo State by Association for Reproductive and Family Health (ARFH) a Non-Governmental Organization in Oyo State in 1999. Other organizations that have distributed female condoms in the state include the Family Planning Coordinating Unit of the State Ministry of Health, and the Planned Parenthood

Federation of Nigeria (PPFN), which incidentally is located in Ibadan Southwest Local Government Area of the state where this research work was carried out.

Since the introduction of the female condom into Oyo state, no household survey has been done to determine the knowledge, attitudes and practices of the married women on the use of the female condom, which is a woman-initiated and controlled method of family planning. Determining the knowledge and factors that will influence adoption of female condom will ultimately help women and their partners' use a family planning method such as the female condom to avoid risky as well as unintended and unwanted pregnancies and sexually transmitted infections, thereby saving many of their lives.

1.3 Justification for the Study

The justification for carrying out this study among married women is that they have been the most targeted group when it comes to promotion of means of contraception. This promotion is frequently carried out in family planning and post natal clinics, which are mostly patronized by married women. It is a known fact that in Nigeria, unmarried women hardly patronize antenatal and family planning clinics since studies have shown that structural and administrative barriers exist at health facilities that either forbids provision of services to people beyond a certain age group or to unmarried women and judgmental healthcare provider also withhold services from people below a certain age group or from unmarried women (Ajuwon et al, 2007). Since married women make up the greater population that attend family planning and post natal clinics, finding out their knowledge about the female condom as a means of contraception and their intention to

use may help in promoting the use of the female condom among women generally and will ultimately help to reduce the level of unmet need in Nigeria.

Also, married women are in a more stable relationship and are more consistent when it comes to utilization of contraceptives than young, unmarried women as user-dependent methods that require consistency of use (e.g. contraceptive pills, condoms) may be less effective when used by young, unmarried persons (WHO, 2003). Studies have found that women living with a partner are more likely to use the female condom (Sly et al, 1997). It is therefore a worthwhile cause to assess the knowledge of the often-targeted married women and their intentions to use the female condom.

1.4 Research Questions

The study provided answers to the following:

1. How many of the married women in Ibadan southwest local government have ever heard of the female condom?
2. How many of the married women in Ibadan southwest local government have ever seen a female condom?
3. How many of the study population have ever used the female condom?
4. How many of the married women in the study area currently use the female condom?
5. What are the factors that enhance or hinder the usage of the female condom among the married women?
6. Are the married women in the study area who are currently not using the female condom intending to adopt that practice?

This study will therefore provide important baseline data about the knowledge of married women about the female condom as a means of contraception and STIs/HIV/AIDS prevention and their intention to use it in Oyo state hitherto not provided in previous studies.

1.5 Objectives of the Study

The general objective of this study was to determine the level of awareness, rate of utilization and intention to use the female condom among the married women in Ibadan Southwest Local Government Area of Oyo State in Nigeria, in order to obtain and provide important baseline data, and make recommendations that could be useful in female condom promotion. The specific objectives that guided the study were as follows:

To:

1. Identify the proportion of married women in the study population who have ever heard and/or seen the female condom.
2. Define the prevalence of current use of the female condom among the study population.
3. Assess knowledge of respondents on uses of the female condom.
4. Identify the factors affecting female condom use and non-use among the respondents.
5. Assess future intention of non-users to adopt the practice.

1.6 Variables

There were seven major variables derived from the conceptual framework that are relevant to this study. This included awareness /knowledge of the female condom, perceptions/view about female condom, history of female condom usage, factors that determined the use or non-use of the female condom, availability/affordability of female condom, acceptability of the female condom among the study population, and the intention of non-users to adopt the practice of using the female condom.

The Precontemplation Stage (knowledge/awareness stage), The Action (have tried and intend to continue), Maintenance (are carrying out the action regularly) stages of the Trans-theoretical model were operationalized in the questionnaire through questions 2, 5, 7, 9, 15a, and 17a.

Other variables studied and worthy of note were certain demographic characteristics (e.g. Age, Religion, Highest level of Education completed, etc.), if female condom is allowed by religion, availability/affordability of the female condom, and the respondents' confidence to carry out certain actions about the female condom.

1.7 Hypotheses

The following research hypotheses were formulated for the study:

1. There is no significant relationship between age and intention to use female condom
2. There is no significant relationship between educational status and intention to use female condom

1.8 Limitations of the study.

The limitations to this study were the fact that the study could only be carried out in the study area due to the time constraints for the study period which made doing a state or nationwide household survey not feasible. This also makes it impossible for the findings to be generalized as being applicable to all married Nigerian women as this survey was carried out only in the south-western part of the country.

CHAPTER TWO

LITERATURE REVIEW

2.1 Contraception and HIV/AIDS

Today, more than ever in history, couples worldwide are using contraception to delay space and limit births. Over 50% of couples worldwide use a family planning method. Large demographic data however shows that women in the developing countries who say that they do not desire additional children are not using any contraceptive method: 80% of women in Africa, 57% of women in Asia and the Middle East, and 43% of women in Latin America (WHO, 1995a). In developing countries over 100 million women who are married or in union have unmet need for spacing or limiting births, with Nigeria recording 3.9 million women with unmet need for family planning (Population Reports, 1996). Lack of contraceptive use contributes to unwanted or mistimed pregnancy, which in turn contributes to the problems of unsafe abortion, female infanticide, and maternal mortality and morbidity. In Nigeria among women hospitalized for abortion complications, only 10% had ever used contraception, but 45% said that they wanted to do so (Population Reports, 1996). Furthermore, economic and social problems, in many cases, are exacerbated by unwanted and mistimed pregnancy. Pregnancy is the main reason that women of reproductive age die at higher rates than men (Population Reports, 1994).

In recent years a new set of consideration has entered the contraceptive decision making process. While sexually transmitted infections (STIs) were identified long ago, the

HIV/AIDS pandemic awakened the world to the fact that unwanted pregnancy and its sequelae (unsafe abortion, maternal mortality and morbidity, social stigma, etc) were not the only deleterious consequences of sexual relations.

Human Immune deficiency Virus (HIV) has been described as an infective agent that attack the central control mechanisms of the immune response, yielding a condition that results in opportunistic infections, malignancies, generalized lymphadenopathy and death (Marshall, 1999). HIV infects certain body cells, especially CD4 lymphocytes (T-cells), thereby destroying the body's immune system, and reducing its ability to fight certain diseases. People who are infected with HIV get sick easily with such diseases as pneumonia, tuberculosis, aggressive Kaposi's sarcoma (a type of cancer), brain infections, persistent diarrhea, and herpes infections. An HIV-infected person whose immune system is severely compromised and/or who has one or more HIV-related diseases is defined as having AIDS. Because HIV damages the immune system, most people with AIDS die from diseases that their bodies can no longer fight (World Bank, 1997).

The Acquired Immunodeficiency Syndrome (AIDS) is a disease that is characterized by defect in cell-mediated immunity leading to severe immunosuppression and constitutional disease, neurological complications, opportunistic infections and neoplasm that rarely occur in persons with intact immune function (Levy, 1993; Wiess, 1993) Acquired Immunodeficiency Syndrome (AIDS) was first recognized in June 1981 when clinical investigators in New York, and California found among young previously healthy

homosexual men an unusual clustering of cases of rare diseases, notably Kaposi Sarcoma, and opportunistic infections such as pneumocystic carinii pneumonia (PCP), as well as cases of unexplained persistent lymphadenopathy (CDC Task force, 1982). This finding aroused great interest and led to various studies.

HIV/AIDS is the 4th biggest cause of mortality in the world (Slaymaker, Walker, Zaba & Collumbien, 2004). The global HIV/AIDS epidemic has had its greatest impact on the African continent. The region of Sub-Saharan Africa is the worst hit, with 7.4% of all those aged between 15 and 49 years thought to be infected with HIV (UNAIDS/WHO, 1997). The 1997 World Bank Report estimates that about 90% of all HIV transmission in this region is through heterosexual intercourse. HIV has spread rapidly among people with high-risk behaviour and also widely among those assumed to be at lower risk.

Nigeria is Africa's most populous country with a land mass of 923,770sq km and an estimated population of 140 million. Nigeria is facing a mature, generalized AIDS epidemic. Since the first cases of AIDS were diagnosed in Nigeria in 1986, adult prevalence has increased from 1.8 percent in 1991 to 5.8 percent in 2001. Since then, it has declined to 5.4 percent in 2004 and was at 3.9 percent in 2006 for those aged 15-49 (Constella Futures, 2006). In the year 2003, the number of adults of age 15 – 49 with HIV/AIDS was 3,300,000, women of reproductive age (15 – 49yrs) with HIV/AIDS amounted to 1,900,000 and deaths resulting from AIDS for that year was 310,000(UNAIDS, 2004). The current number of adults infected with HIV/AIDS in Nigeria is 3.50 million going by government data and 4 – 6 million from Experts

Estimate. By the year 2010, it is estimated that the number of adults expected to be infected with HIV/AIDS will be between 10 – 15 million and the adult prevalence rate will be between 18 – 26 million (UNAIDS, 2004). Nigeria ranks third in terms of actual impact of HIV/AIDS after South Africa and India (Nigeria Ungass Report, 2005). In 2005 it was estimated that there were 220,000 deaths from AIDS (Avert.org, 2007). Some 80% of HIV infections in Nigeria are transmitted by heterosexual sex. Factors contributing to this include a lack of information about sexual health and HIV, low levels of condom use and high levels of sexually transmitted infections (STIs) such as chlamydia and gonorrhoea, which make it easier for the virus to be transmitted (Avert.org, 2007).

The consequences of the spread of HIV are of urgent concern for family planning services in Nigeria. Among populations at antenatal clinic sentinel sites, HIV prevalence rose from 1.2% in 1992 to 5.8% in 2000. Thus, according to World Bank criteria, HIV infection has begun to move beyond high-risk populations to the general population. Perceptions of invulnerability to HIV, coupled with low rates of condom use for family planning and the pattern of extramarital sexual relationships among married men, create an environment of significant HIV risk for Nigerian women seeking family planning services (Adeokun, et al, 2002).

2.2 Barrier Contraceptives

Contraceptive use has become a global norm over the past 100 years following a highly successful global campaign promoting family planning (Berer, 2006). Contraceptive use can help protect women's lives and health by avoiding pregnancies. Women who do not

want to become pregnant can reduce their exposure to the risks of pregnancy and childbirth by using effective contraception.

Barrier contraceptives are family planning methods which act as barriers and prevent the union of sperms and ovum necessary for pregnancy. From ancient times, people have been using all sorts of barrier methods to prevent pregnancy. Over the centuries, women used vaginal pessaries made of crocodile and elephant dungs, pomegranate seeds, bee's wax and numerous other plant and animal materials. Similarly, men use to wear condoms made of intestines of animals. A major development took place in the early 1930s with the innovation and use of the latex materials in the manufacture of condom. A further development was the production of pre-lubricated condoms. Silicon was first used in 1960 to produce semi-dry lubricated condoms which is said to give increased sensitivity in use. Lately, spermicidal condoms (condoms coated with nonoxynol-9 on inner and outer surfaces) are being manufactured and marketed. Nonoxynol-9 is the best spermicide and reduces the risk of contracting STIs and HIV (Chaudhuri, 2001).

Up to the 1950s and early 1960s barrier contraceptives were the main methods of birth control beside the natural contraceptive methods. With the advent of modern methods like the pill and intrauterine device (IUD), barrier contraceptives were abandoned to a great extent, particularly in the western world, mostly because the newer means were advocated as 'ideal' contraceptives. However, some of the side effects, actual or potential, of pills and IUDs have led doctors and patients to think again of using barrier

contraceptives as they are devoid of serious drawbacks, can prevent sexually transmitted infections and are quite effective if used properly (Chaudhuri, 2001).

Recently, barrier methods of contraception have gained much more importance in view of the facts that they prevent pre-cancerous lesion and cancer of the cervix as well as the spread of HIV infection. In many countries, the pendulum is swinging more and more towards the use of barrier methods, and the time has come for a reappraisal of these means of contraception (Chaudhuri, 2001).

2.3 Condom Use and Efficacy

The condom is the oldest and most widely used birth control device in the world. In the folklore of contraception its invention is attributed to a physician named Mr. Condom who recommended it to Charles II (1660-85) to prevent illegal offspring. Probably the word 'condom' which appeared in print for the first time in 1717, was derived from the Latin word 'Condus' which means a receptacle (Chaudhuri, 2001). Condoms have been around since ancient Egyptian times, and have come in all sorts of sizes and shapes, made from oiled paper, fish bladders, animal gut, leather and even tortoiseshell, which was supposedly favoured by the Japanese (Solanki, 2005). They are universally recognized as one of the most effective ways to prevent unintended pregnancy, HIV and other sexually transmitted infections, and also protect against STI-related infertility and cervical cancer.

Condoms have become nearly universally available in Nigeria because of efforts to increase coverage and subsidise prices. Uptake and use is affected by people's

perceptions of how effective condoms are, perceived effects on sexual satisfaction and people not wanting to be seen as promiscuous as a result of buying them. These are all factors that are being overcome. More serious barriers are opposition from religious organisations and traditional societies, which are more difficult to break down, but with careful negotiation and consultation progress is being made (Avert.org, 2007).

The use of condoms as a contraceptive method is difficult to estimate because of their easy availability through commercial channels without any prescription. However, it is known as the oldest and most widely used method of contraception throughout the world in both developed and developing countries and among people of both high and low socio-economic groups. Its popularity is due to easy availability through commercial means without any prescription; the fact that it is most harmless and relatively safe; and that it can be used privately even at odd hours, at any place and moment, and without any technical knowledge.

The advent of contraceptive pills and other methods of non-barrier contraception used by women in the 1960s created the belief that protection that interfered with sexual pleasure was no longer necessary; indeed, this was an important selling point for such methods. As a result, for more than four decades, men who had sex with women in most parts of the world left obtaining protection against unwanted pregnancy almost entirely up to women. Although the HIV/STI epidemic meant this was a short-lived dream, the message did not get through to the family planning world, who dismissed condoms as less effective and distanced themselves from people at risk of HIV as not being a target population for

family planning services. In places where barrier methods had been the only means of contraception, condom use fell off steeply and diaphragm production and use all but disappeared.

Condom use is a key component of combination prevention strategies individuals can choose at different times in their lives to reduce the risks of sexual exposure to HIV. These include delay of sexual initiation, abstinence, being safer by being faithful to one's partner when both partners are uninfected and consistently faithful, reducing the number of sexual partners, and correct and consistent use of condoms (UNAIDS, 2004). Condoms have played a decisive role in HIV prevention efforts in many countries. Condoms have also encouraged safer sexual behaviour more generally (UNAIDS, WHO & UNFPA. 2004).

Condom use is a critical element in a comprehensive, effective and sustainable approach to HIV prevention and treatment. The fact that condoms prevent transmission of other STIs such as syphilis or gonorrhea is of additional importance to the fight against HIV and AIDS because people who have another STI are more vulnerable to being affected by HIV. The risk of HIV infection is 2 to 9 times greater when other STIs are present (United Nations Population Fund, 2002). Without condoms, vaginal, anal and oral intercourses are not protected from STIs or HIV. Recent analysis of the AIDS epidemic in Uganda has confirmed that increased condom use, in conjunction with delay in age of first sexual intercourse and reduction of sexual partners was an important factor in the decline of HIV prevalence in the 1990s (Singh, Darroch & Bankole, 2003).

When used for more than five years, the condom reduces the chance of developing severe cervical dysplasia and cervical cancer as compared to the use of oral pills or to non-use of contraceptives. This has been found by the Oxford/FPA study in Britain and verified by other studies (Chaudhuri, 2001). Condoms have been found to be helpful in reversing progression of even cervical dysplasia. It has been found in laboratory tests that HIV cannot penetrate latex condom (Hatcher, Rinehart & Blackburn, 1997). Condom use during pregnancy, particularly in the later months, gives some protection against amniotic fluid infection (Nacye, 1979). There is practically no major disadvantage of using condoms except that very rarely latex condoms produce hypersensitivity (severe allergy leading to severe redness, itching and swelling after condom use).

Data from two randomized, controlled trials of the contraceptive efficacy of condoms were combined, involving 800 couples who used three latex condom brands exclusively for up to six menstrual cycles. The combined, six-cycle, typical-use pregnancy rate was 7%. The combined, six-cycle, consistent-use pregnancy rate was only 1.0%. The combined clinical breakage rate for the first five condom uses was only 0.4% and the slippage rate was only 1.1%. The study concluded that condoms rarely broke or slipped off during intercourse, and risk of semen leakage from intact condoms was very low. Condoms also provided high contraceptive efficacy, especially when used consistently (Walsh, Frezieres & Peacock, 2004).

In spite of high rates of HIV prevalence in sub-Saharan Africa, a large proportion of sexual acts remain unprotected by the use of condoms (Meheyer, 1995; Young, 1997;

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2.4 Safer Sex

Sexual pleasure is the physical and/psychological satisfaction and enjoyment one derives from any erotic interaction. Research suggests that the pursuit of pleasure is one of the primary reasons that people have sex. According to a recent study among heterosexual men in Mombassa, Kenya, for example: most people who engage in sex (particularly those who purchase sex) are not thinking about disease, they are thinking about enjoying themselves (Thomsen, 2004).

There is growing evidence that promoting pleasure in male and female condom use, alongside safer sex messaging, can increase the consistent use of condoms and the practice of safer sex (African AIDS Conference, 2003; Khan, Hudson-Rodd & Saggers, 2004). The female condom can serve as a means to safely achieving sexual pleasure since by virtue of its texture it offers the advantages of promoting pleasure and disease prevention. The female condom is made of a heat-conducting material that enables the partners to feel each other through it, especially when it is covered inside and out with lubricant (www.femalecondom.org). Also the polyurethane material of which it is made is strong and can be relied upon to prevent disease.

One of the benefits of making safer sex a norm is that protection would be accepted for the sake of sexual health and seen as a good thing in itself, independent of a person's past or present relationships. Thus, trust would be generated by practicing safer sex rather than the opposite.

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from family planning professionals than HIV/STI professionals. Journals specializing in HIV-related topics were more concerned with treatment and clinical research related to HIV, or with analyzing sexual practices rather than the use of protection in the context of sexual relations, and gave little attention to dual protection, if at all. Thus, on the Lippincott, William and Wilkie website, a search using the keyword "dual protection" brought up only 13 articles from 1998 to 2005, though highly relevant ones, and a search using the word "condoms" and "emergency contraception" brought up only two articles. This is in contrast to almost 1,200 articles on that same site that mentions condoms, of which about 20 of the first 150 citations also referred to contraception in their titles in some form (Berer, 2006).

A more comprehensive list of dual protection methods:

- Not having sex at all
- Masturbation, mutual masturbation and other forms of non-penetrative sex (i.e. with no penetration of the vagina, anus or mouth by the penis)
- Mutual monogamy between partners with no pre-existing infection, with the use of any effective contraceptive method and the back-up of induced abortion
- Use of male or female condom alone, including for vaginal and anal sex and male condom for oral sex
- Use of male or female condom plus a diaphragm or cervical cap

- Use of male or female condom plus a non-barrier contraceptive i.e. the pill, implant, injectable, patch, vaginal ring or IUD (the latter in the absence of STIs) or male and female sterilization
- Male or female condom with the back-up of emergency contraception and/or induced abortion plus the back-up of post-exposure prophylaxis against HIV
- Breastfeeding on demand with condoms for the first months post-partum
- Withdrawal alone
- Withdrawal plus male or female condoms during the ovulation period or in the presence of an STI
- Withdrawal with the back-up of emergency contraception and/or induced abortion plus the back-up of post-exposure prophylaxis against HIV (Berer, 2006).

These definitions move outside the narrow confines of previously mentioned definitions by acknowledging the possibility of using non-hormonal as well as hormonal contraceptives, other barrier methods, back-up methods, withdrawal and non-penetrative sex. Microbicides will join this list if and when they come on the scene. Several papers mention the possibility of using the diaphragm lubricated with a microbicide in future.

From the list of dual protection methods above, it is clear that for those who do not wish to have sex, saying no is completely safe, while for those who wish to have sex, it is not necessary to abstain. Having sex less frequently or with fewer partners help to reduce

STI/HIV risk, though in high HIV or STI prevalence settings, it is far from risk-free. Not having intercourse if either partner has an STI is always recommended and there are many people who practice safer sex by avoiding intercourse and exploring their bodies in other ways.

A poster presented at the July 2002 Barcelona AIDS Congress provides experience with a dual protection intervention with the female condom in six family planning clinics in Ibadan. Little is known about female condom adoption and continued use when it is incorporated into routine care in family planning clinics and the significance of female condom when family planning service provision is modified to focus on dual protection (Jagha et al, 2002, as cited in Usmani, 2002). The experience with 144 interviews concludes that despite willingness to adopt dual protection strategies, women are constrained by various social, cultural and other factors beyond their control. Husbands are identified as strong determinants of family planning and dual protection decision-making.

In an intervention in Nigeria, the female condom was introduced along with the male condom as part of a dual protection strategy in family planning clinics. The program included training of providers in discussing dual protection, HIV/STI communication and counseling skills, providing and explaining how to use both male and female condoms and condom negotiation skills. The results from this study showed that in the first year of the program, there was a modest increase in male condom, but a significant interest in the

female condom and an increased discussion of dual protection by providers (Usmani, 2002; Adeokun et al, 2002).

