

**PERCEPTION AND ATTITUDE TOWARDS POSSESSION OF MALE
CONDOM BY FEMALE PARTNERS AMONG MALE
POSTGRADUATE PUBLIC HEALTH STUDENTS OF UNIVERSITY OF
IBADAN, NIGERIA**

BY

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DEDICATION

This work is dedicated to the glory of God.

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Omotayo Olojede

ABSTRACT

The male condom is regarded as the single most effective technology against STI including HIV/AIDS but the patriarchal society that cast women in inferior light compared to men especially in issues of sexuality has made condom possession and use virtually impossible for women. Since condom use by women depends on their male partners, the findings from this study can point to potential areas of intervention on how men can be encouraged to support and promote male condom possession by their partners. This study was therefore carried out to investigate the perception, attitude and willingness of male public health students towards possession of male condom by female partners.

The study was a descriptive cross-sectional survey involving the use of census technique. This included recruiting all the male students in the faculty of public health who gave consent for the study. One hundred and sixty-seven of the estimated 177 male students in the faculty consented to participate in the study and were selected. A validated semi-structured self-administered questionnaire was used for data collection and respondents were assessed on a 31-point knowledge scale, 16-point perception and 15-point attitude scales. Knowledge scores ≤ 10 were rated poor, scores $>10 \leq 20$ fair and scores >20 good. Perception scores ≤ 9 represent poor while those >9 represent good perception and attitude scores ≤ 9 were considered poor while those >9 good attitude. Descriptive statistics and Chi square tests were used to analyse data at 95% level of significance.

Respondents' mean age was 27.7 ± 4.4 years and majority (69.5%) of them were Yoruba. Majority (72.5%) were Christians and most (86.8%) of them were single. Almost all (99.6%) of them have had sex before and a total of one hundred and six (63.5%) of them had had unprotected sex in the past. In the last 6 months, 3 months, and 3 weeks preceding the study, 35.3%, 17.4% and 16.2% respectively had had unprotected sex. Most (83.8%) of the respondents had fair knowledge of protected sex while 13.2% and 3.0% respectively had poor and good knowledge. The knowledge score was 15.1 ± 4.1 . Majority (70.7%) had good perception scores (PS) while only 29.3% had poor PS. Attitude was good among 46.1% of the respondents but poor among 53.9% of them. Overall, 57.8% of them were willing to promote possession of male condom by female partners while 42.2% were not. There was no statistically significant relationship between religion and willingness but departments, perception and societal norm significantly associated with willingness to promote possession of male condom by female partners.

Although knowledge of protected sex was poor among most of the respondents, perception and attitude towards possession of male condom by female partners were positive and majority of them were willing to promote this behaviour. It is therefore recommended that men should be engaged and encouraged to promote and support possession of male condom by women and especially their partners.

Keywords: Male condom, female partners, sexually transmitted infections, HIV/AIDS

Word count: 472

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CERTIFICATION

I certify that this project was carried out, under my supervision by OLOJEDE, Omotayo Emmanuel in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria.

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List of acronyms

WHO:	World Health Organisation
STI:	Sexually Transmitted Infections
HIV:	Human Immuno-deficiency Virus
AIDS:	Acquired Immune Deficiency Syndrome
NDHS:	National Demographic Health Survey
HBV:	Hepatitis B virus
USAIDS:	United States Agency for International Development
NYSC:	National Youths Service Corps
UN:	United Nations
CDC:	Centre for Disease Control and Prevention
NACA:	National Agency for the Control of AIDS
PEPFAR:	The US President's Emergency Plan for AIDS Relief

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CHAPTER ONE

Introduction

1.1 Background to the study

Condom is one of the most popular forms of mechanical barriers as it provides protection for the genital tract from sexually transmitted infections (STIs). It also prevents pregnancy by acting as a barrier that stops semen from passing into the vagina (Jain, Behere, Jain, Jain, Joshi and Jain, 2009). Globally, there has been an increased feminisation of the STIs such as HIV/AIDS, hepatitis B virus (HBV) and gonorrhoea epidemiological profiles. Thus, issues related to women's sexuality have attracted increasing attention, stressing the responsibility of users, managers and health professionals in controlling the epidemic (Andrade, Zaccara, Leite, Brito, Soares, Costa, Pinheiro and Oliveira, 2015).

In general, women experience obstacles in using condoms, whether it is the female or male condoms, as they have difficulty in handling it or due to its' unavailability or inaccessibility, or the male condom issues, usually because its use depends on the partner. Thus, the relationship dynamics plays an important role in STI contamination cycles as some women cannot insist on condom use for various reasons, such as trusting their partners, fear of abandonment or sexual coercion caused by strong persuasion (Cordeiro, Heilborn, Cabral, and Morales, 2009).

The National Demographic Health Survey (NDHS) in 2013 indicates that the rate of condom use is higher among women than their male counterparts (29.3% and 19.8% respectively) but the incidence of STI is still higher among women compared to men (8% to 4%). This implies that women are still at a greater risk of contracting sexually transmitted infections and this can be traced back to men. If men can be more consistent in the proper use of condom, more women would be protected from STIs. However, empowering women to also increase their possession and use of the male condom which is cheap, available and accessible (as the NDHS did not state whether women use male or female condom) will also reduce the rate at which unsafe sexual practices occur and in the long run reduce the incidence of HIV and other STIs. For this reason, women should be more involved in carrying even the male condom.

The WHO in 2004 regarded the male condom as the single, most effective and available technology to reduce the sexual transmission of HIV and other sexually transmitted infections and it will be unjust to deny women of such opportunity that can protect them. Various studies carried out among men of different occupations have shown their failure to protect themselves with condom thereby putting their partners at risk. For example, the rate of

consistent condom use among intra-city commercial drivers was found to be 11.6% and 74.3% of these men have multiple sexual partners while 87.6% of them believe it is impossible for them to have HIV/AIDS (Ekanem, Afolabi, Nuga, and Adebajo, 2005). In a similar study by Paulina Makinwa-Adebusoye (2005), female youths (20-24years) were found to be more sexually active than males (86% to 78%) and only 15% of these young adults practised contraception of any kind while it also found out that majority of the men had many sexual partners. The infidelity of men towards their spouses is deeply rooted in the native African culture and this may be difficult to change but the women would be less vulnerable to STIs consequent upon the unfaithfulness of their spouses if they can be encouraged and empowered to carry their own condoms and use it appropriately and consistently.

1.2 Statement of the problem

The lack of adequate protection during sexual intercourse among young men and women of reproductive ages has been identified to constitute a significant risk factor for the transmission of STIs including HIV worldwide (WHO, 2014). Despite the fact that the awareness of HIV/AIDS is almost universal in Nigeria according to the 2013 NDHS, only 26% of women and 37% of men have comprehensive knowledge about the virus and the disease (i. e. they know that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV) and the rate of condom use is only 29% (among women) and 20% (among men) implying a high rate of unprotected sexual intercourse. Therefore, the knowledge about HIV/AIDS has not completely translated into healthy sexual behaviour in the population meaning that a lot of work still has to be done to curtail the spread of the deadly virus and other STIs. These STIs such as gonorrhoea, syphilis, hepatitis have been found to be rampant among the young and the adults. Fourteen thousands people become infected with HIV daily, the majority through unprotected sexual intercourse and many of these cases of infection could have been avoided were it not for restrictions and barriers on proven and effective prevention strategies such as the male condom.