The fact that people may fail to use dual protection consistently and correctly is not a valid reason not to promote it. It is never too late for those providing family planning and STI/HIV prevention services to start promoting condoms and dual protection. In the long-term, the development of highly efficacious and highly acceptable methods of dual protection is an urgent research priority, starting with a wider range of condoms that will appeal to more people.

2.6 The Female Condom

The female condom has been available in Europe since 1992 and it was approved in 1993 by the US Food and Drug Administration (FDA) (http://www.avert.org/femcond.htm). It is a single use, non-biodegradable, disposable device (Usmani, 2002). First proposed by a Danish doctor named Lasse Hessel in the mid-1980s, the female condom is now commercially available in many nations. It is manufactured by the Female Health Company through its subsidiary Chartex International of Chicago, Illinois. The product is known by several brand names: Reality, Care, Femidon, Femy, Dominique, Feminine, My Femy, others (Usmani, 2002).

In Nigeria, the public and private sectors including non-governmental organizations (NGOs) have been involved in promotion and sales of the female condom. Association for Reproductive and Family Health (ARFH) an NGO in Oyo State wrote a proposal for dual protection in family planning clinics in Ibadan in 1998, applied for and got a grant of female condoms in 1999 from UNAIDS and USAID to support the dual protection project. They later developed a manual for its introduction and trained health providers with it. They supplied the female condom to the family planning units of the state hospital like Adeoyo Hospital and Jericho Nursing Home, and also to some private institutions like Planned Parenthood Federation of Nigeria (PPFN) and Oni Memorial Children Hospital (all located in Ibadan Southwest local Government Area) and the in-house clinic inside A.R.F.H itself.

Another means of female condom distribution in Oyo State is the Family Planning Coordinating Unit of the State Ministry of Health, which is located at the state secretariat. This unit is responsible for getting the female condom from the Federal Ministry of Health and distributing it round the 33 Local Government Areas of the state, which in turn distribute them to the various Primary Healthcare Centres (PHC) under them. In essence they are primarily involved in making sure that the public sector of the state has access to the female condom. They are also now involved in distributing the female condom to some non-governmental organizations in the state.

Another institution involved in making sure that the female condom is available in the state is the Planned Parenthood Federation of Nigeria (PPFN), which incidentally is

located in Ibadan Southwest Local Government Area of the state where this research work was carried out.

Society for Family Health, an NGO located in the area of the town called Bodija talk about female condoms during outreach programmes in the state and has intentions of distributing the female condoms too but for logistic reasons has not been able to do so.

Until recently, the traditional male condom has been the only barrier method available to prevent unintended pregnancy and the transmission of STIs/HIV during sexual intercourse. If the men refused to use the male condom, many women do not have the bargaining power to say no to sex. Most frequently this is as a result of the lower social status of women in many societies. Currently, the female condom is the only alternative to the male condom as a means of protection against both sexually transmitted infection (STIs) and pregnancy.

The female condom is a strong, soft transparent polyurethane sheath inserted in the vagina before intercourse, providing protection against both pregnancy and STIs, including HIV (www.femalecondom.org). It forms a barrier between the penis and the vagina, cervix and external genitalia. The female condom provides extra protection to men and women because it covers both the female genitals (vagina, cervix and vulva) and the base of the penis. These are the areas where STI sores make it easy for HIV to enter. Testing in various parts of the world suggests that when female condom is made available

to women, it reduces further the number of unprotected sex acts and the transmission of STIs. (UNAIDS, 1997).

Female condom can be inserted prior to intercourse, is not independent on the male erection and does not require immediate withdrawal after ejaculation. Female condom has two rings. One is inserted deep into the vagina, where it rubs against the back of the vagina, especially when having sex or pushing the fingers against it, causing a deeper thrust and harder penetration. The other ring sits outside the vagina. The female condom is pre-lubricated with dimethicone lubricant, an inert, non-spermicidal silicone-based fluid. This water-based lubricant makes insertion easier and allows comfortable movement during sex. The woman puts it into her vagina using her fingers, and can do so anytime from hours ahead to immediately before sex. Another practical advantage is that female condom does not have to be removed immediately after ejaculation. The female condom is safe and can be used without a prescription or medical supervision. Unlike the IUD or pill, it causes no side effects such as bleeding or cramps (Usmani, 2002).

Because the female condom is made of polyurethane, it is both strong and reliable. No special storage arrangements have to be made for it because polyurethane is not affected by changes in temperature and dampness. The expiry date on the female condom is 60 months (5 years) from the date of manufacture Testing of female condoms indicates that semen leakage after sex is less than with a male condom and that the risk of semen getting into the vagina due to dislodgement is about one-third lower. These tests were

done with ultrasound equipment to check the stability of the condom, and various sexual positions were tried (UNAIDS, 1997).

A female condom is a soft yet strong polyurethane sheath, about the same length as a male condom but wider. Because the device is made from polyurethane, it can be used with any type of lubricant without compromising the integrity of the device. This is advantageous in countries where personal, water-based lubricants are hard to find or non-existent. Polyurethane is less likely to break or leak than the latex which most male condoms are made of, and causes fewer allergic reactions. Polyurethane is odourless, causes no allergic reactions, and, unlike latex, may be used with both oil-based and water-based lubricants. Polyurethane is 40% stronger than latex (FHI, 2006).

The female condom does not replace the male condom or any other form of protection. Instead, it doubles the arsenal of weapons available in the fight against sexually transmitted infections (STIs) including HIV, and unintended pregnancy. Basically, the female condom gives women an additional option for protecting themselves and their partners.

2.7 Advantages of the female condom

One important advantage of the female condom is that women have more involvement in initiating use. Women find the female condom empowering, according to reports from Costa Rica, Indonesia Mexico, Senegal, Tanzania and Zimbabwe. Many say it gives them a better way to communicate their wish to have safer sex (Rogers, French, Gollub &

Latka, 1997). In Philadelphia, USA, American women said they liked the female condom because it provided them protection, a natural feel, and the power to initiate protection. Many women hold favourable attitudes towards the female condom primarily because it gives them greater control over sexual negotiations and behaviour than the male condom (Ruminjo, Steiner, Jouuis, Mwathe & Thagana, 1996).

In family planning programmes, it has been proven that a wider choice of contraceptive methods results in fewer pregnancies. The same has been found in testing of the female condom: adding this new option for protected sex results in fewer cases of unprotected sex (UNAIDS, 1997). Furthermore, men have been found to support its use for family planning (Philpott, Knerr & Boydell, 2006). This fact is quite encouraging as women often have little control over whether a man uses a male condom or not. In many situations, women are reluctant or unable to say no to sex if the man refuses to wear a male condom.

For a woman at high risk of STI, the female condom provides a prophylactic option should her partner refuse to use a male condom. Though usually requiring the agreement of both partners, in some cases the female condom can give a woman more control. Since it can be inserted hours before intercourse, it can improve protection in situations where consumption of alcohol or drugs may reduce the chances that a male condom will be used.

There may be benefits to women who are no longer of child-bearing age. According to a study carried out in Britain, there are indications that women who suffer pain during sex due to vaginal dryness (particularly women who have passed the menopause) can be helped by the female condom (UNAIDS, 1997).

The pleasurable physical and psychological effects of female condom use can be crucial in negotiation for safer sex. The lubrication and thinness of the material makes sexual intercourse feel slippery, natural and fun. The fact that the man's erection does not have to be constant is an added benefit for many. Some people value its slightly larger size. People can prolong intercourse, taking breaks (e.g. for other kinds of sex play or something completely different) and do not need to take the condom out. The heat transfer through the polyurethane is another feature that many report makes sex feel more "natural" or enjoyable. It has also been associated with increased femininity (Philpott et al, 2006).

A female condom rapid situation assessment was carried out in four states in Nigeria known to have histories of female condom promotion activities using qualitative method of data collection. While not many positive remarks were picked during the discussion, a few points mentioned include that female condom provides dual protection (from HIV/STIs and unwanted pregnancy); it makes sex less messy; more sensitive than male condom during intercourse; can be used by women without the detection of the male partner when the spouse object to male condom use, and the fact that it is women initiated method (UNFPA, 2005). In one large study of almost 600 urban and rural

women in South Africa, 47% of the women said their partners either liked it or had no problems with it (UNAIDS, 1997).

Historically, contraceptive methods are more effective if they are controlled by the women with the support and acceptance of the method by the man. Women in Cameroon, Kenya, Thailand and Malawi all cited control over their own health as a positive aspect of the female condom. Female condoms do not constrict the penis as do latex condoms. As a result, sensitivity of the male partner may not be substantially reduced; no loss of sensitivity was reported by study participants in Kenya and Malawi. Participants in Kenya, Thailand and Cameroon all said STI protection was important; those in the African studies also perceived the device to be either durable, strong, efficacious, or an effective alternative to the male condom, or some combination of the four. Finally, the female condom was perceived as more convenient because it can be inserted well in advance of intercourse (www.FHI.org/en/RH/FAQs/female condom_faq.htm).

The female condom is an effective contraceptive if used consistently and correctly. Within the first year of consistent and correct use, about 5 percent of women relying on the female condom will have an unintended pregnancy. When use is not always correct or consistent, the unintended pregnancy rate has been estimated at 21 percent (Trussell & Kowal, 1998). Social marketing campaigns have also shown that in certain settings, marketing the female condom for its contraceptive purposes increases its acceptability for both partners (Warren & Philpott, 2003).

One factor that has aided female condom promotion is the increase in sexual pleasure and the opportunity to eroticize the condom, reported by many users (Philpott et al, 2006). In Senegal, Society for Women and AIDS in Africa (SWAA) linked the noise made by the movement of the polyurethane during intercourse to the rattling of *bine-bine* beads, which women wear around their hips as an erotic accessory. As a result, for some Senegalese men and women the noise of the condom was transformed into a sexual turn-on, rather than a turn-off. SWAA Senegal then linked the marketing of female condoms with *bine-bine* beads, making the female condom one of a range of erotic accessories in some parts of the country alongside incense and sexy underwear. They also used the notion that the female condom accommodates a wide range of penis sizes as an incentive to use them (Personal communication, Allachinmeg & Mongolia, 2003). In Zimbabwe, there is a new word in the Shona language – *ketecyenza*- invented to describe the gorgeous tickle that men feel when the inner ring of the female condom rubs on the penis (African AIDS Conference, 2003). In Zambia and Ghana men have reported feeling excited by the tapping of inner ring on the penis. In the absence of their partners, men reported buying a female condom for masturbation with the inner ring (Personal communication et al, 2003). Some women report that the rubbing of the outer ring on the clitoris can cause increased pleasure and even orgasm. Men report that the knocking of the penis against the inner ring feels good as well. The female condom is made of a heat-conducting material that enables the partners to feel each other through it, especially when it is covered inside and out with lubricant. In India, women reported their first orgasms as they inserted the lubricated female condom inside themselves (Report by Blackstone Facts for Female Health Foundation & Hindustan Latex Ltd Family Planning

Promotion Trust, 2004). Thus, the female condom has many features that enhance pleasure, which can be used to encourage safer sex.

2.8 Disadvantages of the female condom

Some women have reported unfavourable attitudes towards the female condom, citing the need to obtain their partners' consent prior to use, discomfort during sexual intercourse, difficulties of use, aesthetic concerns, interference with sexual pleasure, and cost (Sly et al, 1997).

In the female condom rapid assessment carried out in Nigeria, some of the respondents have the following complaints with the use of female condom: cumbersome insertion procedure; dislodgement, uncooperative spouse; time spent for insertion; unpleasant noise during intercourse; rumours of possible disappearance into the womb; need to hold down outer ring during coitus; confusion with the diaphragm; lack of knowledge about product; service provider and clients not used to product; inconvenience in wearing; oily; need to direct the male organ ; cost; unavailability; condom slippage during intercourse and withdrawal of penis; Its like making love to a shopping 'bag'; inner ring causing pain during sex and on withdrawal; outer ring noticeable and thereby causing problem with partners who get disgusted by the look and suspicious of use; and penis pushing the condom inside the vagina (UNFPA, 2005).

In an FHI studies carried out in South Africa, the following disadvantages were cited: Not aesthetically pleasing and difficulties in insertion/removal. These major

disadvantages of the device noted by study participants centered on one of the female condom's major advantages; coverage of the external female genitalia. This coverage had a decidedly negative impact on the device's aesthetics and acceptance. Other problems related to aesthetics included dislike of the appearance of the device, noise associated with use, size and partner resistance. Some participants noted difficulties associated with insertion or removal of the female condom, discomfort, messiness and inconvenience associated with use, and movement of the device during use. A few cases of the penis slipping between the device and the woman's body, and slippage and breakage of the device itself were also noted (FHI, http://www.FHI.org/en/RH/FAQs/female condom_faq.htm).

In a study on barrier method preferences and perceptions among Zimbabwean women and their partners, many participants found both male and female condom difficult to use within marriage because of the stigma they carried. Condoms were associated with extramarital affairs or with sex workers. Both men and women reported that if they requested to use condoms with their spouse, he or she would think that they are having an affair or that they suspected him or her of having an affair. As one woman said: I also encountered some problems because my husband also told me that he could not see the difference between me and a whore. He also said that I didn't trust him and he also wanted to know why we had been told to use condom (Buck et al, 2005)

In an FC study conducted by Beksinska, Smit, Zonke, Gowri and Joanis (2006), clinical assessments of condom placement and fitting were directly observed by the study staff.

One common problem noted with insertion was pushing the condom inside the vagina too far. This resulted in the outer ring being incorrectly positioned and not lying flat across the genital area. They believed that attempting sexual intercourse with the outer ring in this position could result in the penis catching the outer ring and pushing the condom inside the vagina. This indicates that counseling and instructions in use should focus on this user problem specifically. They recommended that instructions on proper placement should include that the outer ring be held by the women during insertion, and that the couple should be aware of the outer ring during sex to ensure it does not get pushed inside the vagina.

Other tests have investigated the female condom's risk of causing irritation, or encouraging bacteria or other health problems in the vagina. In some tests, female condoms were used in sex and then left in the vagina overnight, a much longer period than normal. The results showed no complications, indicating that women with very sensitive skin can use the female condom (UNAIDS, 1997).

2.9 Effectiveness of the female condom

With correct and consistent use, the female condom is as effective as other barrier methods and has no known side effects or risks (UNAIDS/WHO, 2000). Contraceptive studies in the US found that female condom compared favourably with other female barrier options, the ranges varying widely dependent on correct and consistent use. Female condom tested in vitro and in vivo was found to be impenetrable to trichomoniasis, cytomegalovirus, herpes virus, hepatitis B virus and HIV (Gilbert, 1999).

Female condoms have fairly low rates of slippage or breakage, and such failure declines as users' experience with the method grows, according to findings from a large observational study of women attending two STI clinics in the southern United States in 1995-1998. For example, 3% of all female condoms slipped out of the woman's vagina; the rate was 11% at first use, but it fell steadily to less than 1% if the method had been used 15 times or more. Multivariate analyses confirmed the association suggested by these rates (Valappil et al, 2005, as cited in International Family Planning Perspective, 2005). Another study found that the female condom failure rate decreased among women at high risk of STIs from 20% at first use to 1.2% after 15 uses of the female condom (Valappil et al, 2005). Thus, a bit of practice is the main thing that is needed.

On whether female condom increases levels of protected intercourse, a study by Kyung-Hee Choi et al concluded that introduction of the female condom led to an increase after three months in the percentage of protected sex without decreasing the level of male condom use (Kyung-Hee et al, 2003. In: Heidi Worley. www.prb.org.)

Laboratory studies have found the device impermeable to various sexually transmitted infections (STIs), including HIV. Using female condom contraceptive effectiveness data and modeling, a study estimated that perfect use of the female condom might reduce the annual risk of acquiring HIV by more than 90 percent among women who have intercourse twice weekly with an infected male (Russell, Sturgen, Strickler. In FHI Research Briefs on the female condom No 2).

One human study has found that the female condom protects against trichomoniasis, the most common curable STI in the world. One hundred and four women who had been previously diagnosed and treated for trichomoniasis were offered a female condom. Those who said they used the device consistently were put in the "user" group; the others were put in the control group. None of the 20 women who used the female condom consistently for 45 days became reinfected, compared to 15 percent reinfected among those in the user group who used it inconsistently (5 of 34) and 14 percent reinfected who used no protection (7 of 50) (Soper, Shoupe & Sharigold, 1993).

The female condom is a new barrier method for use by women that could reduce the risk of sexual transmission of HIV by increasing the choices for sexual protection available to sexually active men and women. Correct use of the female condom reduces the per act probability of HIV transmission by 97%, which is similar to the level of protection offered by the male condom (Young, 1997; Cecil et al., 1998). Many people believe that the female condom will make it easier for women to protect themselves against HIV transmission because it is the first barrier method that is not entirely dependent on the male partner's willingness to use it.

2.10 Acceptability of the female condom

Product acceptability is critical to the correct and sustained use of any method. No one wants to use a product that feels uncomfortable, so a variety of studies have been done on how users and their partners feel about the female condom. The results of this research vary from place to place and from study to study, but the overall finding is that the female

condom is acceptable to many women and men. This is especially true when they are already familiar with the male condom. Introduction studies in more than 45 countries have confirmed the method's acceptability among both men and women (WHO, 1997; UNAIDS, 2000).

Women who perceive themselves at high risk for infection and/or unwanted pregnancy are more inclined to accept the female condom. A Zimbabwean study in 1995 indicated that participants feared pregnancy and contracting STIs because men would puncture pinholes in male condoms. These women found the female condom acceptable (Ray et al, 1995).

FHI studies of the female condom found that many women liked the device and would recommend it to others. Women tended to accept the device more favourably than men did. While women in general would recommend the device to other women and felt fairly positive about it, many of the women in the studies discontinued use due to partner objections. Overall, difficulties of insertion decreased as experience with the device increased, and use became more comfortable and acceptable with practice. The acceptability of the female condom can be assessed by examining the advantages and disadvantages cited by the FHI study participants. The advantages includes: Female-controlled; More comfortable to men, less decrease in sensation than with the male condom; Offers greater protection (covers both internal and external genitalia), More convenient (can be inserted pre-coitus); Stronger (polyurethane is 40% stronger than latex) (FHI, http://www.FHI.org/en/RH/FAQs/female condom_faq.htm).

In the female condom rapid situation assessment carried out in four states in Nigeria known to have histories of female condom promotion activities using qualitative method of data collection, though the situation analysis did not set out to assess issues relating to female condom acceptability, available evidence from pilot studies revealed good acceptability among married women (UNFPA, 2005).

Thirty married women evaluated the Reality female condom with questionnaires about it's acceptability for 300 acts of coitus. The results showed that 90 percent of the couples considered the female condom to be an acceptable method and 86.7 percent to be a good contraceptive device; the majority of couples (86.7 percent) found it easy to use'. 80 percent of female and 73.3 percent of male reported that in comparison to the male condom, the effect on sexual pleasure was either no different or better. However, only a little more than half of the couples (55.2 percent) preferred it to the male condom (Xiadoo, Liuqi & Yu, 2002).

Sixty-eight Zimbabwean women who had completed a barrier-methods study and 34 of their male partners participated in focus group discussions and in-depth interviews to qualitatively explore acceptability of male condoms, female condoms and diaphragm. Although many men in this study realized the importance of using protective methods and wanted to be the decision makers for overall method use, they did not want to be responsible for method compliance. Thus, both men and women liked the idea of a product that was female controlled. Women were generally seen as responsible for

contraception and HIV/STI prevention, while men were generally seen as bringing STI into the home and were resistant to method use. The men and women recognize that there was little a woman could do if her partner did not want to wear a male condom. They reported that the female condom is better because a woman inserted it herself and did not have to count on the male partner to wear it. Few men spoke about the female condom in relation to sexual experience. Of those that did, they reported that it was uncomfortable and made their partner's outer genitalia inaccessible. However, female condoms were thought effective against HIV/STI and pregnancy if used properly. A few participants reported that the lubricant on male and female condom was too wet and slippery. As in other studies, most participants disliked the female condom because it distracted from sexual pleasure, made noise, restricted access to outer genitalia, could not be used without partner cooperation and movement of the female condom allowed for the penis to enter the vagina alongside rather than within the female condom. However, a few women in this study were very excited about the female condom. They liked it because it is easy to use and efficacious, made sex more pleasurable than male condoms, and is female-controlled.

2.11 Knowledge, Attitudes and Intentions Concerning Female Condom Use

A study by Bogart, Cecil and Pinkerton (2000) on Hispanic Adults' Beliefs, Attitudes, and Intentions Regarding the Female Condom examined respondents' level of AIDS knowledge and the relationship of AIDS knowledge to attitudes and norms regarding the female condom. Most respondents were unfamiliar with the female condom. Half of the

sample (56.2%) reported having heard of the female condom prior to viewing a videotape on it. The majority of the respondents (94.5%) indicated that they had not used the female condom. Results further showed that overall attitudes towards the female condom were neither negative nor positive, and normative beliefs toward the female condom were moderately positive. Most of the participants did not think that their church wanted them to use the female condom. Intentions to use the female condom were correlated significantly with attitudes, self-efficacy, AIDS knowledge, and condom use at last intercourse. Overall, respondents with more positive attitudes towards the female condom, higher self-efficacy to use the female condom, and lower levels of AIDS knowledge reported greater intentions to use the female condom. Women's intention to use the female condom was significantly correlated with more positive attitudes toward the female condom and greater self-efficacy to use the female condom.