The possession of male condoms by women will be considered inappropriate among the proponents of the African culture that puts women in an inferior light compared to their male counterparts and condom presentation (for example) during sex has been seen as a default responsibility of men. The argument that condoms curtail fertility and save lives has been pitted against condoms as a symbol of immorality and women's uncontrolled sexuality. This is because barriers to the use of condoms exist at several levels (Sohail and Agha, 2001). At

the individual level: lack of trust, perceived decrease in sexual satisfaction, and women's dependence on men to use condoms (Ross, 1992) are important barriers against condoms. Also at the society level, there is a double standard in virtually every African society as far as sexuality is concerned. For example, while the society somewhat permits men to have more than one sexual partners simultaneously (even in marriage), it frowns at women who do the same leading to inability of women to be in control of their sexual protection and this is an important factor in the spread of STIs including HIV as most women fear being branded as prostitutes, stigmatisation, fear of abandonment or committing adultery as the reason for possession of the male condom. At the organisational level however, some denominations in Christendom (such as the Catholics) and Islam completely forbid all forms of contraception. Moreover, it has been shown that an individual's risks of acquiring STI is greatest in marriage (Messersmith, Kane, Odebiyi, and Adewuyi, 2000) and that men are more likely to have multiple sexual partners and engage in casual sex than women (Lescano, Vazquez, Brown, Litvin and Pugatch, 2006; Bamidele, Asekun-Olarinmoye, Odu, Amusan and Egbewale, 2007; Sabitu, Iliyasu and Baba, 2007) thereby putting themselves and their female partners at risk of contracting STI and despite this fact, Nigerian women are not known to carry or have condoms in their possession (apart from the female commercial sex workers) even when they know that it offers them protection against diseases and unwanted pregnancies simply because many fear for the reaction of their spouses and that of the bias of the patriarchal society towards such act. This results into a lot of unprotected and unsafe sexual activities (which is preventable provided the woman can also have a condom) especially when the male partner who has been somewhat saddled with the responsibility of carrying the condom is not having one.

African women have voiced their inability to negotiate condom use, as well as their desire to use a method of protection against HIV/AIDS and other STI infections that can be used without their partners' knowledge (Ray, Bassett, Moposhere and Moyo, 1995). Because it might enable women to initiate condom use, mass availability of condom has been recognized as an important step toward providing women with the means to protect themselves against HIV and other STI (Madrigal, Schifter, and Feldblum, 1998). Studies have shown that, most sexually active women who are at risk of contracting HIV/AIDS, HBV and other STIs are often not able to convince their partners to use condoms. Similarly, women in marital or non-marital monogamous relationships are another group that are often at high risk of HIV but have difficulties protecting themselves against HIV (de Zoysa, Sweat, and Denison, 1996). Thus, the cooperation of male partners will probably remain necessary

for consistent use of the male condom by women, even though the method may allow women to exert greater control over condom use (Bryan, Aiken and West, 1997). Also, in acceptability trials, women's responses to condom use have often been male centred (Ray et al., 1995), suggesting the importance of men in decisions concerning use of condoms. Male partners may oppose use of condom if they perceive that this device increases their partners' ability to engage in other sexual partnerships or if it changes the balance of power in their relationships.

The social and health problems associated with lack of or inconsistent condom use cannot be over-emphasised. Even the younger generations are at a great risk. Orji and Esimai (2005) reported contraceptive use among sexually active secondary school students in Ilesa to be 13.3%. Apart from being a risk factor of STIs including HIV, inconsistent condom use by females has a high potential for unintended pregnancy which leads to countless other social problems. It has been estimated that as many as two-thirds of the new infections expected to occur in the next 10 years could be averted by the implementation of a comprehensive range of evidence-based preventive measures (such as female possession of male condom). The findings from this study could help in designing necessary information to help in promoting the possession and use of male condoms by female (especially through men), through policy changes as well as encouraging proper health seeking behaviours in relation to the HIV/AIDS and other STI control. Therefore, possession of male condom by females (because it is easy to use, available and accessible compared to the female condom) should be promoted among women so as to overcome the menace of STIs and its consequences in the society.