In a cross-sectional study of female condom awareness, usage and concerns among female undergraduates of the University of Ibadan, Nigeria conducted in September 2004, over 80% had knowledge of the female condom as a form of modern contraception and the majority of them learnt about it through the mass media (39.9%) and health workers (34.4%). However only 11.3% had ever used the female condom, with most (40%) using it to prevent both unwanted pregnancy and sexually transmitted infections, including HIV. The sexual partners' approval was appreciable, accounting for about 42.7% among those that had experience of the female condom usage. The result of this study looks promising judging from a high awareness level of the female condom, even though its usage is low. The female condom may be an alternative strategy to combat

unsafe sexual practices and its sequelae in a country like Nigeria that is male dominated (Okunlola, Morhason-Bello, Owonikoko & Adekunle, 2006).

In another study by Bogart, Cecil and Pinkerton (2000) on intention to use the Female Condom among African American Adults, it was reported that the average intentions to use female condom were low and intentions to use the female condom with main partners were significantly lower than were intentions to use the female condom with casual partners. Mean attitudes towards using female condom was positive. Moreover, participants' beliefs about the female condom were neither very positive nor very negative. For women, positive attitudes toward the female condom were related to the belief that the female condom makes it easier to have an orgasm. This is consistent with previous researches which have found that enhanced pleasure contributes to women's positive attitudes towards the female condom.

In one large study of almost 600 urban and rural women in South Africa, 84% of the women said they would use the female condom in future (UNAIDS, 1997).

In an exit interview conducted by Agha (1999) among a random sample of people visiting outlets that sell the female condom the following results were obtained with reference to their knowledge and intention to use the female condom.

KNOWLEDGE: About 87% of the sample interviewed had ever heard of the female condom. It is worth noting that among 15-19 years olds a substantial proportion (78%) have already heard of the female condom. The two most important correlates of having

heard of the female condom are education and socio-economic status. Knowledge of the female condom ranges from 71% of those with 1-7 years of schooling, to 88% for those with 8-12 years of schooling, to 92% for those with 13 or more years of schooling. Higher socio-economic status is also associated with higher awareness of the female condom.

EVER USE: Among sexually active respondents, 12% had used the female condom. Use of the female condom is noticeably lower among those below age 25 than among older respondents. Respondents 25 and older are more likely to use the female condom than younger respondents. Only 7% of 15-19 years old and 9% of 20-24 year olds have used the female condom in the last 12 months, compared to roughly 15% of 25-49 year olds. Higher education is associated with higher levels of use of the female condom. Use of the female condom ranges from 6% for those with 1-7 years of education to 15% for those with at least 13 years of education.

From this study, users of the female condom are somewhat more likely to be married than users of the male condom (53% vs. 41%). Consistent with age differentials in use, user of the female condom are also more likely to be married than are users of the male condom. The pattern of use of the female condom as well as the profile of users in the study suggest that the female condom is likely to become particularly important in providing protection against HIV and unwanted pregnancy to women in marital partnerships.

The above study also showed that men were more likely to use the female condom with a steady partner than a casual partner. This is consistent with earlier researches done by El-

Bassel, Krishnan, Schilling, Witte and Gilbert in 1998. The fact that men are more willing to use the female condom with a marital or a regular partner than with a casual partner also suggests that the female condom may be a useful product for protecting many married women in sub-Saharan Africa (whose spouses often have multiple sexual partners) against HIV infection, especially since use of the male condom in marital relationships has remained low (De Zoysa, Sweat & Denison, 1996).

For the female condom rapid situation assessment that was carried out in four states in Nigeria known to have histories of female condom promotion activities using qualitative method of data collection, reports on common attitudes and beliefs towards female condom showed the mixed feelings from respondents as it related to willingness to use female condom with spouse. The respondents mentioned an inability to use female condom consistently due to lack of training and unavailability (UNFPA, 2005).

2.12 Factors Responsible For Low Use of Female Condom

Several reasons explain why the use of female condoms remains low throughout the world, especially in resource-poor settings. Policymaker bias, limited supplies and access, relatively higher cost, lack of understanding of how to use them and general discomfort on the part of both men and women with touching the woman's body to insert the condom, are all factors. Perhaps the most common reason for not using condoms is that they are perceived as awkward, uncomfortable and not sexy (Philpott et al. 2006)

The female condom has been on the market for over ten years but despite a clear need it has not yet been adopted for wider use. In 2005 only 14 million female condoms were distributed compared to 6-9 billion male condoms around the world. However, studies in many countries have shown that the female condom is well accepted among both women and men, and that there is demand for it. One of the problems in achieving its widespread distribution in national programmes has been its cost (Nakari, 2006).

Even if more manufacturers enter the market, the female condom will probably always cost more to produce than the male condom. Polyurethane is more expensive than latex and more of it is used. The manufacturing process itself is more costly even when large numbers are being produced. Data from 60 countries suggests that there is global demand for female condoms at a widely affordable price (UNAIDS, 1997).

2.13 Condom use within Marriage

In a Contraceptive Method Mix 2002 Analysis carried out by Population Reference Bureau, it was found that only 1.2% of married/in union women of reproductive age (15–49) in Nigeria use condom (Constella Futures, 2006). Studies on condom use among young single people have been numerous. However, the needs of the married population have been neglected by researchers and programme staff alike, (Hugonnet, Mosha & Todd, 2002). The main exceptions are a small intervention in Zimbabwe, studies of the behaviour of HIV discordant couples in Zambia, an exploratory study in Uganda, and a World Health Organization (WHO) sponsored study in six African countries. The WHO results are of great potential importance because they challenge the prevailing view that

greater condom uptake by couples in long-term relationships is a hopeless aim because of intractable resistance and that wives are powerless to protect themselves in the face of an adamant opposition from husbands (Hugonnet et al, 2002).

For tracking of behavioural trends, the Demographic and Health Surveys (DHS) have emerged as the premier source of reliable information because of their adherence to high standards of survey execution and standardized instruments. Eighteen countries in sub-Saharan Africa, representing over half of the sub-region's total population, have conducted two or more such surveys. The countries are equally split between East and Southern Africa, with severe HIV epidemics, and West and Central Africa, with less severe epidemics. With this geographic coverage, it is reasonable to generalize from the results of these surveys to the whole sub-region. For 13 out of the 18 countries in Sub-Saharan Africa, information from two or more DHSs is available on condom use at most recent coitus. The median dates of the earlier and most recent surveys are 1996 and 2002. Between 1996 and 2002, the percentage of single women reporting condom use at last coitus rose from 19.3% to 28.4%, equivalent to an average annual increase of 2.1 percentage points, whereas the parallel increase for married women was negligible: 3.7% to 4.5%. (Cleland et al, 2006)

Twenty-five years into the HIV/AIDS epidemic, condom use among married/stable couples remain low and under-researched in developing countries, even among countries with high HIV prevalence. This might probably due to the notion that introducing

condoms into a long-standing relationship, in spite of HIV risk, is likely to be awkward (Williamson et al, 2006).

Rates of condom use are lower within marriage than among sexually active unmarried (Population Reports, 1999). Yet, many married couples need condoms both for family planning and for protection against sexually transmitted infections, including HIV. The need for condoms is growing as HIV/AIDS and other sexually transmitted infections (STIs) spread. Narrowing the gap between condom need and condom use would save many lives and reduce the enormous consequences and costs of STIs, HIV/AIDS, and unintended pregnancy within marriages.

Worldwide, condoms rank near the bottom among contraceptive methods used by married couples. According to Population Reports in 1999, an estimated 44 million married couples used condoms for family planning. These 44 million make up about 4% of all couples in which the wife is of reproductive age, and about 7% of married couples who are using some method of family planning. This estimate is based largely on surveys of women of reproductive age.

In developing countries, the prevalence of condom use among married women of reproductive age is between 2% and 6% in about half of countries surveyed and below 2% in the other half. In Cameroon, Ghana, and Zambia, for example, fewer than 4% of couples use condoms (United Nations, 1999). This low level of condom use within marriage does not necessarily imply high risk of HIV/AIDS or other sexually transmitted

infections (STIs). If both members of a married couple are free of infection and the couple remain monogamous, their risk of contracting an STI is virtually nil, and other modern contraceptives are available for family planning.

Monogamy, however, should not be taken for granted. A review of studies in 63 countries found that many married men have sex with someone other than their spouse. Many of these studies were not nationally representative, and the percentage having extramarital sex varied widely, from 3% to 73% among the groups of men studied (Population Reports, 1999).

The number of condoms used each year to prevent unintended pregnancies within marriage is an estimated 3 billion. This is 12% of the 24 billion condoms needed. This figure is based on the percentage of men in each country who are married, the percentage of married couples currently using condoms as their method of contraception, and frequency of sexual relations among married couples as reported in surveys. The percentage is low because few couples who practice family planning use condoms as their contraceptive method (Population Reports, 1999).

Uganda, a country of 26.9 million people, has both large number of people living with HIV and AIDS and high fertility. The 2005 HIV prevalence for adults aged 15+ was 6.7% with an estimated 900, 000 people infected (UNAIDS, 2006). The total fertility rate is 6.9, the fifth highest in the world, with the population growing at 3.3% annually. Yet

less than a quarter (23%) of married women aged 15-49 use any method of contraception; only 18% use modern methods (Population Reference Bureau, 2006.).

In spite of so many deaths from AIDS and high fertility, few Uganda men and women in marital or cohabiting relationships report use of condoms. According to the 2000-1 Ugandan Demographic and Health Survey, only 3.8% of men and 2.2% of women with a spouse or cohabiting partner reported using condoms at last sexual intercourse with their spouse or partner. In contrast, condom use at last sexual intercourse with a non-cohabiting partner was reported to be 59.7% for married/cohabiting men and 24.2% for married/cohabiting women (Ugandan Bureau of Statistics & ORC Macro, 2001).

A qualitative study was conducted in Kampala, Uganda by Nancy E Williamson et al (2006) with 39 couples reporting 100% condom use in the previous three month. The women were recruited from among women in a clinical trial who were using condoms and whose partners also agreed to participate. The respondents had been in their current relationship for an average of 12 years. A majority of the 78 respondents (30 women and 29 men) said that one of the reasons they used condoms was for family planning reasons or more specifically, to prevent pregnancy. While 45 of 78 partners cited disease prevention as a reason they used condoms, only 17 specified lack of trust in their partner as a motivator for condom use. Of the 30 women who said they suggested condom use to their partner, about half (14 of 30) reported that their male partner accepted the idea with little or no resistance. The women used diverse strategies to deal with expected male resistance and often cited multiple reasons to use condoms. Some said it took courage as

they expected rejection. But they felt they had to take one risk (partner's negative reaction) to avoid another (HIV infection or unwanted pregnancy). Women's insistence on condom use did not upset their partner as much as the women expected, given that male dominance was commonly reported in their responses to questions about gender. Men's reasons for accepting condoms were to please their partner, protect her from HIV, protect their children, protect themselves and, in some cases, continue having other partners. Most respondents reported they were satisfied with the sexual relationship with their steady/marriage partner. For the majority, condom use did not affect their sex life. Only two men reported that their wives were resistant to the use of condoms. They also reported high levels of communication and believed that this helped them achieve consistent condom use. Aspects of communication noted as important to consistent condom use included discussion, agreement, trust and honesty. Women's ability to discuss female condom use with a partner is likely to be an important determinant of its use with that partner (AIDS Control and Prevention Project, 1997; Gardner, Blackburn & Upadhyay, 1999)

It must be said that few public health campaigns have promoted condoms to stable and married couples since the HIV epidemic began (the Caribbean being a notable exception). Social acceptance of the need for condom use in marriage has been glaringly absent. Yet the qualitative study by Nancy Williamson et al (2006) among 39 married couples in Uganda who used condoms consistently, shows that it is feasible.

It has been reported that in Nigeria, the barriers to the use of female condom which if addressed will promote its use included: the need for male involvement, not being widely available, and the need to train providers to teach women how to use the product (Constella Futures, 2006).

2.14 Married Women and STI/HIV/AIDS

Women comprise a growing proportion of those newly infected with HIV, in both the developing and developed world. Of the total number of 40.3 million people worldwide who lived with HIV in 2005, 17.5 million were women (UNAIDS, 2005). In Sub-Saharan Africa, where the AIDS pandemic has hardest hit women, 57% of those who tested positive for HIV are women, and at least one-third of these women are married (UNAIDS, 2004).

Women are physiologically more susceptible to the contraction of STIs/HIV than men. Worldwide the disease burden of STIs in women is more than 5 times that in men (WHO, 1995a). A mutual interdependent relationship exists between STIs and HIV. Infections such as gonorrhea, trichomoniasis and chlamydia can increase the risk of HIV transmission from two to three fold (Quinn, 1996), this risk being greater in women because the physical area exposed to sexual secretions is larger than that of men. It is therefore crucial that women have access to methods they can initiate, control and use for protecting themselves against STIs including HIV/AIDS. Contraceptives that are most effective in preventing unplanned pregnancy provide, little, if any protection against the STIs, including the Human Immunodeficiency Virus (HIV), which causes the Acquired

Immunodeficiency Disease (AIDS) so a selection of barrier methods must be made available as widely as possible.

Women account for nearly 50 percent of people living with HIV worldwide. Eight out of ten infected women get the virus by having sex with an infected male partner (UNAIDS, 1997). In Nigeria, women now account for 62 per cent of HIV infections (Constella Futures, 2006).

Data from around the world, including in Nigeria, suggest that married women's greatest risk of contracting HIV is through having sex with their husbands (Federal Ministry of Health, 2004). Women's biological vulnerability to HIV through sexual intercourse is up to four times as high as men's. This is largely because of anatomy: the area of the female genitals exposed to semen and other sexual fluids during sex is four times larger than that of men. Women are also at more risk of getting infected because semen contains greater amount of the virus than vaginal fluids. Also, micro lesions occurring during intercourse may become an entry point for HIV. Both men and women run a much higher risk of infection with HIV if they have an untreated STI. But the problem is that STIs in women often cause no symptoms and consequently may get late treatment or none at all (UNAIDS/WHO, 1997).

Women are mostly getting infected at a younger age than men as a consequence of sexual networking patterns. Women tend to have sexual relationships with men at least a few years older, whether inside or outside marriage. In some cultures, men marry women up

to ten years younger, and they often have extra-marital relations with younger women (and with younger men) (Berer, 2006). In each such relationship, the older man has had more chance to be exposed to HIV, both because he is older and because he is likely to have had more sexual relationships. Hence, the chain of transmission means more infected women (Berer, Ray, 1993). That does not mean, however, that men are less at risk of HIV. Quite the contrary; men are more at risk at older ages (Berer, 2006).

Many people think that a woman is only at risk if she has many sex partners or is a sex worker. This is far from true as many women are infected by the only man they have ever had sex with- their husband. It may be difficult for them to argue with their husband's decision, particularly on when and how to have sex. Women who have more than one partner are often in an even weaker position to insist on protection.

Rates of HIV among married women or those in committed partnerships are increasingly rapidly worldwide. One in four women are HIV positive by the age of 24 in South Africa and 90 percent of female infection in India occur within marriage, challenging the concept of those traditionally deemed to be at high risk of infection (www.cldis.org/hivaids/prevention/femalecondom.htm). Polygamy, sexual coercion and violence all contribute to these statistics while abstinence and monogamy are inadequate defenses for women who often marry young and are deprived of education and social status.

Many married women perceive themselves to be at risk of HIV infection but do not use any barrier method. Among female condom users, married women are more likely than single women to encounter partner resistance to the female condom and less likely to report future use. They also are less likely than single women to have used male condoms prior to trying the female condom (Kerrigan, Mobley, Rutenberg, Fisher & Weiss, 2000).

As the AIDS pandemic has become globalized and feminized, women in developing countries have become more at risk of HIV infection- including married women. In sub-Saharan Africa, where women have been hardest hit by the AIDS pandemic, 57 percent of those who test positive for HIV are women, and at least one-third of these are married. (UNAIDS, UNFPA & UNIFEM. 2004). More than four-fifths of new infections in women result from sex with husband/primary partners (Usmani, 2002). Yet the vast majority of married women at risk are not using any barrier method during sex. According to UNAIDS, only 4.9 percent of married women worldwide use condoms, including only 1.3 percent in sub-Saharan Africa (womenandaids.unaids.org.). Given this context, many analysts think the female condom should become an important tool for HIV prevention, especially for married women.

In regions such as the sub-Saharan Africa where substantial proportions of sexually active persons are infected with HIV, many monogamous women are also at high risk of HIV transmission (De Zoysa et al, 1996; Young, 1997). In such situations, mass availability and use of the female condom could play an important role in increasing women's protection against HIV. Because it might enable women to initiate condom use,

the female condom has been widely recognized as an important step towards providing women with a means to protect themselves against HIV infection and unwanted pregnancies.

2.15 Redesigning the Female Condom

A new female condom design, much the same at one end, different at the other has been developed by PATH, a nonprofit group based in Seattle, USA and its makers hope it will succeed where its predecessor failed. For couples who have agreed on condoms, the new design has several advantages. The redesigned female condom is made of softer, thinner polyurethane to better transmit warmth. It is easier to insert; one end is bunched up as small as a tampon, an improvement on the old design, which resembled the stiff rubber ring of a diaphragm and had to be folded into a figure 8 for insertion (McNeil, 2007).

During sex, the new female condom also moves more like a vagina than the old design did, according to couples in Seattle, Thailand, Mexico and South Africa who tested a series of prototypes, said Joanie Robertson, project manager for the condom at PATH. The old design hung passively from the rubber ring, which could shift around and sometimes hurt; the new design has dots of adhesive foam that adhere to the vaginal walls, expanding with them during arousal. According to PATH, more than 90 percent of the couples were satisfied with the ease of use and comfort of the new condom, and 98 percent found the sensation of sex to be "O.K. to very satisfactory" (McNeil, 2007).

However, the new design does not overcome the glaring drawback that doomed the first to be a niche product: it cannot be used secretly. For that reason, married women, now one of the highest risk groups for AIDS in poor countries, rarely use it.

"I don't want my husband to know that I am wearing a condom," said Lois B. Chingandu, the director of SAfaids, an anti-AIDS organization in Zimbabwe.

"Condoms are almost undiscussable within a marriage" in Africa, she added. "It is something associated with casual sex. If a wife uses a condom, the message is that you have been unfaithful. If she even initiates the discussion, it tips the power scale. Men resist quite a lot, and it can result in violence" (McNeil, 2007).

2.16 Male Involvement in Female Condom Use

Effective use of the female condom also depends on a variety of factors, including male involvement in the decision to use it. Program planners and advocates now refer to the female condom as a female-initiated method, underscoring that the increased participation of men is important for its future success.

Women's lack of control over their sexual protection is an important concern in many parts of the world including sub-Saharan Africa. Women have expressed their desire to use a method of protection against HIV that can be used without their partner's knowledge (Ray et al, 1995). Even though it might allow women a greater measure of control over condom use, the cooperation of sexual partners will remain necessary for consistent use of the female condom (Young, 1997).

In acceptability trials, women's responses to female condom use have often been male-centered (Ray et al, 1995). Men may oppose use of the female condom if they perceive that this device increases women's ability to engage in other sexual relationships or if it changes the balance of power in a relationship. On the other hand, men may prefer using the female condom if it gives them more pleasure than using of the male condom, and some men may prefer not being responsible for HIV protection (Ray et al, 1995). Although there is some evidence that women discontinued use or do not use the female condom because of partner opposition (Ruminjo et al, 1996; Young, 1997), men have reported positive opinions about the female condom in most studies (Young, 1997; El-Bassel et al, 1998).

Research has revealed that a man's reaction to the female condom is often an important factor in whether his female partner uses the method (Welsh et al, 2001; Ford & Elspeth, 1993; Green et al, 2001). Some studies have found men amenable to the female condom. A study in Zimbabwe found that, although women initiate the dialogue about using the method, both partners jointly decide to use it (Kerrigan, as cited in Heidi Worley.www.prb.org.)

Partner satisfaction with the method has been associated with repeated use, and women who find the female condom easy to use frequently cite lack of partner objection (Hoffman, as cited in Heidi Worley. www.prb.org.). Other researches have found that men's objections to the method are decisive in women's decisions not to use it. In South Africa where the female condom has been incorporated into the national family planning

program, partner object was the leading obstacle causing women to abandon use of the method (Beksinska et al, 2001).

Other analysis have found that some men may believe the female condom and other female-controlled methods give women too much control over sex (Pool et al, 2000). These objections can mean unprotected sex. In the Zimbabwe study, nearly 25 percent of women reported their partner opposed female condom use and about 50 percent of those women ended up having unprotected sex. Married women often resort to strategies other than direct negotiation to convince their partner to use the female condom, such as telling their partner that sex will be more enjoyable or that it will be possible during menstruation.

2.17 Reusing the Female Condom

The female condom is currently approved by the US Food and Drug Administration for one-time use. Some experts believe that if reuse were possible, it could reduce the device's cost and result in more protected sex acts. Female condom reuse has been reported in a number of countries, particularly in resource-poor settings (Smith, Nkhama & Sebastian, 1999). Although the World Health Organization (WHO) does not recommend or promote the device's reuse, WHO stated in July 2002 that the final decision on whether or not to support reuse of the female condom must ultimately be taken locally (WHO, 2002a. http//www.who.int/reproductive-heart/ris/female_condom.en.html). WHO continues to recommend the use of a new male

or female condom for every act of sexual intercourse where there is risk of unplanned pregnancy or of acquiring a sexually transmitted infection (STI) such as HIV.

Acknowledging that some women may not have access to new female condoms, however, WHO has also developed a protocol for cleaning and handling female condoms so that they can be reused safely (WHO, 2002b. http//www.who.int/reproductive-heart/rtis/female_condom.en.html). A single female condom may be used up to five times provided that after each use, it is cleaned and handled according to WHO guidelines. Research has found that the female condom remain structurally sound after repeated cycles of bleach disinfection and washing.

A WHO funded study found that the structural integrity paramcters of the device remained well above the manufacturer's standards for integrity of new condoms after been disinfected for 30 minutes in a 1-to-5 dilution of bleach in water, washed in soap, dried, and lubricated up to seven times. Three batches of 300 unused condoms were tested in a laboratory for water leakage, seam strength and burst pressure after being subjected to the washing procedure. Three of the 900 devices tested were found to contain holes, but these defects were thought to have been caused by handling rather than chemical deterioration (Potter, 2002).

A study of re-use in Johannesburg, South Africa, among a group of 100 women aged 17-43 who were attending a family planning or STI clinic, and another group of 50 women aged 18-40 at high risk of STIs, including 80% who were sex workers, found that the

concept of re-use of the female condom was acceptable to 93%, while 83% said they would be willing to re-use the female condom. The 49 women who did re-use female condoms up to seven times during the study said the steps involved in cleaning the condom for re-use were easy to perform and acceptable (Pettifor, Beksinska & Rees, 2001).

A study conducted in South Africa has determined that female condoms retain their structural integrity after careful washing and reuse. Fifty sex workers and female clients of an STI clinic were asked to wash a female condom after use by rinsing it, washing it in liquid detergent for a minute, rinsing it again, patting it dry with clean tissues or a towel or allowing it to air-dry, then re-lubricating it with vegetable oil and using it again. After reuse, the used condoms were sent to a laboratory for testing under US Food and Drug Administration (FDA) standards for leakage, maximum pressure bursting and strength of seams, all of which they passed. Study participants were asked to repeat the process with a new female condom, this time washing it twice to use it three times. This procedure was repeated for up to eight uses. Three-fifths of the women chose to air-dry the condoms, 99 per cent re-lubricated them before use, generally with baby oil, sunflower oil or petroleum jelly. Among the 295 condoms used and returned during the study, only five holes were detected after different number of reuses, representing a breakage rate of 2 per cent. Three women had noticed these holes and alerted study staff themselves, while two were discovered during leakage tests. Four of the five were on the part of the female condom that remains outside the vagina and is twisted during its removal. The results suggest that proper washing and reuse of female condoms did not

cause damage, and that in situations where using a female condom is not possible with each act of intercourse, reuse is feasible (Beksinska et al, 2001).

2.18 Conceptual /Theoretical Framework

Theories and models are very important tools in health education because they essentially provide a basis for understanding individual behaviour and those factors that influence such behaviour, enabling programmes to be developed to provide solutions to problems and as a foundation for planning appropriate interventions (Van Ryn & Heaney, 1992).

Theory is considered to be a systematically organized knowledge applicable to a relatively wide variety of circumstances devised to analyze, predict or explain the nature of behaviour of a specified set of phenomena while models are basically considered to be a visual construct of proposed causal linkages among a set of concepts believed to be related to a particular public health problem (Earp & Ennett, 1991). Human behaviour results from interaction between an individual and determinants such as biological, psychological, socio-cultural, environmental and structural spheres, which facilitates it (McLeroy, Bibeau, Steckler & Glanz, 1987). This therefore means that in planning research and intervention programmes in health education, it is of utmost importance to consider not only the individual as a stand-alone entity but also the environmental and social forces that are involved in generating or facilitating the individual's behaviour. Most models accommodate a combination of certain aspects of theories within its construct that enables clearer understanding and diagnosis of human behaviours.

In this study, the Trans-theoretical model (stages of change model) originated by Prochaska and colleagues (1994) was used to analyze the behaviour of the married women towards adopting the practice of using female condom. This model was adopted

to provide a clear explanation of how the important variables are linked so that the hypothesis and instrument developed would capture the concept being studied.

The Trans-theoretical (Stages of Change) Model

This model seeks to explore the stages a person will pass through before choosing to adopt a particular practice. It comprises of the following stages:

1. **Pre-Contemplation:** No intention in unforeseeable future
2. **Contemplation:** Not currently but intend
3. **Preparation:** Have tried and intend to continue
4. **Action:** Are carrying out the action regularly
5. **Maintenance:** Have taken the action for a considerable period

This model begins with precontemplation and moves through contemplation, planning and action until the new behaviour is internalized at the maintenance stage. It also addresses the issue of relapse and the need to prevent it at the maintenance stage through adequate social support.

Stages of Change Model applied to Knowledge of, and Intention to Use the Female Condom

1. **Precontemplation:** The married women are not currently aware of the existence of the female condom or are aware but not thinking about ever using it
2. **Contemplation:** The married women are aware of the existence of the female condom and the benefits of using it. At this stage they are thinking about making a positive change in their behaviour towards the use of the female condom.

3. **Preparation:** The married women acquire more knowledge about the female condom use and the skills needed to wear the female condom correctly. They may have also tried to wear it.

4. **Action:** The married women have started using the female condom regularly to protect themselves from unintended pregnancies and sexually transmitted infections (STIs) and HIV/AIDS.

5. **Maintenance:** The married women have fully adopted the practice of regular use of the female condom.

6. **Relapse Prevention:** The married women may start using the female condom, stop at some point in time and resume use again. They make several attempts at maintenance and cycle through the lower stages until they finally use it consistently.

Assumptions

In conducting this study, certain assumptions have been made.

The first assumption is that the knowledge, attitude and practices of married women in Oyo state and southwest Nigeria will be the same.

The second assumption is that the factors that could either promote or hinder the adoption of female condom use are the same throughout the country.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

This study employs a descriptive, cross-sectional survey research design to identify knowledge, attitudes and intention of married women in Ibadan on usage of the female condom. Thus the goal of this research is to document the level of awareness about the female condom among married women and factors that affect usage of the female condom or their intention to use it as a form of dual protection method against unintended pregnancy and sexually transmitted infections (STIs), including HIV/AIDS.

3.2 Description of the Study Area

Ibadan is the capital city of Oyo state located in the southwest region of Nigeria. It is a metropolitan urban city of multiple ethnicities with a total estimated population of 5,591,589 (National Population Commision, 2006). Ibadan is the largest city in West Africa and the third largest in the world. It lies roughly on latitude 7N and 4S. It is located at the boundary between the rain forest and the grassland region of the southwestern part of Nigeria. The city is bounded by Oluyole LGA on the south, southwestern and south-eastern sides by Lagelu LGA on the northern and eastern sides and Akinyele LGA on the northern and western sides (Federal Survey, 1967). Ibadan has 11 local government areas, 5 urban and 6 peri-urban local governments. Ibadan is the

largest of contemporary traditional Yoruba towns in Nigeria and is typified by traditional and cultural norms, which dictates human acts and conduct.

Ibadan Southwest Local Government Area (LGA) of Oyo State was created on the 27th of August 1991 and is the second largest of the five LGAs carved out from the former Ibadan Municipal Government in 1991. It has its Administrative Headquarter in Oluyole Estate within the office complex of the former Ibadan Municipal Town Planning Authority, along M. K. O. Abiola Way. It is 150 km from Lagos and 658km from Abuja. It is bounded in the North by the Ibadan North and Ibadan North East local governments' areas, in the East by the Ibadan South East and Oluyole local government areas, in the south by Iddo local government area and in the west by Ibadan North West local government area. It comprises of 12 political wards and has a 1991 census figure of 274,028 people, of which the males accounted for 50.03% (189,772.29) and the females were 49.97% (189,545.7) of the total population (Oyo vision projectSDT, 2002). The women of Reproductive age as at 1991 constituted about 22% (83,451) of the population.

There are three types of population density areas in the Local Government Area namely the high, medium and low-density areas. The highly populated residential areas are Foko, Oja'ba, Agbeni, Idi Arere, Isale Osi, Popoyemoja and Bode. The medium density residential areas are Molete, Oke Ado, Challenge, Ososami, Anfani, Ajeigbe, Olusanya, Ring road, Oke Bola, Odo Ona and Apata. The Government Reservation Area (GRA) of Iyaganku and Oluyole Estate comprises the low-density areas. About 90% of the

inhabitants of the LGA are Yorubas. There are pockets of other tribes like the Igbos and Hausas resident there. Foreign nationals, especially the Lebanese also abound in the area.

Occupationally, majority (about 60%) of the population are involved in trading activities. These are followed by those involved in craftsmanship/artisans (25%), those involved in public service (10%), those offering various types of services (2%) and those involved in manufacturing (2%). Less than 3% of the residents of the Local Government engage in farming activities. The food crops commonly grown there are cassava and maize.

Ibadan southwest local government area has a total number of twelve (12) Health Centers located at the following areas: Oja'ba, Akere, Foko, Molete, Alesinloye, Government College, Adifase, Awodife, Elewura, Oke Bola, Odo Ona and the Local Government Headquarter at Oluyole Estate. In addition to these, there are seven (7) State Health Centers and one Federal Government Health establishment. 154 other health care facilities (132 privately owned and 22 mission owned hospitals) are also rendering services in the local government (Oyo Vision ProjectSDT, 2002).

Most of the outlets for distribution of the female condom in Oyo State are located there. This includes the federal owned Railway hospital, state hospitals like Ring Road State Hospital, Oni Memorial Children Hospital, Jericho Nursing Home, Maternal and Child Health Centre Moor Plantation, and the two family planning clinics of the Planned Parenthood Federation of Nigeria (PPFN), apart from the primary health care centres that are being supplied female condom by the state ministry of health.

3.3 Description of Target Population

The targeted populations were married women living in Ibadan South west local government area in Ibadan, Oyo state Nigeria. Eligible respondents were married women between the ages of 15 to 49 which constitute the reproductive age group. This study was limited to married women living in six wards out of the 12 wards in Ibadan southwest local government area of Oyo state.

3.4 Sampling Technique

The multi-stage sampling method was used in selecting the women that participated in this household survey. There are twelve (12) wards in Ibadan South West local government, each consisting of a number of compounds/households. A ward is an administrative or electoral division of a town. Each ward is made up of Districts.

The selected wards/districts for this study are outlined below:

1. Ward 2 - Isale Osi
2. Ward 6 - Foko
3. Ward 8 - Iyaganku
4. Ward 10 - Oke Ado
5. Ward 11 - Oluyole
6. Ward 12 - Apata

The procedure for selection is highlighted below:

Step 1: The local government area was stratified into twelve political wards

Step 2: A sampling frame consisting of the list of all the districts under the 12 political wards located in the area of study was made

Step 3: The names of the districts were written on different sheet of papers of equal size and colour and divided first into 12 groups based on the ward under which they belong.

Step 5: These papers were then squeezed into little balls and put in 12 different bowls.

Step 6: These 12 bowls were separated into 3 groups based on whether they fall under the high, medium or low population density areas. This was to ensure equal representation of respondents from the local government area.

Step 7: The balloting system of simple random sampling was now used to select one paper from two bowls out of the 3 groups.

Step 8: From the chosen districts, streets/avenues/compounds were randomly selected by balloting.

Step 9: Households (Houses at each side of the street/avenue) were selected using the systematic random sampling method.

Step 10: Each selected household was required to produce a married woman who will participate in the research. In a household with more than one married woman available, balloting was done to produce the married woman in the household who was interviewed using the questionnaire.

3.5 Sample size

The sample size for this study was calculated using the Leslie and Kish formula below. The prevalence of female condom knowledge (56.2%) was arrived at based on the research work done by Bogart et al in 2000, on Hispanic Adults' Beliefs, Attitudes, and Intentions Regarding the Female Condom in year 2000 where he examined respondents' level of AIDS knowledge and the relationship of AIDS knowledge to attitudes and norms

regarding the female condom. The study showed that most respondents were unfamiliar with the female condom. Half of the sample (56.2%) reported having heard of the female condom prior to viewing a videotape on it. .The degree of accuracy desired in this study i.e. the precision is 5% = 0.05, the confidence level to be used is 95% which corresponds to the value of 1.96. This formula was used because the study was being done in an area that has a total population of more than 10,000.

Formula used: $$n = \frac{z^2pq}{d^2} = \frac{(1.96)^2(0.56)(0.44)}{(0.05)^2} = 379$$

Where n = the desired sample size

Z = the standard normal deviate. Usually set at 1.96 which corresponds to the 95 percent confidence level

p = the proportion in the target population estimated to have heard about female condom

q = the proportion in the target population estimated not to have heard about female condom = 1.0 – p

d = the degree of accuracy

To take care of attrition, 5% of the calculated sample size was added to make up to 398.

3.6 Instrument for Data Collection

The data for this study was collected using both quantitative and qualitative data collection methods. The instrument used for the quantitative data were interviewer-administered, semi structured questionnaires while for the qualitative data, focus group discussion guide was used.

First, a pretested Focus Group Discussion (FGD) guide containing discussion questions on opinions, attitudes and practice towards the use of the female condom was used to collect qualitative data. The instrument had the following sections: discussion starter, main discussion points and conclusion (See Appendix One). Eight (8) Focus Group Discussions was conducted in the study area. This was carried out among married women (N= 8) in eight different groups; they were stratified based on age, educational level and socio-economic class. At the FGDs there was a recorder who wrote down all that was discussed, an observer and the moderator. The FGD guide consisting of 9 questions was used to guide the discussions, despite the fact that the discussion was flexible in nature. A very good tape recorder (Electronic) was used to assist in recording the discussion so that no important information would be lost and high quality audiotapes were used. Refreshment was served during each FGD. The FGDs lasted for approximately 2 hours for each session. After each FGD session, the discussion on the audiotape was carefully listened to, transcribed and narrative themes were generated. The theme by theme analysis of the transcribed data was done based on the research questions. This thematic approach was used to bring out individual responses from the FGD. These responses were reported verbatim according to either minority or majority reports. The information

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elicited from the focus group discussion was used to modify the questions in the questionnaire.

The quantitative method of data collection was in form of a questionnaire. The items on the questionnaire were divided into two sections: demographic data and questions on awareness, knowledge, usage and intention to use the female condom expressed in 171 items. (See Appendix Two). Open-ended and close-ended questions were utilized in formulating the questionnaire. It was interviewer administered and questions were asked in the language the respondents could understand. The pretested questionnaires were administered among the estimated sample population.

3.7 Validity

Validity can be defined as the degree to which the test measures what it is supposed to measure (Key, 1997). Approaches to the validity of tests and measures include content and construct validity. To ensure validity of the data collected, several steps were taken. Groups of items which are representative of the content of the trait to be measured were obtained. These include knowledge, attitude, practices and demographic information. Both the qualitative and quantitative tool were written in simple English and translated into Yoruba language. This was designed to aid the comprehension of the respondents. The validity of the contents of the questionnaire was strengthened through review of literature and supportive information obtained during the Focus Group Discussions. Furthermore, review of the instrument by the researcher's supervisor and other senior colleagues was extensively undertaken to provide face validity.

3.8 Reliability

The reliability of a research instrument concerns the extent to which the instrument yields the same results on repeated trials. Reliability for the instruments used in this study was enhanced through pretesting the qualitative instrument (FGD guide) and quantitative instrument (questionnaire) among married women in a population that had similar characteristics with the actual study population but did not consist of those who participated in the real study. Therefore, the pretesting was done in Ibadan North local government area (LGA) located in Ibadan, Oyo state. Forty married women participated in the quantitative data pretest exercise in Ibadan North LGA and 16 women in the qualitative data pretesting. The pretesting enabled the researcher to discover possible errors and ambiguities, which were rectified before the final administration of the tools.

The developed Focus group discussion guide, after review and approval by the researcher's supervisor, was pre-tested among 16 married women in Ibadan North local government area divided into two age groups of 15-30 and 31-49 years. Pretesting of the quantitative tool revealed the need to translate it into Yoruba language. The translated version was also pretested. Interviewer's bias was eliminated because the researcher read out the questions in the focus group discussion guide to the participants in English and Yoruba Language. The pre test of the FGD guide further enhanced the validity and the suitability of the questions asked as this was used to modify the final draft of the FGD guide and survey questionnaires. Also, the focus group discussion guide was thoroughly studied so as to know the appropriate words to use that will bring about the needed response from the FGD participants.

A reliability test is done when trying to ascertain if a research instrument that has been designed is accurate, dependable and consistent over time. A Statistical Reliability Analysis was also done to test the reliability of the questionnaire and to measure its internal consistency. This involved the use of the Alpha (Cronbach) model of reliability analysis. The Alpha (Cronbach) model is a model of internal consistency, based on the average inter-item correlation. Here the questionnaire used for the pretest was divided into two and one set of the instrument was correlated with the other to obtain the coefficient of reliability. The closer the value of the reliability test is to 1, the more reliable the instrument is. A high correlation was obtained. The Alpha reliability coefficient was 0.8438 while the Guttman Split-half was 0.9359.

3.9 Method of Data Collection

Four female research assistants were recruited and participated in the data collection using the questionnaire. They were trained to ensure that they have adequate understanding of the instrument prior to commencement of data collection. The training focused on the objectives and importance of the study, sampling processes, how to secure respondents' informed consent, and review of questions to ensure completeness. Although the research assistants were experienced, refresher training was given on interviewing techniques. The questionnaire was discussed in detail and interviewer became familiar with it by conducting role-plays. The research assistants were also involved in pretesting of the questionnaire, which created opportunity for them to learn how to effectively collect the required data. This was time for them to practice how they

will go about collecting the data while the researcher watched to see how it was being done and to make any needed correction(s) before they were allowed to start data collection on the study population.

The research assistants involved in this survey went from house to house collecting data from the married women. They were also required to do a quick on the spot check on the filled questionnaire and clarify any vague answers from the participants immediately to avoid coming back for clarification. However they were warned to avoid asking leading questions. The researcher supervised the research assistants by monitoring their movements, moving round the community to crosscheck and make sure that they actually visited the households that were selected, and paying impromptu visit on the research participants while they were on the field. The actual collection of data lasted for six days. One day was spent in each of the six selected area. The research assistants completed the questionnaires within a period of 15 to 30 minutes depending on whether the respondents' attention was being needed elsewhere during the course of the interview. The researcher checked the questionnaires administered each day and problems discovered were resolved immediately.

3.10 Data Analysis

After the data collection exercise was over the questionnaires were collated and edited by the researcher with the help of the research assistants who helped in collecting them. The data was checked for completeness. Serial numbers were given to the questionnaires for easy identification and recall of the instrument and the questionnaires were stored in a

place safe from destruction by water or fire. During data cleaning, six records were eliminated because of missing data, leaving 392 respondents.

A coding guide was developed after careful review of the responses. The questionnaires were hand-coded by the researcher. A template was then designed on the Statistical Package for Social Sciences (SPSS) software for entering of the coded data. Each questionnaire response was entered into the computer using Statistical Package for Social Sciences (SPSS) software. This software was used to generate frequency data, tables and perform cross tabulation of variables.

The focus group discussions was transcribed, organized and summarized. Content analysis of the discussion was done. The aim of this analysis was to look for trends and patterns that reappear within either a group focus group or among the various focus groups. Points of agreement and disagreement among discussants in the various groups were identified. Trends and patterns, as well as frequently mentioned and strongly held opinions were noted. Comparisons were made between the different responses from various locations against themselves and responses between the 15-30 and 31-49 years age groups from the various locations. Similar responses were put together and then compared with contrasting ones. Findings from the FGDs were used to support or refute findings from the quantitative survey results.

3.11 Ethical Considerations

The survey followed standard ethical guidelines. Verbal consent was obtained from the respondents prior to questionnaire administration. Respondents' confidentiality was protected by: appropriate training for interviewers, adequate field supervision, limited access to completed questionnaires and no individual identifiers in the electronic data set. The following steps were taken to ensure that this research was conducted in an ethical manner. The questionnaire was prepared without including a section for writing of the name of the respondents' or their house addresses. This was to ensure confidentiality. Also an informed/understood consent form was prepared which the respondent first of all read and understood before the research assistant administers the questionnaire. (See Appendix four). This was translated into the Yoruba language to ensure that the items contained therein were thoroughly understood by each respondent regardless of her educational level. For those respondents' that couldn't read nor write in both languages, provision was made for a third party to help them read, interpret and fill the consent form based on the answer given by the respondents' (this could be any one known to the respondent). A potential respondent also had the right to refuse to participate if she so wished. The contact address of the researcher was on the consent form incase of any complaints or for further clarification needed by any respondent concerning this study. The consent form was in duplicate and one copy given to the respondent concerned.

CHAPTER FOUR

RESULTS

This chapter deals with presentation of the findings of the study. The result will be presented under the following headings: socio-demographic characteristics of respondents, awareness of female condom, female condom use practices, and intention to adopt the use of female condom. The factors influencing the adoption or non-adoption of female condom as a means of preventing unintended pregnancy and HIV/STI is also presented. Lastly, the association between some demographic variables and intention to use the product is highlighted.