1.3 Justification of the study

The male condom, regarded by the WHO (2004) as one of the most efficient and available technology to reduce the risk of STIs spread by skin to skin contact, such as herpes and Human Papilloma virus has been shown to be able to prevent up to 80 to 95% of HIV transmission (USAIDS, WHO, 2007) when it is used correctly and consistently. Therefore, both males and females should be encouraged to ensure the use of male condom. The result of this study, will give information on the attitude and perception of males if females were to possess the male condom. This information, on the long run can be used to sensitize both males and females on the need for women to also have their male condoms since women are more prone to STIs than men.

Also, in order to facilitate negotiation for condom use between sexual partners, issues such as masculinity/chauvinism need to be addressed (Raiford, Seth, Braxton and DiClemente, 2013) so as to positively influence the somewhat negative disposition of men (which is affected at

various level of influence – intrapersonal, interpersonal and community) towards possession and use of male condom by their partners (Mehlomakulu, 2011). Effective public health professionals who are trained to positively influence and promote healthy behaviours in the population so as to prevent diseases should therefore be equipped with all necessary information and knowledge such that culture, tradition and/or religion will not interfere with their judgement in discharging their responsibility as ‘society physicians’ in planning programmes and interventions to raise the critical consciousness of males in promoting the male condom possession and use among females so as to prevent STI especially HIV/AIDS. The findings from this study will reveal the perception, attitude and the willingness of potential public health professionals to function in this capacity and can therefore be used better equip them. The findings from this study (if negative) can be an indicator pointing towards a deeper problem which needs to be addressed or a foundation on which to build on (if positive) in order to achieve a greater rate of condom use in the society especially among women.

In addition, the findings from this study will serve to fill many questions that are still left unanswered by various researches that have been done on condom use among various sections of the population. Iwuagwu, Ajuwon and Olaseha (2000) reported that 41% of UI female undergraduates negotiate condom use with their partner while 73% had ever done it and 38% carries condom. The huge discrepancy between those who had negotiated before and those who still negotiates means a lot and promoting condom use among females by males will give the females the necessary confidence to negotiate and demand for condom during every sexual act. Among serving NYSC corps members in Ibadan, the rate of condom use was found to be 15% for males and just 4% for female (Sunmola, Olley and Oso, 2007). A similar study among students of a tertiary institution in Nigeria found regular condom use among males to be 44.6% and 20.3% among females (Sabitu, Iliyasu and Baba, 2007), knowledge of the female condom was however found in a different study to be 80% and the rate of use to be 11.3% (with 42.7% using it upon their partners approval (Okunlola, Morhason-Bello, Owonikoko and Adekunle, 2006). Thus, the use of condom by females obviously depends on their male counterparts. Therefore, if women can be encouraged to take better charge of their sexual health, their rate of condom use will be increased. The result of this study will therefore identify the challenges that may prevent health workers especially public health specialists to function appropriately in this capacity and generate relevant recommendations to address these challenges.

1.4 Research questions

To guide the study appropriately, the following questions were raised:

1. What is the knowledge of protected sex among male postgraduate public health students of the University of Ibadan, Nigeria?
2. What is the perception towards possession of male condom by female partners among male postgraduate public health students of the University of Ibadan, Nigeria?
3. What is the attitude towards possession of male condom by female partners among male postgraduate public health students of the University of Ibadan, Nigeria?
4. What is the level of willingness to encourage possession of male condom by female partners among male postgraduate public health students of the University of Ibadan?

1.5 Broad objective

To investigate perception and attitude towards possession of male condom by female partners among male postgraduate public health students of the University of Ibadan, Nigeria.

1.6 Specific objectives of the study

The following are the specific objectives of this study:

1. To assess the knowledge of protected sex among male postgraduate public health students of the University of Ibadan.
2. To determine the perception towards possession of male condom by female partners among male postgraduate public health students of the University of Ibadan.
3. To determine the attitude towards possession of male condom by female partners among male postgraduate public health students of the University of Ibadan.
4. To determine the willingness to promote possession of male condom by female partners among male postgraduate public health students of University of Ibadan.