4.1 Socio-Demographic Characteristics of Respondents

Respondents' Age group.

Most of the respondents 260 (66.3%) fall within the 15-30 year age group followed by the 31-49 year age group 132 (33.7%). The overall mean age is 28.8 years SD ± 6.5. (See Table 1).

Respondents' religion and ethnicity.

The distribution of respondents by their religious affiliation indicates that Christianity was the dominant respondents' religion 275 (70.2%) while 115 (29.3%) were Muslims. Yoruba 332 (84.7%) constitutes the predominant ethnic group; others are Igbo 40 (10.2%), Ebira 7 (1.8%), Hausa 5 (1.3%). (See Table 1)

Respondents' level of education and occupation.

One hundred and fifty seven (40.1%) of the respondents had post secondary school education and 103 (26.3%) with secondary school education; 87 (22.2%) respondents had some form of education (Quaranic, Adult education, Primary and Junior secondary school), and 43(11.0%) had no formal education. Only 2 (0.5%) of the respondents had postgraduate education.

The predominant occupation was trading 208(53.1%) followed by civil service 54(13.8%), artisans 35 (8.9%) and professionals 31(7.9%). 58 (14.8%) respondents were unemployed. (See Table I).

Table 1: Socio-Demographic Distribution of the Respondents.

Variable	No (%) N=392
Age (Years)	
15-30	260 (66.3)
31-49	132 (33.7)
Religion.	
Christianity	275 (70.2)
Islam	115 (29.3)
Others	2 (0.5)
Ethnic Group	
Yoruba	332 (84.7)
Igbo	40 (10.2)
Ebira	7 (1.8)
Hausa	5 (1.3)
Others	8 (2.1)
Level of education completed	
No formal education	43 (11.0)
Some form of education	87 (22.2)
Secondary	103 (26.3)
Post secondary	159 (40.6)
Occupation	
Professionals	31(7.9)
Artisans	35(8.9)
Traders	208(53.1)
Civil servant	54(13.8)
Others (farmers, students, unemployed)	64(16.3)

4.2 Awareness of Female Condom

One hundred and fifty nine (40.6%) respondents ever heard of a female condom and 233 (59.4%) have not. Only 109 (27.8%) have ever seen a female condom while 283 (72.2%) have not. When asked what respondents have heard about female condom, mixtures of positive and negative responses were given. Major positive things heard were that female condom can prevent unwanted pregnancy (80%) and followed by prevention of STIs (28.4%). On the contrary, negative things respondents have heard about the product are that it can drop into a woman's body leading to death (29.7%), its oily nature (23.9%), the balloon-like look (23.9%) and inhibiting natural sexual feeling (14.2%). Other things heard about the product are listed in Table 2 below.

These survey findings were similar with FGD results in which majority of the discussants have never heard of the female condom. All the discussants in the 31 – 49 years age groups in a low density residential area in unison said they have never heard anything about the female condom.

Unfortunately, many of those who reported ever hearing about it have never seen it. Out of all the FGD discussants in the eight groups, only nine had ever seen the female condom. Among the 15 – 30 age groups in a highly populated density area, none had seen the female condom. One of them had this to say:

> "Female condom is very much around and they do talk about it at Family planning centers but I have never seen it"

Two discussants said the following when asked if participants have ever seen female condom:

"Somebody like me do not know how it looks like whether white
Or yellow and the way they use it"

"At the maternity centre where we take our children for immunization, They tell us that for people that do not want to use family planning, they should be using female condom and we do tell them that how can we use what we have never seen?"

Of all the nine women who had ever seen a female condom among the FGD discussants, 7 live in low density residential area.

Table 2: Respondents Awareness about Female Condom

Variable	No (%) N = 159
It can prevent unwanted pregnancy	124 (80.0)
It can drop into a woman's body resulting to death	46 (29.7)
It prevents sexually transmitted infections (STIs)	44 (28.4)
Female condom is oily	37 (23.9)
Female condom looks like a balloon	37 (23.9)
It can block the womb if one is not very careful	32 (20.6)
'There is no natural feeling with female condom use	22 (14.2)
Its large size causes inconvenience during use	21 (13.5)
It is a new product	18 (11.6)
It is inserted into the vagina	16 (10.3)
It does not prevent sexually transmitted infections (STIs)	16 (10.3)
Female condom is very convenient to use	11(7.1)
It is a means by which women can space their children	10 (6.5)
Female condom performs the same function as male condom	9 (5.8)
It is an alternative to the male condom	6 (3.9)
It has the shape of a vagina	5 (3.2)
It does not prevent unwanted pregnancy	5 (3.2)
It can only be used once/cannot be reused	3 (1.9)
Others	5 (3.0)

Respondents Source of information about female condom

The most important source of information on female condom by respondents who had heard of it are the health facilities (41.3%) followed by the media where 32.3% heard about it from the television and 36.8% from the radio. Thirty-eight (24.5%) respondents heard about female condom from their neighbours while 24 (15.5%) learnt of it in an academic institution. See Table 3.

These findings corroborate the FGD results in which most discussants stated the above mentioned places as their source of information about the female condom.

One source of information which an FGD discussant mentioned which was not among those listed by the survey respondents was the following:

> "You know some men can be making jest that they have sexual intercourse with a girl yesterday and the girl used condom. That was how I heard about it at life in Osun state".

Another source of information mentioned by an FGD discussant that was not mentioned by the survey respondents is the reading about it from a book called Everyday woman.

Table 3: Respondents Sources of Information about Female Condom

Variable	No (%) N = 159
Hospital/Health/Maternity Centres	64 (41.3)
Radio	57 (36.8)
Television	50(32.3)
Neighbour	38 (24.5)
School	24 (15.5)
Newspaper/Magazine	12 (7.7)
Seminars	6 (3.9)
Health talk in home	1 (0.6)
Society for Family Health	1 (0.6)

Respondents' knowledge of female condom

In response to the question "In what situation should a female condom be used?, 62.6% of the respondents said that female condom can be used when a woman who is menstruating wants to have sexual intercourse, 40.0% to prevent unplanned pregnancy, while 38.1% said when breastfeeding and at the same time want to have sexual intercourse.

This last reason was also stated by a FGD discussant in the 15-30 age groups who said that:

> "It should be used when a woman is breastfeeding in order to prevent the baby from sucking sperm from the mother's breast milk".

Other reasons for female condom use mentioned include: when having sex during the unsafe days in a menstrual period (24.5%), when a woman wants to protect herself from contracting HIV (22.6%), when a male partner refuses to wear a male condom (20.0%), when having sex with a non-regular partner (14.8%). Other reasons are shown in Table 4.

Many of the FGD discussants mentioned that female condom can be used during the unsafe days, when a woman is menstruating, and when a woman has just given birth to a baby and wants to avoid marital problems that could arise from refusal of her husband's advances. This point was put forth by one of the discussant thus:

> "Female condom can be used when a woman is nursing a baby and she does not want her husband to look elsewhere"

Some also said a woman that has a husband who is unfaithful to her can use female condom for protection against infections while a few other discussants claimed not to know when female condom can be used since they have either not seen it or used it.

Table 4: Respondents Knowledge on when Female Condom can be used

Variable	No (%) N = 159
When a woman is menstruating	97 (62.6)
When a woman wants to prevent unplanned pregnancy	62 (40.0)
When a woman is breastfeeding	59 (38.1)
During the unsafe days in a menstrual cycle	38 (24.5)
When a woman wants to protect herself from contracting HIV	35 (22.6)
When a man refuses to wear male condom	31 (20.0)
When a woman has just had a new born baby	26 (16.8)
When having sex with a non-regular partner	23 (14.8)
To protect oneself from contracting STIs	18 (11.
When having sex with a regular partner	16 (10.3)
When a husband can no longer be trusted/is unfaithful	5 (3.2)
Others	6 (3.9)

Of the 159 (40.6%) respondents that have ever heard of female condom, 18 (11.3%) were sure they knew how to use female condom and 6 (3.8%) were unsure. The knowledge of these 24 respondents was tested on steps to be followed when female condom is to be used as shown in Table 5.

High knowledge in respect of observing the condom for perforation was obtained from 70.8% of the respondents followed by looking for expiry date (66.7%). Moderate

knowledge was recorded for looking for an arrow at the top right of the female condom package indicating the point of opening (29.2%). Opening the package carefully and tearing at the notch on top right. (33.3%). Low knowledge was obtained for very important instructions like pushing the inner ring as far as it will go with your middle finger while making sure the condom is not twisted (8.3%) and guiding penis into the condom during sex while making sure that the penis is not entering sideway outside the condom (8.3%).

Although majority of the FGD discussants had never used female condom, they also mentioned steps like looking for expiry date on the female condom pack, and making sure the condom is not perforated. Just like during the survey, low knowledge was also displayed by the FGD discussants for important instructions like pushing the inner ring as far as it will go with your middle finger while making sure the condom is not twisted and guiding penis into the condom during sex while making sure that the penis is not entering sideway outside the condom.

However, unlike during the FGDs where majority of the discussants mentioned that one had to consider how appropriate female condom is for one's body system as a major step to take before use, no one mentioned it during the household survey

Table 5: Respondents' Knowledge on Steps for using Female Condom

Variable	No (%) N = 24
Look for NAFDAC number	12 (50%)
Look for the Expiry date	16 (66.7%)
Make sure the female condom has no perforation	17 (70.8%)
Make sure the female condom package is not open	15 (62.5%)
Look for an arrow at the top right of the female condom package indicating the point of opening	7 (29.2%)
Open the package carefully; tear at the notch on top right. Do not use teeth, scissors or knife to open	8 (33.3%)
Remove the condom and rub-in-between palms to allow even distribution of the lubricant	5 (20.8%)
Hold the condom downward, such that the outer ring (open-end) faces upward	1 (4.2%)
Position yourself properly to insert condom by either: Standing with one leg on a chair or stool squatting or lying on your back	3 (12.5%)
Hold the condom at the closed end, grasp the flexible inner ring and squeeze it with the thumb and second or middle finger so it becomes long and narrow	2 (8.3%)
Insert the condom such that the outer ring covers the area around the opening of the vagina	14 (58.3%)
Push the inner ring as far as it will go with your middle finger. Make sure the condom is not twisted	2 (8.3%)
During sex, guide penis into the condom. Be sure that the penis is not entering sideway outside the condom	2 (8.3%)
After sex, remove the female condom by twisting the outer ring and gently pulling the condom out	7 (29.2%)
Gently replace the used condom back into the torn package and discard in a refuse bin.	8 (33.3%)

4.3 Respondents' Female Condom practices

Three hundred and seventy-five (95.7%) of the respondents have never used female condom while 17 (4.3%) of them have done so. The finding was similar to the FGD results in which only one of the discussants have ever used female condom.

The major reasons for use of female condom by the 17 survey respondents include: it helps prevent unwanted pregnancy (88.2%), helps to space children (52.9%), and prevents sexually transmitted infections (47.1%). However 3 (17.6%) in addition specifically mentioned preventing themselves from contracting HIV. Others are shown in Table 6.

Table 6: Respondents' reasons for female condom use

Variable	No (%) N=17
To prevent unwanted pregnancy	15 (88.2)
To help space children	9 (52.9)
To prevent sexually transmitted infections (STIs)	8 (47.1)
To protect against HIV	3 (17.6)
Because it has the shape of a vagina	3 (17.6)
To prevent baby from sucking sperm from breast milk	2 (11.8)

Consistency in the use of condom among the survey respondents was extremely low with only 1 (5.9%) reportedly using it always, 1 (5.9%) frequently and 15 (88.2%) sometimes. When asked when last respondents used the product most (52.9%) said in the past week, 5 (29.4%) in the past two weeks while one respondent each used it in the past one month, three months and one year respectively. In response to the question on whether respondents used female condom at last sexual intercourse, 13 (76.47%) said 'yes' but 4(23.53%) did not. The three non user's behavior was due to not finding female condom to buy, while husband's self protection was cited by two.

Availability of female condom could motivate use when needed. When asked about how many unused female condom respondents had at time of interview, 6 (35.3%) had one each while 5 (29.4%) had two. However, reusing condom is a risk practice for HIV transmission. In order to know whether respondents are reusing female condom, respondents were asked how many used female condoms they had at the time of the survey. None of the respondents' had any. With respect to the source of purchase of female condom, 12 (70.6%) respondents bought their supply from the pharmacy/medicine stores, 4 (23.5%) from a health facility and one (5.9%) from a friend. Three respondents who reported using the female condom did not like the experience stating that it makes noise during sexual intercourse (66.7%) and they feared it might drop into their vagina (33.3%).

Respondents' reasons for never using female condom

The major reasons given by the three hundred and seventy-five respondents non user of female condom include: Spousal disapproval 60 (44.8%), the fear of its dropping deep into a woman's vagina which can result to death 35 (26.1%), unavailability for purchase 21 (15.7%) , being a rubber product 19(14.2%), the likelihood of its increasing the frequency of monthly menstruation 19 (14.2%) , and trust that husband cannot flirt around 16 (11.9%). Other reasons are contained in Table 7.

On the other hand, almost all the FGD discussants attributed non use to never hearing nor seeing it or due to non availability.

Table 7: Respondents' reasons for never using female condom

Variable	No (%) N = 375
Spousal disapproval	60 (44.8%)
It can drop into a woman's body which can result in death	35 (26.1%)
Female condom is not available for purchase	21(15.7%)
It increases the number of times women menstruate in a month	19 (14.2%)
Being made of rubber discourages use	19 (14.2%)
Bad rumours/news about the female condom	17(12.7%)
Trust that husband cannot flirt around	16 (11.9%)
Not wanting to wear any device on the body	13 (9.7%)
No natural feel during sexual intercourse with female condom	10 (7.5%)
No reason	10 (7.5%)
The vagina is not a place to carelessly put anything	9 (6.7%)
Because I had never seen it before today	7 (5.2%)
Female condom do burst during sexual intercourse	4 (3.0%)
Husband protects himself	3 (2.2%)
Others	3 (2.1%)

4.4 Respondents' Intention to Adopt the Use of Female Condom

Out of the 17 respondents who had ever used the female condom, 12 (71.0%) intend to continue using it in the future while 5 (29. 0%) were unsure. Reasons for likely use in the future cited by the 12 respondents include pregnancy prevention (17.7%) and the natural feeling with use (23.5%). The 5 respondents who were unsure of future use complained of its noisemaking during sex (11.8%), its delicate appearance (5.88%), unnatural feeling with use (5.88%), and the perceived notion that it can drop into a woman's womb (5.88%).

Out of the 375 non users, only 54 (13.8%) intend to initiate future use, 227 (57.9%) do not and 94 (24.0%) were unsure. The major reasons given by those who were willing to use female condom in the future were protection against sexually transmitted infections (44.4%), prevention of unwanted pregnancy (15.0%), child spacing (11.1%). Other reasons are contained in Table 8.

The never used respondents who also do not intend to use female condom in the future cited the put- off appearance of the product (19.0%), spousal disapproval (18.0%), trust in spouse's fidelity (11.0%), and inadequate information about female condom (5.0%). See Table 9 for other reasons given.

Respondents who were unsure of future use stated inadequate information about female condom (53.0%), unsure of spousal approval (11.0%), its large size (10.1%) and delicate look (5.3%) as their major reasons. See Table 10

Table 8: Major reasons for non-users intending to initiate female condom use.

Variable	No (%) of Respondent N= 54
So as not to contract sexually transmitted infections	24 (44.4%)
To prevent unwanted pregnancy/conception/help space children	14 (26.0%)
To prevent one from contracting HIV	5 (9.3%)
Can be used as a backup for missed contraceptive pills/ will serve as an alternative to other family planning methods	3 (6.0%)
Prefer it to other family planning methods	2 (4.0%)
Incase sexual partner refuse to wear male condom	1 (2.0%)

Table 9: Major reasons for non-users not intending to initiate female condom use

Variable	No (%) N= 227
Husband 's disapproval	40 (18.0%)
Trust in husband's fidelity not to flirt	25 (11.0%)
Don't like to use it as contraceptive	20 (9.0%)
Female condom looks delicate	15 (7.0%)
Female condom looks dangerous	14 (6.2%)
Female condom looks horrible/irritating/like a balloon	14 (6.2%)
Lack of information about the female condom/its uses	11 (5.0%)
The vagina is not a place to carelessly put anything	7 (3.1%)
It will not feel natural using the female condom	7 (3.1%)
Bad rumours about female condom	7 (3.1%)
Not wanting to put/use device in private part	7 (3.1%)
Husband protects himself	6 (3.0%)
There are other methods of preventing pregnancy that one can use	6 (3.0%)
It increases the number of days/times women menstruate in a month	5 (2.2%)
First time of seeing a female condom	5 (2.2%)
It is not allowed by religion/not written in the Quran	5 (2.2%)
Others	114 (50.2%)

Table 10: Major reasons for non-users not sure about initiating female condom use

Variable	No (%) N= 94
Inadequate information about the female condom	50 (53.2%)
Not sure if spouse will approve of female condom use	10 (11.0%)
Because of its size/ its too big	9 (10.1%)
Because it looks delicate	5 (5.3%)
Because it looks dangerous	4 (4.3%)
Female condom cannot feel natural during use	4 (4.3%)
It increases the number of times women menstruate in a month	4 (4.3%)
Spouse wont like use of female condom	2 (2.1%)
Others	6 (1.8%)

Table 11: Intention to use female condom among users versus non-users

Variable	Yes No (%)	No No (%)	Unsure No (%)
Users (N = 17)	12 (71%)	0 (%)	5 (29%)
Non-users (N = 375)	54 (14.4%)	227 (60.5%)	94 (25.1%)

Furthermore, respondents were asked what can motivate them to use the product in the future. Being convinced that the product can protect them from contracting sexually transmitted infections 145(37.0%) and especially HIV 201(51.3%) followed by prevention of unplanned/unwanted pregnancy 167(42.6%) were some of the reasons cited. Others are shown in Table 12.

Table 12: Likely Factors that could influence Respondents' adoption of female condom

Variable	No (%) N = 392
Female condom can protect one from contracting HIV	201 (51.3)
Female condom can prevent unplanned/unwanted pregnancy	167 (42.6)
Female condom can protect one from contracting STIs	145 (37.0)
Getting adequate information about the female condom	83 (21.2)
If it does not have adverse effect on health	66 (16.8)
Being sure that female condom will not drop into the womb	62 (15.8)
When husband is no longer trusted	56 (14.3)
If husband approves of it	50 (12.8)
If female condom is made more affordable	44 (11.2)
If female condom is readily available for purchase	23 (5.9)
No factor /reason can make me use the female condom	17 (4.3)
If husband refuse to use male condom	12 (3.1)
If it feels natural during use	10 (2.6)
If female condom is of better quality to prevent leakage	8 (2.0)
If a rope can be fixed on female condom and tied around the waist	8 (2.0)
If female condom does not cause infection like male condom	6 (1.5)
If female condom is allowed by religion	3 (0.8)
When childbearing is over	2 (0.5)
If fellow womenfolk will recommend it	2(0.5)
If it can be made in a simpler form	2(0.5)
Others	2(0.5)

Similar factors were also cited by the FGD discussants. Apart from preventing unwanted pregnancy and infection, and for child spacing, one major factor cited by the FGD discussants that could influence future adoption of female condom is lack of trust in their spouses.

According to one of the discussants in the 15 – 30 years age group:

> "If you have trust in your husband before then you start seeing some signs that he now has girlfriend outside, in order to protect oneself from contracting any disease, the woman will start using female condom with the husband"

Other factors cited by majority of the FGD discussants include health workers showing female condom to them followed by training on how to use it. Other factors are the assurance that the condom can be removed easily after use, ready market availability, if it doesn't break/leak during use as rumored, and if it is firm on the woman's vagina. In the words of one of the discussant:

> "They should also make it hold firmly on the woman's vagina like it holds on the man because one of us said female condom is big"

Acceptability of female condom by their spouses and its affordability can also influence female condom adoption according to FGD discussants.

When the factors were differentiated between those who have ever used and those never used female condoms, three factors stand out fairly. These are protection against unwanted pregnancy and from contacting HIV infection and other sexually transmitted infections (See Table 13).