1.7 Research hypotheses

The following null hypotheses (H_0) were formulated to guide the study;

1. There is no significant relationship between religion and willingness to promote possession of male condom by female partners among male postgraduate public health students of UI.
2. There is no significant relationship between respondents' perception and willingness to promote possession of male condom by female partners among male postgraduate public health students of UI.
3. There is no significant relationship between respondents' departments and willingness to promote possession of male condom by female partners among male postgraduate public health students of UI.

4. There is no significant relationship between societal norm and willingness to promote possession of male condom by female partners among male postgraduate public health students of UI.

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CHAPTER TWO

2.0

Literature Review

2.1 Introduction and conceptual clarification

The male condom is a thin sheath that covers the penis during intercourse which is made of rubber (latex), plastic (polyurethane) and lambskin. The male condom can vary in colour, size and the amount of lubrication and spermicidal effect as the case may require and it is regarded as the single, most efficient and readily available contraceptive method to reduce the transmission of HIV and other sexually transmitted infections (WHO, 2004).

Contraception is a term used to describe the prevention of pregnancy or sexually transmitted diseases including HIV/AIDS (WHO 2013). It has also been defined as the use of any practices, methods, or devices to prevent pregnancy from occurring in a sexually active woman. Other names in place of contraception are family planning, pregnancy prevention, and fertility control (MedicineNet, 2016). In any social context, effective contraception allows a couple to enjoy a physical relationship without fear of unwanted pregnancy and ensures enough freedom to have children when desired (Rakhi and Sumathi, 2011). Therefore, the act of planning, provision and use of birth control is called family planning (WHO, 2011).

Male condoms were the most common contraceptive methods used among the sexually active students. Similar findings have been observed elsewhere in both the developed (Heisler and Van Eron, 2012; Dinas, Hatzipantelis, Mavromatidis, Zepiridis and Tzafettas, 2008) and developing countries (Akintade, Pengpid, and Peltzer, 2011; Cadmus and Owoaje, 2009; Tilahun, Assefa and Belachew 2010; Parey, Addison, Mark, Maurice, Tripathi and Wahid, 2010; Abiodun and Balogun, 2009). These condoms are put on a man's erect penis and physically block ejaculated sperm from entering the body of a sexual partner. Modern condoms are most often made of latex, but some are made of other materials such as polyurethane, or lamb's intestine. Female condoms are also available, most often made of nitrile, latex or polyurethane (Beksinska, Smit and Mantell, 2012). Male condoms have the advantage of being inexpensive, easy to use, and have few adverse effects (Pray and Pray, 2005).

Types of Condoms

Male condom – Refers to a thin sheath made of latex worn by men to cover the penis during sexual act to prevent the transmission of Sexually Transmitted Infections including HIV.

Female condom – Defines a thin sheath made of polyurethane inserted into the vagina during sex to prevent transmission of Sexually Transmitted Infections including HIV

2.2.1 Condom use in Nigeria

Condoms are used both for family planning purposes and for disease prevention and it is often thought to increase as contraceptive practice becomes more widespread through more aggressive marketing strategy especially the social marketing method that has been employed in condom advertisements over the years. In the late 1990s, 4.9% of the world's married couples used predominantly the male latex condom (UN, 2001). By far, the highest prevalence rate (42%) is found in Japan, the only country in the world where condom is the most commonly used family planning method (Engender Health, 2002). However, condom use has increased over the years with increasing awareness of HIV/AIDS but despite a reduction in the prevalence of HIV, the number of people with HIV is still on the rise given the rise in global population. For example, Reis, Heisler, Amowitz, Moreland, Mafeni, Anyamele and Iacopino reported in 2005 that the HIV prevalence among adults in Nigeria has increased from 1.8% in 1991 to an estimated 5.8% in 2001 and that the prevalence ranges from 2% to 14.9% in the country's 36 states and the Federal Capital Territory. However, the prevalence has markedly reduced to about 3.2% according to NDHS 2013 but the number of people infected with the virus has increased as well as the number of children born with the deadly virus.

According to various surveys (NDHS inclusive), condom use is generally low in Nigeria due to various reasons. However, the rate of condom use is still higher in the southern part of the country compared to the north where all forms of contraception are not religiously acceptable. As stated earlier, condoms are used mostly in the context of commercial sex while the rate is low in casual sex and lowest in marriage despite the fact that most men have multiple sexual partners. The cultural double standard and permission for men to engage in multiple sexual relationships is enough reason why condom use should be encouraged among women even in marriage so as to curb the spread of HIV and prevent unplanned pregnancies. Condom use among women was reported to be at 29.3% in the 2013 NDHS and 19.8% among men. This is a very low rate considering the aggressive marketing strategy employed in advertising condom and its accessibility.

2.2.2 Attitude towards condom use

Attitude may be defined as the favourable or unfavourable reaction to objects, people, situations or other aspects of the world. Other social psychologists considered attitudes to include factors such as cognition, affection and behaviour (Kruglanski, Jocelyn, Be'langer, Xiaoyen and Katalina, 2007). The cognition aspect of a person means a person's knowledge

of something; the affective component represents an individual's feelings and evaluations that influence the standpoint for or against something and the behavioural aspect to be, the way people act towards a situation or a person and the motivation to make changes. Attitudes as suggested by psychologist are formed through experiences in lifetime and are usually determined by beliefs and the evaluation of such beliefs. Attitudes formed by individuals in society can be comprehensive as well as unspecific.

Making condoms easily available and accessible is a key part of supporting condom use among African people. However, having a condom does not mean its owner can use it successfully. Being able to clearly communicate one's intention to use condoms and to follow through this intention requires knowledge, skills and confidence.

There is considerable work to be done among African people to increase the cultural value of condoms. Where condoms are perceived to be socially unacceptable, people will avoid their use. A change in attitude requires the understanding that condoms help both partners to be safer, and are not a reason for distrust. In a study conducted among the African population in England by NAHIP in 2010, It was found out that, one-third (32.3%) of Bass Line2 respondents (Hickson, Owuor and Weatherburn, 2009) indicated they would worry about what people thought of them if they carried condoms. Such concerns were most common among those who had never had an HIV test, those with lower educational qualifications, and members of traditional African religions. Also contributing to some people's dislike of condoms is their experience of discomfort and genital irritation when they have used them in the past (Mayisha Collaborative Group,2005).

2.2.3 Perception towards condom use

There are some sociocultural beliefs and perception that the respondents identified as hindrances to female partner use of condoms in the society in a study conducted by Jackalas, Kajiso, Liwena, Mangope, Mookodi, Seitiso, Matshediso and Muza in 2010 among male and female populations in Botswana. The study showed that 24% of the respondents believe that culture is a barrier to condom use, since culturally, women are not expected to initiate sex; it is men who are in control when it comes to sexual activities. In addition, women who carry condoms are perceived as promiscuous; hence no woman would like to be identified as such in a mostly patriarchal African society where women have virtually unequal right with the men. Studies on condom use show that people's perception of risk is associated with high levels of condom use (Akwaru, Madise and Hinde, 2003; Bauni and Jarabi, 2003). Similarly, some studies have also suggested that self efficacy is one of the most important predictors of actual condom use (Baele Dusseldorp and Maes, 2001; Lindberg, 2000; Bandura, 1986).

Perceived condom attributes has also been associated with use of condoms (Peltzer, 2000). Perceived social environmental support has also been identified as a major determinant of condom use (MacPhail and Campbell, 2001). These mentioned studies however, indicate that multiple factors determine the perception towards condom use and that such factors may vary across different population or societies.