Table 13: Factors that can influence users and non-users to use female condom

Factors	Users No (%)	Non-users No (%)	Total
Female condom can protect one from contracting HIV	12 (23.5)	189 (20.6)	201
Female condom can protect one from contracting sexually transmitted infections	6 (11.8)	139 (15.1)	145
When husband/partner is not trusted any more	2 (3.9)	54 (5.9)	56
Being sure that female condom will not drop into the womb or vagina	2 (3.9)	60 (6.5)	62
When a rope is fixed on female condom and tied around the waist to prevent falling into the body	0 (0.0)	8 (0.9)	8
Female condom can prevent unplanned /unwanted pregnancy	14 (27.5)	153 (16.6)	167
Getting adequate information about female condom	0 (0.0)	83 (9.0)	83
If female condom does not cause infection like male condom does	1 (2.0)	5 (0.5)	6
If female condom is made more affordable	6 (11.8)	38 (4. 1)	44
If female condom is readily available for purchase	2 (3.9)	21 (2.3)	23
If female condom use does not require touching the vagina to know if it is still there like other family planning methods	0 (0.0)	1 (0.1)	1
If there is a natural feeling with female condom use	0 (0.0)	10 (1.1)	10
If fellow womenfolk recommend it	0 (0.0)	2 (0. 2)	2
If female condom is of better quality to prevent leakage or breakage during use	2 (3.9)	6 (0.7)	8
If it does not have adverse side effect to health	3 (5.9)	63 (6.9)	66
If husband approves of it	1 (2.0)	49 (5.3)	50
If husband refuse to use a male condom	0 (0.0)	12 (1.3)	12
If female condom is made in simpler form	0 (0.0)	2 (0.2)	2
No factor/Nothing/No reason	0 (0.0)	17 (1.8)	17
When childbearing is stopped	0 (0.0)	2 (0.2)	2
If religion allows use of female condom	0 (0.0)	3 (0.3)	3
After use of family planning pill is discontinued	0 (0.0)	1 (0.1)	1
If size of female condom can be reduced	0 (0.0)	1 (0.1)	1

Self efficacy of respondents regarding respondents' confidence to use female condom in the future was measured. They were asked how confident they are in performing a range of activities related to female condom as shown in Table 14. Nearly two thirds are more confident to discuss female condom use with other women 247 (63.0%) and convince their sexual partners to use female condom 213 (54.3%). However 182 (46.4%) were less confident to visit a health facility to ask of female condom or visit a medicine store/pharmacy to buy female condom 198 (50.5%).

Overall, only 20.9 and 31.9 percent of the respondents self efficacy were in the excellent and good categories respectively. (Table 15).

Table 14: Respondents' self efficacy about the female condom

How confident are you to....	Very Confident	Confident	Not Confident
Visit a Medicine store/Pharmacy to buy female condom	198 (50.5)	140 (35.7)	54 (13.8)
Visit Hospital or Health center to ask for a female condom	182 (46.4)	141(36.0)	69 (17.6)
Convince your sexual partner to have sex with you with a female condom	213 (54.3)	105 (26.8)	74 (18.9)
Discuss female condom use with other women	247 (63.0)	106 (27.0)	39 (9.9)

Table 15: Respondents perceived self-efficacy about female condom in categories

Variable	No (%) N = 392
Low (< 50th percentile i.e. 0-9)	185 (47.2)
Good (50-75 percentile i.e. 10-11)	125 (31.9)
Excellent (> 75 percentile >11)	82 (20.9)

4.5 Test of Hypothesis

Hypothesis One

It states that there is no significant relationship between age and intention to use female condom. In testing this hypothesis, respondents were categorized into 15-30 years and 31-49 years age groups. Table 16 shows the one-way analysis of variance (ANOVA) statistics used to analyze the data. The difference between respondents' intention to use female condom and age was not significant ($P>0.05$). Therefore, the null hypothesis is accepted.

Table 16: Respondents' Intention to use female condom by Age

ANOVA

Varintion	Sum of Squares	df	Mean Square	F statistic	P value
Between Groups	0.313	3	0.104	0.464	0.708
Within Groups	87.238	388	0.225		
Total	87.551	391			

Hypothesis Two

This states that there is no significant relationship between educational status and intention to use female condom. In testing this hypothesis, respondents were categorized based on four educational levels viz: No formal education, Some education, Secondary school education, and Post secondary education. Table 17 shows the ANOVA test used for the relationship between intention to use female condom and educational status. The difference between respondents' intention to use female condom and educational status was not significant (P>0.05). Therefore, the null hypothesis is accepted.

Table 17: Respondents' Intention to use female condom by Educational Status

ANOVA

Variation	Sum of Squares	df	Mean Square	F statistic	P value
Between Groups	35.611	3	11.870	1.815	0.144
Within Groups	2536.958	388	6.539		
Total	2572.569	391			

4.6 Suggestions for promotion of female condom

For effective promotion of the female condom, suggestions by the survey respondents included: Organizing health talks/seminars and trainings for women (34.3%); and through female condom promotion on television (25.5%) and radio (25.0%).

See Table 18

Table 18: Respondents' suggestion for promotion of female condom

Suggestions	No (%) N = 392
Through advertisement on television	100 (25.5)
Through advertisement on radio	98 (25.0)
Through advertisement in newspapers and magazines	10 (1.6)
By organizing health talks/seminars and trainings for women	134 (34.3)
Through television programs	38 (9.7)
Through radio programs	17 (4.3)
Recommending female condom in health facilities	16 (4.1)
By giving women adequate information about female condom	15 (3.9)
Through public awareness campaign	56 (14.4)
By making it readily available for purchase/in pharmacies	7 (1.8)
By reducing the size of female condom	6 (1.5)
What you are doing now is a way of promoting it	5 (1.3)
If female condom can stop dropping into women's body/womb	3 (0.8)
Women should introduce female condom to fellow womenfolk	2 (0.5)
It is your job to know what to do to promote female condom	2 (0.5)
By making female condom more affordable	2 (0.5)
Others	4 (1.2)

The FGD discussants also mentioned similar suggestions with those stated above like organizing trainings on female condoms for women, distribution of free female condoms and advertisements through the media. Other important suggestions by the FGD discussants include re- engineering female condom in such a way that it could be worn on the vagina and not inserted into it, and male involvement through asking men to attend antenatal and postnatal clinics with their wives so that the men can allow their wives to use the female condom.

One of the FGD discussant in the 15 – 30 years old age group stated that:

> "If both men and women can be aware of the female condom, it will help the men to allow their wives to use it"

Availability of the female condom was also mentioned by most of the FGD discussants as a means of effectively promoting it. According to one of the discussants in the 31 – 49 years old age group in the high density residential area:

> "Out of sight is out of mind. If the female condom is in sight in shops and markets like the male condoms are, people will use it more. We are only hearing about it but we are not seeing it"

The failure rate of female condom was also mentioned. Some of the discussants pointed out that if female condom has a low contraceptive failure rate, it will help promote it.

Among the discussants in the 31 -49 years age group in a low density residential area, boldness among the womenfolk was pointed out as a factor that can promote female condom use.

One of them has this to say:

> "I think that women should be able to come out from their shells, and gain boldness to walk into stores and buy female condom just as men will feel cool buying it because I think it is still better than other types of contraceptives that makes women's tummy or the whole body become bigger than the normal size and the husband may still complain at the end that 'I don't like fat women, I hate big tummy and so on and so forth' "

CHAPTER FIVE

DISCUSSION

This chapter is divided into four sections: discussion of results, recommendations, conclusion and suggestions for further research.

5.1 Awareness About the Female Condom

The findings of this study revealed low awareness and knowledge of the product. Only 159(40.6%) of the 392 respondents have ever heard of the female condom.

The 2003 NDHS also indicate low knowledge of female condom among currently married women (11.5%). A study by Bogart et al on Hispanic Adults' Beliefs, Attitudes, and Intentions Regarding the Female Condom in year 2000 examined respondents' level of AIDS knowledge and the relationship of AIDS knowledge to attitudes and norms regarding the female condom. The study showed that most respondents were unfamiliar with the female condom. Half of the sample (56.2%) reported having heard of the female condom prior to viewing a videotape on it.

The 2003 NDHS also confirms that the knowledge of female condom is lower among currently married women (11.5%) as against that of unmarried sexually active women (23.6%) and not sexually active unmarried women (20.4%).

Health facilities (Hospitals, Health/Maternity Centers) are main sources of information for the few that heard about female condom (41.3%) followed by radio (36.8) and TV (32.3%). However, in the cross-sectional study of female condom awareness, usage and

concerns among female undergraduates of the University of Ibadan, Nigeria conducted in September 2004 majority of the respondents also learnt about the female condom through the mass media (39.9%) and health workers (34.4%).

5.2 Respondents' Practices About Female Condom

In this study most respondents (95.7%) have never used a female condom. The study by Bogart et al (2000) were similar with majority of the respondents (94.5%) never used the female condom. According to Population Reports in 1999, an estimated 44 million married couples used condoms for family planning. These 44 million make up about 4% of all couples in which the wife is of reproductive age, and about 7% of married couples who are using some method of family planning. Rates of condom use are lower within marriages than among sexually active unmarried (Population Reports, 1999).

The implication of this finding is that very few married women presently use female condom with their spouses even though data from around the world, including in Nigeria, suggest that married women's greatest risk of contracting HIV is through having sex with their husbands and in Nigeria, there is an unmet need for family planning of 17 percent and a low level of contraceptive use, with 12 percent practicing family planning and only eight percent using modern methods (Federal Ministry of Health, 2004; Constella Futures, 2006). This finding highlights the need, therefore, to address in future campaigns the particular needs of married women in relation to dual protection.

5.3 Respondents' Attitude Towards Female Condom Use

Respondents who had ever used condoms had fairly positive attitude to the use of female condom. They cited prevention of unwanted pregnancy and sexually transmitted infections as reasons, among others. Bogart et al study on Hispanic Adults' Regarding the Female Condom in 2000 showed that overall attitudes towards the female condom were neither negative nor positive, and normative beliefs toward the female condom were moderately positive.

Available evidence from pilot studies in the female condom rapid situation assessment carried out in four states in Nigeria revealed good acceptability among married women (UNFPA, 2005). In another study by Bogart et al on intention to use the Female Condom among African American Adults in year 2000, mean attitudes towards using female condom was positive. Moreover, participants' beliefs about the female condom were neither very positive nor very negative. For women, positive attitudes toward the female condom were related to the belief that the female condom makes it easier to have an orgasm. This is consistent with previous researches which have found that enhanced pleasure contributes to women's positive attitudes towards the female condom.

5.4 Respondents' Intention to Adopt Female Condom Use

The future intention of those that had ever used the female condom was fairly high as 12 of the 17(70.59%) do intend to continue using the female condom mainly due to the experienced effect of prevention of unwanted pregnancy and perception of natural feeling during sex.

Irrespective of this finding, a very large number of never used 227 (57.9%) do not intend to use the product in the future and an additional 94 (24.0%) were unsure if they want to initiate use. Spousal disapproval, trust in spouse, poor aesthetic appearance and outright dislike for it as a means of contraception were among the reasons given. Many studies have shown that male involvement is crucial for adoption of its use. An exit interview conducted by Agha in 1999 showed that men were more likely to use the female condom with a steady partner than a casual partner. This is consistent with earlier researches by El-Bassell et al in 1998. The fact that men are more willing to use the female condom with a marital or a regular partner than with a casual partner also suggests that the female condom may be a useful product for protecting many married women in sub-Saharan Africa (whose spouses often have multiple sexual partners) against HIV infection, especially since use of the male condom in marital relationships has remained low (De Zoysa et al, 1996).

The FHI study in South Africa (2000) reported similar findings in respect of not aesthetically pleasing and difficulties in insertion/removal. These major disadvantages of the device noted by study participants centered on one of the female condom's major advantages; coverage of the external female genitalia. In this study, this coverage had a decidedly negative impact on the device's aesthetics and acceptance. Other problems related to aesthetics included dislike of the appearance of the device, noise associated with use, size and partner resistance. Some participants noted difficulties associated with insertion or removal of the female condom, discomfort, messiness and inconvenience

associated with use, and movement of the device during use. A few cases of the penis slipping between the device and the woman's body, and slippage and breakage of the device itself were also noted (FHI, http://www.FHI.org/en/RH/FAQs/female condom_faq.htm

In the female condom rapid assessment carried out in Nigeria by UNFPA in 2005, some of the respondents mentioned rumours of possible disappearance of female condom into the womb as one of the reasons for not intending to use it. In this study, this reason was also mentioned by respondents who had previously used female condom but were not sure if they intend to continue using it or not. This calls for aggressive education of the womenfolk to remove this wrong perception going around.

This study also showed that perceived self-efficacy is fairly significantly associated with intention to use the female condom. This is similar to the findings in Bogart et al study (2000) on Hispanic Adults where women's intention to use the female condom was significantly correlated with more positive attitudes toward the female condom and greater self-efficacy to use the female condom.

5.5 Conclusion

The number of countries with generalized HIV epidemics has risen from 25 to 46 in the past decade. In such settings, vigorous promotion of condoms among married couples as a method of family planning (with the crucial added advantage of disease-protection) is a public health priority (Ali, et al, 2004). This view is corroborated by a report in This Day

Newspaper of April 2, 2004 in Lagos, where the then Deputy Governor of Osun State, Erelu Olusola Obada had said that the recent introduction of female condom would protect women against being infected with the deadly HIV/AIDS and other sexually transmitted diseases.

Married women have particular needs that need to be addressed in future campaigns and educational programs. Many married women perceive themselves to be at risk of HIV infection but do not use any barrier method. Among female condom users, married women are more likely than single women to encounter partner resistance to the female condom and less likely to report future use (Kerrigan et al, 2000).

Conclusively and as evident from this survey, knowledge about female condom and intention to adopt its use is low among married women. This may be because of low level of information about the female condom. Few married women know there is female condom available and do not have adequate knowledge needed to make an informed decision about it.

Newspaper of April 2, 2004 in Lagos, where the then Deputy Governor of Osun State, Erelu Olusola Obada had said that the recent introduction of female condom would protect women against being infected with the deadly HIV/AIDS and other sexually transmitted diseases.

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Conclusively and as evident from this survey, knowledge about female condom and intention to adopt its use is low among married women. This may be because of low level of information about the female condom. Few married women know there is female condom available and do not have adequate knowledge needed to make an informed decision about it.

5.6 Recommendations

1. It is necessary that educational intervention providing correct knowledge about female condom be put in place to allay misconceptions about female condom and its use.
2. Training married peer educators on female condom will be beneficial as married women may be more willing to adopt the use of female condom if recommended to them by their fellow womenfolk.
3. Training both clinicians and pharmacists to provide women and men with information and support services about the product may be an effective means of increasing correct and continued use.
4. Prevention programmes need to ensure that high-quality female condoms are accessible to those who need them, when they need them, and that people have the knowledge and skill to use them correctly.
5. Female condoms must be readily available, either free or at low cost, and promoted in ways that help overcomes social and personal obstacles to their use. Condom use is more likely when people can access them at no cost or at greatly subsidized prices.
6. Promotion of correct and consistent female condom use within antiretroviral treatment programmes, and within reproductive health and family planning services, is essential to reduce further opportunities for HIV transmission.
7. Since condoms are generally perceived to reduce pleasure, it is vital for public health campaigns to address how to increase sexual pleasure when promoting female condoms.

8. An important recommendation is to train family planning and sexual health care providers as well as the range of NGOs providing these services in the importance of promoting dual protection, and to confront and overcome their biases against female condoms.

9. The dual protection nature of female condoms should be promoted. For example, even for HIV prevention, promoting the female condom as a family planning method may be more acceptable to stable couples since it does not imply distrust.

10. Programmers should promote female condoms with and to couples in marital and long-term relationships, especially. portraying them in radio and TV spots and billboards, and offer them voluntary counseling and testing as couples. They should not assume that men in stable relationships will resist female condom use or have only negative attitudes towards it.

5.7 Suggestions for further research

1. Further research is needed to determine how providers and counselors can assist couples in using an all user-dependent method of contraception like the female condom more consistently and correctly.

2.. Research that directly examines men's attitudes towards the female condom is desirable especially since many women report the need to obtain partner assent prior to using the female condom or discontinue its use because of objections by their partners.

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APPENDIX ONE

FOCUS GROUP DISCUSSION GUIDE

MARRIED WOMEN'S KNOWLEDGE OF AND INTENTION TO USE FEMALE CONDOM IN IBADAN SOUTH WEST LOCAL GOVERNMENT AREA, OYO STATE NIGERIA

(Translated into Yoruba language)

INTRODUCTION (ENGLISH)

Good day to you all. My name is ---------- (first name only). I am from the Department of Population and Reproductive Health Education, Faculty of Public Health, College of Medicine University of Ibadan. With me are ----------

- (mention names of others in the team).

We thank you for agreeing to take part in this discussion. We have invited you all to discuss about the female condom. We hope that the information we collect during this discussion will help us understand women's opinions about the female condom and any challenges associated with its use so that we can know which areas women need help concerning the female condom.

We would like to assure you that there is no right or wrong answers during this discussion. We therefore encourage you to freely express your own opinion especially as we are all women here.

We also assure you that we will keep secret all that you tell us during this discussion. Therefore we do not need your names. However we will give you a number to help our recording of this discussion.

We seek your permission to record the discussion on audiotape. We do this to enable us remember all that we will talk about during this discussion. We will also be jotting down some points.

Anyone that wishes to answer any question will be required to raise her hand. When you are called upon to answer, please mention your number before expressing your opinion. The contribution of everyone present here is very important to us.

Now we are all going to introduce ourselves by our first names or nicknames (Participants' introduction).

We shall now start the discussion.

INTRODUCTION (YORUBA)

E ku oju Ojo. Oruko mi ni ..... (Oruko akoje nikan). Mo wa lati Eka ti Population and Reproductive Health Education, Faculty of Public Health, College of Medicine University of Ibadan. Pelu mi ni ..... (Daruko Oruko awon omiran).

Adupe lowo yin ti e gba lati kopa ninu ifi oro jiroro yii. A pe yin lati jiroro lori roba idabobo ti obinrin. A lero wipe awon iro ti e ba fun wa ninu ijiroro yii, yio ran wa lowo lati mo Ero awon Obinrin nipa roba idabobo ti obinrin ati awon isoro ti o ro mo lilo re. Ekyi a fi le je ki a mo ibi ti awon obinrin ti nilo iranlowo lori roba idabobo ti obinrin. A si fe fi da yin loju pe kosi esi ti o tona ninu ijiroro yii. A si ro yin pe ki e tureka ninu ijiroro yii, gegebi e ti se mo wipe gbogbo wa ni obinrin.

A si fe da yin loju wipe gbogbo ohun ti a ba so nibi yii yio wa ni boo kelc. Nitori naa a ko ni lo oruko yin. Nitori eyi a o fun olukaluku ni nomba fun ida ra eni mo.

A beere fun ase yin lati le lo ero gbohungbohun fun ijiroro wa yii, Eleyi a fii ran wa lowo lati ranti gbogbo ohun ti a jiroro le lori.

Enikeni ti oba fe dahun ibeere a rowa kii a na owo soke, ki esi daruko nomba yin ki e to dahun ibeere naa.

Kikopa gbogbo wa ti a wa nibi yii, o se pataki si wa.

Nibayi ijiroro naa ti bere.

QUESTIONS(IBERE)

1. What are the types of reproductive health problems faced by women in this community? (Kini awon isoro ilera ibisi ti o n doju ko awon obirin ni awujo yi/iru awon wo ni?)

   - Probe for (Se iwadi fun)
     - Unwanted pregnancy (Oyun airotele)
     - Sexually transmitted diseases, if not mentioned (Awon arun ibalopo)

2. How many have ever heard of female condom? (Eniyan melo loti gbo nipa roba idabobo ti obinrin?)

   - Probe for (Se iwadi fun)

- Sources of information including major sources (Awon Ona wo lcn gba gbo iro lori roba idabobo ti obirin; Esc alayec ni pato)
- What people have heard about the female condom (Kini e ti gbo nipa roba idabobo ti obinrin?)
- Why female condom is important for women (Kini idi ti roba idabobo ti obinrin se pataki fun obinrin?)

3. How many have seen a female condom? (Eniyan melo lo ti ri roba idabobo ti obiriin?)
   - Probe for (Se iwadi fun)
     - What it looks like (Description) (Apejuwe re/Bawo lose ri)
     - What people think about it (Kini awon eniyan ro nipa re)
     - What people like or dislike about it (Kini awon eniyan feran nipa re tabi kini won o fe nipa re)
4. What are the uses of a female condom? (Kini awon iwulo roba idabobo ti obinrin?)
   - Probe for (Se iwadi fun)
     - When it should be used (Igbawo ni a le lo)
     - How it should be used (Bawo ni a se le lo)
     - Steps for using it (Kini nkan ti eniyan a se akiyesi ki ato lo roba idababo obinrin)
     - Experiences of using the female condom (Kini awon iriri ti a ti gbo tabi ri lori lilo roba idabobo ti obinrin)

- Likes and dislikes (Kini awon ohun ti a fe tabi eyi ti a ko fe nipa lilo roba idabobo obinrin)

5. What factors can facilitate the use of the female condom among women in this community? (Kini awon ohun ti o le mu lilo roba idabobo ti obinrin rorun fun awon obinrin awujo yi?)
6. What are the challenges/problems that women can face that could hinder their use of the female condom? (Kini awon isoro ti o le doju ko awon obinrin lati le maje ki won lo roba idabobo ti obinrin?)
7. How readily would women in this community desire to use the female condom in the future? (Bawo ni ose ma ya awon obinrin awujo yi lara si tabi wu won lati ma lo roba idabobo ni ojo iwaju?)
   - Probe for factors that could (Se iwadi fun)
     - Motivate them to use the female condom in the future (Ki ni o le mu awon obinrin agbegbe yi ma lo roba idabobo ti obinrin ni ojo iwaju)
     - Discourage them from using the female condom in the future (Ki ni awon ohun ti ole ma je kin won lo roba idabobo obinrin mo ni ojo iwaju)
8. What will peoplelike to know about the female condom? (Kini ohun ti awon eniyan ma nfe mo nipa roba idabobo obinrin?)
9. What suggestions do people have for promotion of the female condom? (Kini awon aba li awon eniyan ni fun igbesoke roba idabobo ti obinrin?)

Thank you very much for spending your time here to discuss with us and for answering our questions. God bless you! (E se pupo fun asiko yin ti e fi sile fun ijiroro yii. Oluwa yio bukun yii.)

APPENDIX TWO

QUESTIONNAIRE (ENGLISH)

TOPIC OF RESEARCH: MARRIED WOMEN'S KNOWLEDGE OF AND INTENTION TO USE FEMALE CONDOM IN IBADAN SOUTH WEST LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

INTRODUCTION

Good day Ma. My name is ---------- I am here on behalf of (mention name of researcher) who is a Master of Public Health student at the department of Population and Reproductive Health Education, Faculty of Public Health, College of Medicine University of Ibadan. This questionnaire is designed to assess the knowledge and usage of the female condom among married women in this local government area and its availability in the LGA. It will be appreciated if you will provide HONEST answers to these questions as best as you can. The result of your response will be used for academic and research purposes only.

Confidentiality of response is GUARANTEED since your names and house address will NOT be on the questionnaire.

SERIAL NO: ----------

PART A: SOCIO DEMOGRAPHIC DATA

1. LOCAL GOVERNMENT AREA ----------
2. WARD ----------
3. DISTRICT ----------

4. AGE AT LAST BIRTHDAY: _____

5. RELIGION (Circle one)

1. Catholic 2. Protestant 3. Pentecostal

4. Islam (Specify denomination) _____

5. African traditional religion

6. Others (Specify) _____

6. ETHNIC GROUP (Circle one)

1. Yoruba 2. Igbo 3. Hausa

4. Others (Specify)_____

7. HIGHEST LEVEL OF EDUCATION COMPLETED (Circle one)

1. No formal education 2. Quaranic education 3. Adult education

4. Primary school 5. Junior secondary school

6. Senior secondary school 7. National certificate of education (NCE)

8. O.N.D. 9. University degree/ H.N.D

10 Others (Specify) _____

8. OCCUPATION (Circle one)

1. Civil servant (Specify type) _____

2. Public servant (Specify type) _____

3. Business (Specify type) _____

4. Petty trader 5. Farming

6. Artisan (Specify type)_____

7. Unemployed

8. Others (Specify)_____

PART B: KNOWLEDGE ON THE FEMALE CONDOM

1. Have you ever heard of Condom?

1. Yes ☐ 2. No ☐

(If No, end interview)

2. Which kind of condom have you ever heard of?

1. Male condom only ☐ 2. Female condom only ☐

3. Both male condom and female condom ☐ 4. None of the above ☐

3. Have you ever seen a male condom?

1. Yes ☐ 2. No ☐

4. Have you ever seen a female condom?

1. Yes ☐ 2. No ☐

5. What have you heard about the female condom/what do you know about the female condom? (Do NOT read out list. Circle ALL that Apply)

1. Female condom is oily
2. Female condom looks like a balloon
3. It can prevent unwanted pregnancy
4. It does not prevent unwanted pregnancy
5. It does not prevent sexually transmitted diseases.
6. It can drop into a woman's body and this can result in death.
7. It does not feel natural to have sex with a female condom
8. The large size of the female condom causes inconvenience during use.
9. There is no way the female condom can be manufactured without it having adverse effects on the health of the users
10. The female condom is very convenient to use
11. Women can take the initiative to space out their children by using the female condom

12. It has the shape of a vagina, making it okay for use

13. It is inserted into the vagina

14. It does not work

15. It can block the womb if one is not very careful.

16. The female condom perform the same function with that of the male condom

17. It prevents one from contracting sexually transmitted diseases

18. It is a new product

19. It is an alternative to the use of male condom

20. It is made of the same material as the male condom

21. It is very expensive.

22. It can only be used once/cannot be reused

23. It makes plenty of noise during sexual intercourse

24. The female condom can be inserted up to 8 hours before sexual act, and may not be removed immediately after sexual act

25. Female condom is very strong and cannot break easily

26. Female condom cannot get stuck inside if correctly used (by guiding the penis into the condom)

27. Female condom is thicker, longer and wider than the male condom

28. It is only commercial sex workers that use female condom

29. Others (Specify) _____

_____

_____

6. What are your major sources of information about the female condom? (Do NOT read out list. Circle ALL that Apply)

1. Television 2. Radio 3. Newspaper/Magazine 4. Health talks in market place
5. Hospital/Health/Maternity center 6. School 7. Seminars 8. Neighbour (s)
9. Others (Specify) _____

_____

7. In what situation should a female condom be used? (Do NOT read out list. Circle ALL that Apply)

1. When a woman is menstruating 2. When a woman has just had a new born baby
3. When a woman wants to avoid marital problems 4. When a woman is breastfeeding
5. When having sex with a regular partner 6. When having sex with a non-regular partner
7. During the unsafe days in a menstrual cycle
8. When a woman wants to prevent unplanned pregnancy
9. When a woman wants to protect herself from contracting HIV
10. To protect oneself from contracting sexually transmitted infections (STIs)
11. When a woman only is HIV positive 12. When one's husband is HIV positive
13. When both husband and wife are HIV positive
14. As a backup method for missed daily contraceptive pill
15. When a man refuse to wear the male condom
16. When the male condom is always breaking or leaking
17. When the husband can no longer be trusted/is unfaithful
18. When a woman experiences dryness during sexual intercourse
19. Others (Specify) _____

_____

8a. Have you ever used a female condom?

1. Yes ☐ 2. No ☐ ☐

(If No, Go to Question 18 & 19)

8b. If yes, why did you use it? (Do NOT read out list. Circle ALL that Apply)

1. To prevent unwanted pregnancy 2. To protect against HIV

3. To prevent sexually transmitted infections 4. To help space children

5. To punish an unfaithful husband 6. To prevent baby from sucking sperm from breast milk 7. No adverse effect on health with female condom use

8. It is convenient to use during sexual intercourse

9. It has the shape of a vagina 10. As a backup method for missed daily contraceptive pill 11. Because I usually experience dryness during sexual intercourse

12. Others (Specify) _____

_____

9. How often do you use a female condom? ☐

1. Always ☐ 2. Frequently ☐ 3. Sometimes ☐

4. Rarely ☐ 5. Never ☐

10. When last did you use a femalccondom? ☐

1. In the past one week ☐ 2. In the past two weeks ☐

3. In the past one month ☐ 4. In the past three months ☐

5. In the past six months ☐ 6. In the past one year ☐

11. Did you use female condom during the last sexual intercourse? ☐

1. Yes ☐ 2. No ☐

(If Yes, Go to Question 13)

12. If No, why did you not use it? (Do NOT read out list. Circle ALL that Apply)

1. I don't like the noise it makes 2. It is difficult to insert

3. There is no natural feel during sexual intercourse with female condom

4. It causes pain during sexual intercourse 5. I could not afford to buy it

6. I could not find it to buy 7. I don't really know how to wear it correctly

8. The size of the female condom is too big 9. It inconvenienced me the last time I used it 10. I was afraid that it might fall into my body/womb

11. My husband was protecting himself 12. The female condom burst the last time I used it 13. I trust my husband not to flirt around 14. I don't like using rubber as a contraceptive 15. I don't like using any device on my body

16. My husband disapproves of it 17. I was feeling too shy to go and buy one at the store/hospital 18. I wanted to get pregnant 19. I did not feel like using it

20. Others (Specify) _____

_____

_____

13. How many used female condoms do you presently have? _____

14. How many unused female condoms do you presently have? _____

15a. Do you like using a female condom? ☐

1. Yes ☐ 2. No ☐

15b. If Yes, give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____

_____

_____

12. If No, why did you not use it? (Do NOT read out list. Circle ALL that Apply)

1. I don't like the noise it makes 2. It is difficult to insert

3. There is no natural feel during sexual intercourse with female condom

4. It causes pain during sexual intercourse 5. I could not afford to buy it

6. I could not find it to buy 7. I don't really know how to wear it correctly

8. The size of the female condom is too big 9. It inconvenienced me the last time I used it 10. I was afraid that it might fall into my body/womb

11. My husband was protecting himself 12. The female condom burst the last time I used it 13. I trust my husband not to flirt around 14. I don't like using rubber as a contraceptive 15. I don't like using any device on my body

16. My husband disapproves of it 17. I was feeling too shy to go and buy one at the store/hospital 18. I wanted to get pregnant 19. I did not feel like using it

20. Others (Specify) _____

_____

_____

13. How many used female condoms do you presently have? _____

14. How many unused female condoms do you presently have? _____

15a. Do you like using a female condom? ☐

1. Yes ☐ 2. No ☐

15b. If Yes, give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____

_____

_____

15c. If No, give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____

_____

_____

16. Where did you buy your last female condom? (Do NOT read out list. Circle ALL that Apply)

1. Hospital/Health center
2. Pharmacy /Medicine stores
3. Market place
4. Roadside seller
5. Others (Specify) _____

_____

_____

17a. Do you intend to continue using the female condom? ☐

1. Yes ☐ 2. No ☐ 3. Not sure ☐

17b. If Yes, Give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____

_____

_____

17c. If No, Give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____

_____

_____

17d. If Not sure. Give your major reason(s). (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD) _____ _____

_____

_____

Q18. (If No to Q8a) Why have you never used a female condom? (Do NOT read out list. Circle ALL that Apply)

1. Husband disapproves of it
2. Female condom is too expensive
3. I don't like to use rubber as contraceptive
4. As a married woman I trust my husband not to flirt around
5. Female condom is not available for purchase
6. Bad rumours/news about the female condom
7. My husband/sexual partner is protecting himself
8. I don't like to wear any device on my body
9. I hear that it can drop into a woman's body and this can result in death
10. The vagina is not a place to carelessly put anything
11. Female condom do burst during sexual intercourse
12. I hear that it increases the number of times women menstruate in a month
13. There is no natural feel during sexual intercourse with female condom
14. Women find it difficult to conceive after using female condom as a family planning method
15. Female condom makes women fatter or thinner
16. No reason.
17. Others (Specify) _____

_____

19. (If No to Q8a) Despite the above stated reasons do you desire to use the female condom/intend to start using it?

1. Yes ☐ 2. No ☐ 3. Not sure ☐ ☐

20a. If Yes, What is your most important reason for saying Yes? (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD)

20b. If No, What is your most important reason for saying No? (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD)

20c. If Not sure, What is your most important reason for not being sure? (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD)

21a. Do you know how to use the female condom?

1. Yes ☐ 2. No ☐ 3. Not sure ☐ ☐

(If No, Go to Question 22)

21b. If Yes or Not sure, list the steps for female condom use (Do NOT read out list. Circle ALL that Apply)

1. Look for NAFDAC number
2. Look for the Expiry date
3. Make sure the female condom has no perforation
4. Make sure the female condom package is not open

5. Consider how appropriate it is for one's body system

6. Look for an arrow at the top right of the female condom package indicating the point of opening

7. Open the package carefully; tear at the notch on top right. Do not use teeth, scissors or knife to open

8. Remove the condom and rub-in-between palms to allow even distribution of the lubricant

9. Hold the condom downward, such that the outer ring (open-end) faces upward

10. Position yourself properly to insert condom by either: Standing with one leg on a chair or stool, squatting or lying on your back

11. Hold the condom at the closed end, grasp the flexible inner ring and squeeze it with the thumb and second or middle finger so it becomes long and narrow

12. Insert the condom such that the outer ring covers the area around the opening of the vagina.

13. Push the inner ring as far as it will go with your middle finger. Make sure the condom is not twisted

14. During sex, guide penis into the condom. Be sure that the penis is not entering sideway outside the condom

15. After sex, remove the female condom by twisting the outer ring and gently pulling the condom out

16. Gently replace the used condom back into the torn package and discard as a refuse bin.

17. Others (Specify) ----------

---

22. What factor(s) can make you Use the female condom? (Do NOT read out list. Circle ALL that Apply)

1. The fact that female condom can protect one from contracting HIV

2 The fact that female condom can protect one from contracting sexually transmitted infections

3. When I don't trust my husband/partner any more

4. Being sure that the female condom will not drop into my womb or vagina

5. When a rope is now fixed on female condom and tied around the waist to prevent falling into the body

6. The fact that female condom can prevent unplanned /unwanted pregnancy

7. Getting adequate information about the female condom

8. If the female condom does not cause infection like the male condom does

9. If female condom is made more affordable

10. If female condom is readily available for purchase

11. If female condom use does not require touching the vagina to know if it is still there like some other forms of family planning methods

12. If it feels natural to have sexual intercourse when using female condom

13. If my fellow womenfolk recommend it to me

14. If female condom is of better quality to prevent leakage or breakage during use

15. If it does not have adverse side effect to my health

16. If my husband approves of it

17. If my husband refuse to use a male condom

18. Others (Specify) _____

_____

23. What factor(s) can make you Not To Use the female condom? (Do NOT read out list. Circle ALL that Apply)

1. The size of female condom

2. The female condom looks delicate and dangerous

3. It cannot fit firmly on the outer part of a woman's vagina

4. It is not convenient to use

5. If my husband disapproves of it

6. It can fall into the womb resulting to surgical operation or death

7. It makes women to be leaner or fatter

8. It increases the number of times women menstruate in a month

9. Not being sure that female condom can prevent pregnancy

10. It can break, cut or leak during sexual act

11. My husband will suspect me of having extramarital affair

12. There is no natural feel during sexual intercourse with female condom

13. My husband will feel that I don't trust him anymore

14. The procedure for wearing of female condom is very tedious

15. I don't know how to correctly use the female condom

16. I am trying to get pregnant

17. If my husband does not like around

18. Others (Specify) _____

_____

24. How confident are you that you can do any of the following? (Read the list. Tick the option)

	Very Confident	Confident	Not confident
Visit a Medicine store/Pharmacy to buy female condom			
Visit Hospital or Health center to ask for a female condom			
Convince your sexual partner to have sex with you with a female condom			
Discuss female condom use with other women			

25. Is female condom use allowed by your religion?

1. Yes 2. No 3. Not Sure

26. How much do you think a female condom should cost? _____

27. What suggestions do you have for promotion of female condom use among women? (PROBE FOR COMPLETE ANSWER. RECORD RESPONSE WORD FOR WORD)_____

_____

_____

Thank you for taking out time to answer the questions I asked you

APPENDIX THREE

QUESTIONNAIRE (YORUBA)

AKORI IWADI: OYE AWON ABILEKO NIPA KONDOMU OBIRIN ATI ISESI WON SI LILO RE, NI APA ARIWA IWORUN TI IJOBA IBILE NI IBADAN TI IPINLE OYO, NIGERIA.

IFIHAN

Ekan san nu. Oruko mi ni ——————————————. Mowa sibi ni oruko (Daruko Oluwadi) ti o je akeko gba imo ninu ilera gbegbogbo ti eko bi a se po si ati bi a se n posi ti eko ilera. Ti isori nipa ilera gbogbo gbo. Ti ile-isegun ni ile iwe giga ti Ibadan. Iwe ibere yii, ase lati mo oye ti Ibadan lilo kondomu obirin laarin awon abileko agbegbe ijoba ibile yii. Ao mo riri re, ti e ba fun wa ni agbara tun eko ati iwadi nikan ni a o lo fun.

Abo wafun esi yin ni won igba ti oruko ati adiresi ile yin ko si nibi iwe ibeere yii.

NAMBA: ——————————

APA A: SOCIO DEMOGRAPHIC DATA

1. AGBEGBE IJOBA IBILE ——————————
2. ISORI ——————————
3. ADUGBO ——————————
4. OJOBI TI ESE GBEYIN ——————————

5. ESIN (Yi odo si eyokan)

1. Katoliki
2. Potesitanti
3. Pentikosita
4. Imole (so eyi to ba n lo) ----------
5. Esin ibile
6. Omiran (Salaye) ----------

6. ISORI IRAN (Yi odo si eyokan)

1. Yoruba
2. Igbo
3. Hausa
4. Omiran (Salaye) ----------

7. IBI TI A KA IWE DE TO YANJU

1. Koka rara
2. Ile eko kurani
3. Ile eko Agba
4. Alakobere
5. Girama Kekere
6. Girama Agba
7. Iwe ecii gbogbogbo lori eko
8. O.N.D
9. Yunifasiti
10. Omiran (Salaye) ----------

8. ISE (Yi odo si eyokan)

1. Osise Ijoba (Soru eyi ti onse) _____

2. (Soru eyi ti onse) _____

3. Onisowo (Soru eyi ti onse)

4. Alate

5. Agbe

6. Onise owo (So iru eyi ti onse)

7. Alarise

8. Omiran (Salaye)

APA B: OYE NIPA KONDOMU OBIRIN

1. Se ti gbo yi ri 'Kondomu'

1. Beeni ☐ 2. Becko ☐

(Toba je becko, paari ibeere)

2. Iwo nini kondomu wonyi le ti gbo ri?

1. Kondomu okunrin nikan ☐ 2. Kondomu obirin nikan ☐

3. Kondomu lokunrin ati tobirin ☐ 4. Ko si ikankan lara won ☐

3. Se ti ri Kondomu Okunrin ri?

1. Beeni ☐ 2. Becko ☐

4. Se ti ri Kondomu Obirin ri?

1. Beeni ☐ 2. Becko ☐

5. Ki le ti gbo nipa kondomu obirin? /Ki le mo nipa kondomu obirin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Kondomu obinrin ni ororo laru
2. Kondomu obirin dabi fere
3. Kondomu obirin ma n dena oyun nini
4. Kondomu obirin ko kin dena oyun nini
5. Ko dena arun ibalopo
6. Ole jabo si inu oju ara obinrin, eleyi dele fa iku
7. Ko kin se dadu nigba ti aba lo kondomu obinrin fun ibalopo
8. Ti tu bi kondomu obinrin le fa idiwo nigba ti aba ni ibalopo
9. Kosi ona ti won fi le se kondomu obinrin tiko ni niipalara fun eni to balo
10. Kondomu obirin ki mu inira lowo nigba ti aba lo
11. Abileko le fi se ifeto si omo bibi nipa lilo kondomu obinrin
12. Odabi abe obinrin, eyi to mu rorun
13. A o kibo inu abe lo
14. Ko sise
15. Ole di ile omo bi enyan koba sora
16. Ise kanna ni kondomu obinrin ati tokunrin
17. Oma n dena arun ibalopo
18. Won sese se jade ni
19. Oje onamiran si lilo kondomu okunrin
20. Nnkan kanna ti won fi se tokunrin na ni won fi se tobinrin
21. Owon po

22. Ekan soso ni cyan Icio/kose lun lo

23. O ma n pariwo ni asiko ti a bani ibalopo

24. A Ie wo kondomu obinrin ni wakati mejo si asiko ti a fe ni ibalopo atipe

25. Kondomu obinrin ni agbara ko Ie tete ja

26. Kondomu obinrin ko Ie lamo oju ara bi aba lo dada nipa (mimu oko si nu kondomu)

27. Kondomu obirin ole, ogun, otun tobi ju ti kondomu okunrin lo

28. A won aseiwo nikan loma n lo kondomu obinrin

29. Oniran (Salaye) ----------

---

6. Ibo Ieti gbo nipa kondomu obinrin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Telifisan 2. Radiyo 3. Iwe Iroyin 4. Oro nipa ilera ninu oja

5. Ile Iwosan 6. Ile iwe 7. Idanu leko 8. Aro adugbo

9. Omiran (Salaye) ----------

---

7. Iru igba wo ni ale lo kondomu obinrin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Ti obinrin ba n se nnkan osu
2. Ti obinrin ba sese bi omo tuntun
3. Ti obinrin ba n safun wahala ile oko
4. Ti obinrin ban fun omo loyan
5. Ti a ba n ni ibalopo pelu eni keji wa
6. Ti a ba n ni ibalopo pelu elomiran
7. Ni asiko ti a Ie loyun
8. Ni gbati obinrin ba n dena oyun
9. Nigbo ti obinrin ba fe dena arun HIV

10. Lati dabobo aru eni kuro lowo arun ibalopo

11. Nigbati obinrin ba ni arun HIV nikan

12. Nigbati oko ba ni arun HIV nikan

13. Igbati oko ati iyawo ba ni HIV

14. Ojo ona miran ti a ko ba ranti lo pili wa

15. Nigba ti okunrin ba ko lati wo kondomu

16. Nigba ti Kondomu okunrin to ba n ja

17. Nigba ti a ko ba lo gberi oko jeno

18. Ti aru obinrin ba ma n gbe nigba ti o ba n ni ibalopo

19. Omiran (Saloyc) _____

_____

8a. Se ti lo kondomu obinrin ri?