2.3 Probable reasons for low rate of condom use in Nigeria

Adejoh and Uchenna (2011) stated various reasons for not using condom in Kogi state one of which is strong desire and social pressure to establish fertility as soon as possible within marriage. This was reported to be the major reason why condom is rarely used by most couples for a long time in most marriages. In fact there is inconsistent use of condom and a high discontinuation rate by married couples in Nigeria. This is supported by Maliki, Omohan and Uwe (2006) who also noted that fertility is a factor militating against the use of condom because women especially those in long-term relationship feel the pressure to get pregnant. According to Smith (2004), the inconsistency and discontinuation in condom use in marriages and long-term relationships stems from misunderstanding about the need for consistent condom use, experimentation with the method and ending use so as to have another child. He also noted that low risk perception is a cause for low condom use among unmarried youths despite widespread knowledge about HIV/AIDS and its mode of transmission and the high levels of awareness of and access to condoms among this population. Although, the rate of condom use among youths is high when compared to the rate among adults, it is still unacceptably short of the expected standard as casual and risky sexual behaviour is more common among the youths.

Moreover, there are other reasons why condom is facing problems in Nigeria apart from the one stated in this study. For females, it was reported that stigma leads to lower condom use. Also, lack of knowledge on where to get condoms (9.4% and 29.1% of male and female respondents, respectively) reduced condom use in both males and females (Lammers, Wijnbergen and Willebrands, 2013). This implies that more work needs to be done in making condoms accessible if we are going to have an acceptable use rate. Most females are of the opinions that only commercial sex workers should be carrying condoms around and fear that they would be stigmatised if found to be carrying condoms. The few who admitted that they could buy and carry condom according to a survey conducted by a journalist in Abuja also admitted that they cannot buy the condom where they are known for fear of stigmatisation or being looked at like a prostitute. This is an important area of intervention. Condom use is not

all about the advertisement, the campaigns and the social marketing but making it available in a friendly manner will go a long way in guaranteeing an increased rate of use of the product. Furthermore, there is a wide gap between HIV knowledge and the practice of preventive behaviours even in countries with high prevalence of HIV/AIDS (Lammers et. al., 2013). The 2013 NDHS put HIV knowledge in Nigeria at 93% and 96% for female and male respectively. This level of knowledge compared with the rate of condom use of 29.1% and 19.8% for females and males respectively means that the knowledge does not translate into behaviour. An increase in some forms of risky sexual behaviours was measured in Uganda over the period 1989–2005. Although abstinence increased among adolescents (15–24 year olds) from 23% in 1989 to 42% in 2005, males (15–49 year olds) were found to report more multiple sexual partnerships and sex with non-spousal partners over the 2001–2005 period (25%–29% and 28%–37%, respectively) while condom use with non-spousal partners among male adolescents declined from 65% to 55% (Opio, Mishra and Hong, 2008).

In addition, religion is also a serious challenge to consistent condom use in Nigeria. Certain denominations of the two major religions in Nigeria frown at all forms of contraception. Sex workers in Nigeria were found to underestimate the risk despite their level of knowledge about HIV as many believed that it was God that decided on their fate, leading to low protective behaviour (Ankomah, Omoregie, Akinyemi, Anyanti, Ladipo and Adebayo, 2011). This kind of belief is shared among many Nigerians. We all tend to believe that whatever happen to us is decided by certain higher powers and regardless of what we do, ‘what will be will be.’ As a result, many people refuse to use all form of contraceptives because they think it does not matter.