1. Beeni ☐ 2. Becko ☐

(Toba je becko, lo si ibere kejidinlogun ati kokandi logun)

8b. To baje beeni, ki lo de ie fi lo? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Lati dena oyun

2. Lati dena arun HIV

3. Lati dena arun ibalopo

4. Lati fi aye si omo babii

5. Lati fi iyaje oko ti ko lotito

6. Lati dena omo kuru nibi mimo ato lati ara oyan mimu

7. Ko si abamo lori itara nipa lilo kondomu obirin

8. Ororun lati lo lasiko ibalopo

9. Odabi eju ara

10. Onamiran ti a ba gbagbe lati lo pili ta li dena oyun lojojumo

11. Toripe ara mi man gbe lasiko ibalopo

12. Omiran (Salaye) ----------

---

9. Bawo ni esen lo kondomu obinrin si?

1. Gbogbo igba ☐ 2. Igba gbogbo ☐ 3. Igbaniran ☐ 4. Ekokan ☐

5. Rara ☐

10. Igba wo ni elo kondomu obinrin gbeyin?

1. Ose kan seyin ☐ 2. Ose meji seyin ☐ 3. Osu kan seyin ☐

4. Osu meta seyin ☐ 5. Osu kefa seyin ☐ 6. Odun kan seyin ☐

11. Se lo kondomu obinrin ninu ibalopo te segbeyin?

1. Beeni ☐ 2. Beeko ☐

(To ba je beeni, lo si ibere ketala)

12. To ba je beeko, ki lo de te ko fi lo? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. N ko feran ariwo to man pa

2. Onira lati wo

3. Ko kin dun nigba ti a ba lo kondomu obinrin balopo

4. Omu inira wa nigba ti a ba ni

5. Mi lo lera

6. A ko nira

7. Mi ko mo bi won se n wo dada

8. Kondomu obinrin to bi gun

9. Onimilara ni gbati mo lo gbeyin

10. Eru bami tori koma jabo sinu mo mi

11. Oko mi dabo bo arare

12. Kondomu obinrin ti mo lo gbeyin oja

13. Mo jeri oko mi ko kin se sina

14. Nko feran robe fun idena oyun

15. Nko feran lilo nkankan si erami

16. Oko mi ko fowo si

17. Ojutimi lati lo ra eyokan nile itaja

18. Mo fe loyun

19. Ko wumi kin lo

20. Omiran (Salaye) _____

_____

13. Kondomu obinrin teti lo melo leni? _____

14. Kondomu obinrin ti ekoti lo meelo ni eni? _____

15a. Se feran ki ma lo kondomu obinrin?

1. Beeni ☐ 2. Beeko ☐ ☐

15b. To ba je beeni, so idire (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) _____

_____

_____

15c. To ba je beeko, so idire (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) _____

_____

_____

16. Ibo leti ra kondomu obinrin te ra gbeyin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Ile iwosan 2. Ile itaguntan 3. Oja 4. Awon to n ta ate loju ona

5. Omiran (Salaye) _____

_____

17a. So wuyin ke ma lo kondomu obinrin lo? ☐

1. Beeni ☐ 2. Beeko ☐ 3. N ko mo daju ☐

17b. To ba je beeni, so idire (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) _____

_____

_____

_____

17c. To ba je beeko, so idire (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) _____

_____

_____

_____

17d. Ti ko ba da e loju, so idire (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) _____

_____

_____

_____

18. (Toba je beeko si beere A ti ekekejo) Ki lo de ti eko ti li lo kondomu obinrin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi to ba jeyo)

1. Oko mi ko fowo si
2. Kondomu obinrin ti wan ju
3. Nko fe lo roba fun idena oyun
4. Gege bi abileko mojeri oko pe ko kin se agbere
5. Kondomu Obinrin ko si fun rira
6. Angbo awon oro nipa re tiko da
7. Enikeji mi dabo bo ara re
8. Nko feran kin ma wo nkan si inu ara mi
9. Mo gbo pe ole jabo sinu ara obinrin eyi si le fa iku
10. Oju ara ki se ibiti ale ki nkan bo
11. Kondomu Obinrin mun ja lasiko ibalopo
12. Mo gbo pe o ma je ki asiko ti a fise nnkan osu kopo si
13. Ko si odun nibe nigba ti a ba lo kondomu obinrin

14. Awon obinrin kokin royun ni leyin igba ti wan ba ti lo kondomu obinrin fun ifeto somo bibi

15. Kondomu obirin ma n mu obinrin gbo labi ki o sanra 16. Ko si nkankan

17. Omiran (Salaye) ----------

---

19. (Toba je beeko si beere elekeje a) Pelu gbogbo idi to wa loke se owuyin lati lo kondomu obinrin/Ki e bere sini lo?

1. Beeni ☐ 2. Beeko ☐ 3. Nko mo daju ☐

20a. To baje beeni, kini idi pataki re to fi sope beeni? (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) ----------

---

20b. To baje beeko, kini idi pataki re to fi sope beeko? (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) ----------

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20e. To baje Nkomo daju, kini idi pataki re to fi ko li mo daju? (SE IWADI FUN IDAHUN TO PE. KO IDAHUN BI WON BA SE SO) ----------

---

21a. Se mo bi won se n lo kondomu obinrin?

1. Beeni ☐ 2. Beeko ☐ 3. Nko mo daju ☐

(To baje beeko, sibeere elekejilelogun)

21b. To baje beeni tabi nkomo daju, so igbese fun lilo kondomu obinrin. (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Wo noimba Nafuduki

2. Woojo toma baje

3. Kipe kondomu yen toni iho

4. Kipe kondomu obinrin wan ko ti si pali re

5. We bi yo ba seri ni ara eniyan

6. Wo aro ni apa otun kondomu obinrin eyi to n se afihan bi a se n si

7. Si pali re jeje, faya ni apa otun loke, inase lo eyin, sisosi tabi obe lati fi si

8. Si kondomu ko si rupapo nio owo ki ororo le yika re

9. Mu kondomu wa si owo isale ni ona to je pe, oka to wa ni ta, oma koju si oke

10. Se arare dudu lati wo kondomu boya lori iduro pelu ese kan lori aga tabi tabili kekere.

Liloso tabi lifi eyin lele lori ibusun

11. Mu kondomu ni owo ipari. Gba oka to fele inu mu, ki o si run pelu owo atanpako ati ika keji, ki oba le gun, ki o si tobi

12. Wo kondomu ni ona ti oka ita ati bo gbogbo oju ara

13. Ki oka inu lo sinu bi ika aro re ba se le lonu. Ri wipe kondomu ko lo po

14. Ni asiko ibalopo, fowo fi oko sinu kondomu. Ripe oko yen ko lo si onamuran sita kondomu

15. Leyin ibalopo, yo kondomu obinrin nipa lilo oka tita atipe ki o rora ma yo kondomu sita

16. Rora da kondomu ti eti lo pada sinu pali re, ki e si jasile ile

17. Omiran (Salaye) _____

_____

22. Awun nnkan wo lole mu yin lo kondomu obinrin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba feyo)

1. To ba je pe kondomu obinrin le dabobo eyan lowo arun HIV

2. To ba je pe kondomu obinrin le dabobo eniyan kuro lowo arun ibalopo

3. Nigba ti mi ko ba fokan tan oko mi/enikeji mi

4. To dnmi loju pe kondomu obinrin kole jabo sinu ile omo mi

5. Nigba ti won ba fi okun si kondomu obinrin ti eyan o so yika idi lati mole jabo si inu ara 6. To ba le dena oyun 7. Gbigbo nipa kondomu obinrin si

8. Ti kondomu obinrin ko ba ni arun bi to kurin

9. Ti kondomu obinrin ko ba won 10. Ti kondomu obinrin ba wa fun tita

11. Ti kondomu obinrin ki ba sebi tawon ti fere somo bibi ti a o fowo kan oju ara ki a fi le mo boba wani be

12. Ti o ba dun lati ni balopo pelu kondomu obinrin

13. Ti awon obinrin egbe mi ba so fun

14. Ti kondomu obirin baje ti eroja gidi ti o le dena jija tabi bibe lasiko u abalo

15. Ti ko bani atun botan

16. Ti oko mi ba fowo si

17. Ti oko mi ba ko jale lati wo kondomu obinrin

18. Omiran (Saleye) _____

_____

23. Nnkan wo lo le nuyin lati ma lo kondomu obinrin? (Mase ka idahun wonyi sita. Yi odo si gbogbo eyi ti o ba jeyo)

1. Bi kondomu obinrin seri

2. Kondomu obinrin dabi pe ofo seyan ni ijanba ati eewu

3. Ko le duro dada nita oju am obinrin

4. Ko rorun lati lo

5. Ti oko mi ko ba fowo si

6. Ole jabo sinu ile omo ti o sile fa abe sise tabi iku

7. Omu obinrin tobi tabi tinrin

8. O fi kun iye igba ti obinrin fi nso nkan osu

9. Ti ko ba damiloju pe kondomu obinrin le dena oyun

10. Ofo ja, bee tabi ko jo lasiko ibalopo

11. Oko mi yo fura simi pe mon se sina

12. Kosi adun ninu ibalopo pelu kondomu obinrin

13. Oko mi lero pe nko gbe nire jemo

14. Ona ti an gba wo kondomu obinrin le

15. Nko mo bi won se ma n wo Kondomu obinrin dada

16. Mo fe loyun

17. Ti oko mi ko ban se sina

18. Omiran (Salaye) _____

_____

24. Bawo ni e se ni igboya lati se okan ninu awon wonyi? (Ka idahun sita. Fa makl si eyi ti won ba niu)

	Gboya dada	Gboya	Ko sigboya
Lo sile itogun lati ra kondomu obinrin			
Losi ile iwosan lati bere fun kondomu obinrin			
So le sofun enitcjonibalopo re lati lo kondomu obinrin pelu re			
Siso nipa lilo kondomu obinrin laarin awon obinrin			

25. Se won gba lilo kondomu obinrin ninu esin yin?

1. Beeni ☐ 2. Beeko ☐ 3. Nko mo daju ☐

26. E lo le ro pe kondomu obinrin lejo? _____

27. Imoran wo leyin ni lati jeki kondomu obinrin lilo ko gboro laarin awon obinrin? (Se iwadi fun idahun to pe. Ko idahun bi won ba se so)

_____

_____

_____

Ese lati fi aye sile fun idahun, ibeere ti mo bi yin.

24. Bawo ni e se ni igboya lati se okan ninu awon wonyi? (Ka idahun silo. Fa makl si eyl ti won ba mu)

	Gboyadada	Gboya	Ko sigboya
Lo silo itogun lati m kondomu obintin			
Losi ile iwosan lati bere fun kondoinu obinrin			
So le sofun enitejonibalojo re lati lo kondomu obinrin pelu re			
Siso nipa lilo kondomu obinrin laarin awon obinrin			

25. Se won gba lilo kondomu obinrin ninu esin yin?

1. Beeni ☐ 2. Beeko ☐ 3. Nko mo daju ☐

26. E lo le ro pe kondomu obinrin leje? _____

27. Imoran wo leyin ni lati jeki kondomu obinrin lilo ko gboro laarin awon obinrin? (Se iwadi fun idahun to pe. Ko idahun bi won ba se so)

_____

_____

_____

Ese lati fi aye sile fun idahun. ibeere ti mo bi yin

APPENDIX FOUR

CONSENT FORM FOR RESEARCH PARTICIPANTS (ENGLISH)

TOPIC: MARRIED WOMEN'S KNOWLEDGE OF AND INTENTION TO USE FEMALE CONDOM IN IBADAN SOUTH WEST LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

PRINCIPAL INVESTIGATOR: DR. GRACE E. ABALAKA

PURPOSE OF STUDY

This research is being carried out to know what married women know about the female condom and if the female condom is readily available for purchase in this local government. We will also want to know if married women like to use the female condom or not, the factor(s) that enhances/ hinders the usage of the female condom and if non-users intend to start using it or not.

PROCEDURE

If you agree to take part in this research, you will be required to answer some questions in a questionnaire on the spot. If you are unable to do so at that time, we will require you to give us a day and time to come back when you will be less busy and able to attend to us. This might require you giving us your phone number so that we can call you to confirm our appointment with you before coming back.

RISKS/DISCOMFORT

There are some discomforts you may experience if you choose to participate in this research. One of this is the issue of giving us some time out of your own tight schedule to answer the questions. You may also be a bit embarrassed by some of the questions we're asking in the questionnaire because they deal with personal matters which you may ordinarily not like to express your views on. Lastly, you may not be using any means of contraceptives yet (maybe due to an infertility problem) and may feel hurt that such a question is being asked.

To minimize these discomforts, we are willing to wait for as long as it will take you to have the time to answer our questions. If you're not able to attend to us immediately, we are willing to come back on any other day that you ask us to come back. To protect your opinions concerning private sexual matters contained in the questionnaire, the information you give us during this research will not be disclosed to anybody outside those involved in this research work.

Also, the questionnaire and diskettes in which we'll store them will be kept under lock and key. Most importantly, we will not write your name on the questionnaire. To minimize the hurts any woman with a case of infertility will go through, we wish to state our apologies in advance for hurting you and will not mind you refusing to answer our questions without giving us any reason for that.

BENEFITS

There are two benefits for you in this research.

First you will have an opportunity to air your view(s) on the female condom (like whether you like/don't like it, etc). This information will be used to help women on contraception and HIV issues. Secondly, the information you share will help us to know whether female condoms are accepted and frequently used in our community/nation.

These two benefits will ultimately help you as a woman since any information elicited from this research will be used to improve upon the female condom, if need be, so that female-initiated contraceptive methods can be improved upon for the betterment of the womenfolk, which includes you and I!

ALTERNATIVE TO PARTICIPATION

You are free to choose whether to take part in this research or not. You are also free to ask any question about any part of the research that you don't understand. If you choose not to participate in the research but want to know more about the female condom, you will be gladly referred to appropriate places for that.

CONFIDENTIALITY

We have taken some steps to ensure that the information you provide is kept secret.

i) We will not write your name on the questionnaire. Instead, we will write a number on it to help us when analyzing the results.

2) The questionnaires and diskettes we will use for collecting and storing the results of this research will be kept in a special locker where no one (other than staff involved in the research) will see them. They will also be destroyed after the research work has been concluded.

3) You will be allowed to sit with the interviewer away from public glare to fill the questionnaire privately so that other people around won't know about your private/sexual life.

VOLUNTARINESS

You are free to choose whether to take part in this research or not. You may decide not to answer any question that you think is too personal. You are also free to refuse answering any question asked you.

PERSON TO CONTACT

If you want to talk to anyone about this research, have some things to clarify concerning the research or feel that our research assistant did not administer the questionnaire to you with the courtesy and politeness that you deserve, please contact Dr Grace Abalaka who is the principal investigator using the following e-mail address and phone number.

E- mail address; elcojogracc@gmail.com

Phone number: 08034737925

Do you want to take part in this research? Yes ☐ No ☐

If your answer is yes and you have read and understood the content of this document, and have been given the opportunity to ask any questions on your mind or if the document has been read and explained to you, please sign or make your mark below.

_____ _____

SIGNATURE OR THUMB PRINT OF RESEARCH PARTICIPANT — DATE

_____ _____

SIGNATURE OF RESEARCH ASSISTANT — DATE

_____ _____

WITNESS TO CONSENT IF RESEARCH PARTICIPANT IS UNABLE TO READ THE CONSENT FORM HERSELF (Must be different from the person obtaining the consent) — DATE

APPENDIX FIVE

FOMU EERI FUN AWON OLUKPA IWADI

AKOLE IWAADI: OYE AWON ABILEKO NIPA KONDOMU OBINRIN ATI LILO RE NI IJOBA IBILE IWO ORUN ARIWA NI IBADAN TI IPINLE OYO, NIGERIA

OLORI OLUWADI: DR GRACE E. ABALAKA

KOKO IJIRORO

Iwaadi yii agbe sita lati mo imo awon abileko nipa kondomu obinrin ati bi kondomu obinrin se wa fun lira ni ijoba ibile yii. A tun fe mo boya awon abileki fe lati ma lo kondomu obinrin tabi rara. Awon inkan to fe fa idiwo lati lo kondomu obinrin atipe awon ti kokin lero lati malo tabi rara.

IGBESE

To ba faramo lati kopa ninu iwadi yii, wa ni lati dahun awon ibere ni ibi kan. Ti oko ba le se be ni akoko yen, a o bere fun ojo ati ago ti a o pada wa nigba ti emo raye ti e le dawa lohun. Eyi le mu ki a fun wa ni nomba ibara enisoro yin. ti a ma fi pe yin lati fi mo asiko ti a o ma ki a to ma pada bo.

EWU/INIRA

Awon inira kan wa ti e mari ti e ba kopa ninu iwaadi yii. Okan lara re ni. fifun wa ni akoko lara akoko yin lati fi dahun ibeere naa. Etun le kan egbin nipa awon ibeere ti a ba bi yin ninu iwebere nitori pe onise pelu eyin gangan eyi ti e ko ni nife lati so eru yin.

Igbeyin, e le mai ti malo ikankan ninu awon ogun ifeto somo bibi (ole je tori airomobi). Osi le dun yin yin pe itu ibere be yen ni a bere.

Lati din ihira yi ku, Angbero lati duro fun igba ti o ma gba yin lati ni aye fun idahun ibere wa. Ti eko ba le da wa lohun loju ese, Angbero lati padawa ni ojo kejo ti e ba ni kapada wa. Lati dabo bo ero yin lori oro ibalopo ti o wa ninu iwebeere yi, Awon mikun tesofunwa lasiko iwadi yi, ko ni bosi owo enikan nita lara awon to kopa ninu iwaadi yii. Afikun, iwebeere ati disiketi ti a li won si, ma wa ni abe titi ati kokoro.

Nipataki julo, A ko ni ko oruko yin sinu iwebeere. Lati din inira abileko ti ko ti bimo, Angbero lati so tele pe ki e ma binu pe aniyin lara a koni binu ti e ko ba dahun ibeere wa lai fun wa ni idi kankan si.

ERE

Ere meji lo wa fun yin ninu iwaadi yii.

Akoko eni aye lati gbo ero re lori kondomu obinrin (Bipe boya eni fe si/cko ni fesi, abbl) Iwaadi yi a o lo lati ran abileko lowo lori ifeto somo bibi ati oro HIV. Elekeji. oro ti a ba jo pin yoo ran lowo lati mo boya kondomu obinrin je ilewogba ati pe won lo ni adugbofilu.

Ere meji yii yoo ran e lowo, iwo bi obinrin niwon igba tojc pe idahun ti a kojo tupa iwaadi a o lo lati mu idagbasoko ba kondomu obinrin, ti o ba nilo, ti awon obinrin o fi ma lo ni ona ifeto somo bibi le dagba soke fun eyi to dara lanrin awon abileko. Ti emi ati yin wa tube.

ONAMIRAN TI A KO BA FEKO PA

Oni aye lati mu boya ko kopa ninu iwadi yii tabi rara. E si tun laye lati bere, ibeerekibere nipa onkankan ninu iwadi ti ko ba ye yin. Ti e ba mu lati ma kopa ninu iwadi yii sugbon e fe mo nipa kondomu obinrin, pelu idiinu ni won dari yin losibi ti oba ye.

IFOKANTANNI

Ati se awon igbese kan lo sepe oye le ba fun wa koni lu jade.

1. A koni ko oruko yin sori iwebeere-kakabe. A ko nimba sini lati fi mo wa lowo nigba ti a ba sayewo esi.
2. Iwebeere ati disiketi a o lo fun gbigba ati fifi esi iwadi pamo si aaye apoti nibiti enikeni (leyin awon abasise to wa nibi iwadi yii) yoo ri won. A o ba wan je leyin ti aba paari ise iwadi.
3. Ao gbayin laye lati joko pelu oluwadi, ti e o si jina si arin opo oju lati dahun iwebeere ni koro ki awon eyan lagbegbe ma ba mo nipa koko/ibalopo aye re.

IYAN RA ENI

Oni aye lati mu boya ko kopa ninu iwadi yii tabi rara. Ole pinnu lati ma dahun ibeere ti o ba lope ojo mo oro ara yin. Eyi laye lati madahun ibeere kankan ti a ba bi yin.

ENITI ELE RI

Ti o ba fe soro fun enikeni lori iwadi yii. Eni nkan ti efe so loni se lori iwadi tabi ti ero pe awon oluranlowo oluwadi wa, won ko seyin dad nibi iwebeere pelu aponle ati itemba ti oyeyin. Ejowo eri Dr. Grace Abalaka ti o je olori oluwadi ti onlo wonyii e-maili adiresi ati nomba ibaraenisoro.

Adiresi e-maili: eloojograce@gmail.com

Nomba Ibaraenisoro: 08034737925

So fe kopa ninu iwaadi yii? Beeni ☐ Beeko ☐

Ti idahun re baje beeni ti o siti ka ti osi ye o, gbogbo nnkan ti o wa ninu iwe yii, se won ti fun e laye lati bere ibeere to wa ni okan re tabi ti iwe yii ti won ba ti ka ti won si salaye re fun e, jowo soini tabi ki o se maki re sisale.

SIGINASO TABI ATANPAKO TI ETI ENITO KOPA NINU IWAADI — OJO

SIGINASO OLURANLOWO OLUWAADI — OJO

SEERI SI TI OLUKOPA IWAADI TI KO BALE KA FOMU ERI FUNRARE (Ogbudo yalo si enitogba fomu eri) — OJO

So fe kopa ninu iwaadi yii? Beeni ☐ Beeko ☐

Ti idahun re baje beeni ti o siti ka ti osi ye o, gbogbo nnkan ti o wa ninu iwe yii, se won ti fun e laye lati bere ibeere to wa ni okan re tabi ti iwe yii ti won ba ti ka ti won si salaye re fun e, jowo saini tabi ki o se maki re sisale.

_____ _____

SIGNASO TABI ATANPAKO TITE TI ENITOKOPA NINU IWAADI OJO

_____ _____

SIGNASO OLURANLOWO OLUWAADI OJO

_____ _____

SE ERI SI TI OLUKOPA IWAADI TI KO BALE KA FOMUERI FUNRARE (Ogbodo yato si ontogba fomu on) OJO