Other factors affecting female condom possession in Nigeria

1. Gender inequality between male and females: The social stigma of purchasing or owning condoms is that women who do so are sexually promiscuous or dirty. Similarly, women are seen as undesirable if they suggest condom usage, or are considered uptight if they require condom usage (Fitzpatrick, 2007). In addition, the power struggle between men and women often ends with women making amends that would not otherwise have been made. Essentially, condom use is scarce and inadequate in our society because majority of women lack the communication efficacy to change the cultural norms. Most women fit in to the societal norms as a result of three specific reasons. First due to the negative social stigmas placed on women who purchase and possess condoms, secondly due to the unequal power

balance between men and women, and lastly, lack of adequate sexual education which is a main contributor to this phenomenon. It is evident from literature that reasons for the low use of condoms among sexually active individuals include embarrassment, low self efficacy, dislike for condoms, and concerns about the meaning that a partner might attach to a request for condom use. Another cause of inconsistent condom use is lack of motivation to engage in protective sexual behaviour (Thompson, Kyle, Swan, Thomas and Vrungos, 2002).

Baum and Temoshok (1990) supported this notion and further included the unavailability of condoms as also a reason for not using condoms. Research studies show that subjective assessments of partner safety and the belief that sufficient measures were taken to avoid pregnancy were important reasons for condom non-use. Using a condom with every partner and every act of intercourse is not easy to achieve. Many people, in fact, tend to use condoms sometimes but not always, or with some partners.

2. Tradition and culture: In a heteronormative society, men are viewed as responsible for the purchase and possession of condoms, while women are deemed responsible for securing other methods of contraception, such as various forms of birth control. Women are supposed to be in charge of their sexual lives; however there are negative social stigmas associated with women and condoms. The society views women who buy and carry condoms as more promiscuous and ultimately less desirable for a sexual relationship. Instead of praising women for ensuring healthy sexual relations, society constantly sends the message to women that this a negative decision, and the only women who would need this safety net are those that have exorbitant amounts of sexual relations. Using a condom is 'killing the mood', women that bring it up are viewed as undesirable, and women that insist on it are perceived as uptight and overcautious (Fitzpatrick, 2007).

Understandably, no one wants to be seen as uptight, and condom use is forgotten. In 2006, the Center for Disease Control reported that an average of 71.03 percent of Americans admit to using condoms "none of the time", 6.9 percent use condoms "some of the time", and a feeble 22.1 percent of Americans report that they use condoms responsibly on a regular basis (Center for Disease Control, 2006). These numbers are not only the result of the price or availability of condoms, but they are also a reflection of the stigmas associated with this method of contraception. If a woman repeatedly insists on a condom, the male is likely to grow annoyed or try to coerce her to change her mind.

2.4 Consequences of low condom use in Nigeria

Over the years, evidences of unprotected sex continue to grow unabated in the country. There is an increase in the incidence of teenage pregnancy which is accompanied by various other

social and health implications such as unsafe abortion and its consequences which has claimed many lives.

Also, the rate of unwanted or unplanned pregnancy continue to rise despite the advent of various family planning techniques implying that unprotected sex still continue in the population.

Most importantly, the impact of unprotected sex on the incidence and prevalence of STIs including HIV/AIDS cannot be overemphasized. The number of people infected and affected by HIV/AIDS in the country continue to grow despite various local and international interventions.

2.4.1 Unwanted pregnancies

As stated earlier, condoms serve two major purposes: first, it is a form of family planning through which unwanted pregnancies can be avoided, second, it prevent the consistent user against sexually transmitted infections including HIV. Therefore, widespread HIV alone (even as popular and deadly as it is) is not the only consequence of low condom use in Nigeria. Several other social and health problems such as high rate of teenage pregnancy which may lead to increased maternal mortality, infant mortality and morbidity, high rate of abortion and death thereof and even poverty can all be traced to low condom use in the population.

It is estimated that about 1.5million unplanned pregnancies occur in Nigeria every year and about half of this result into elective abortion (Bankole, Oye-Adeniran and Singh, 2006). According to them, one-third of every Nigerian woman of child bearing age have had an unwanted pregnancy and 1 in 10 have had an induced abortion and due to the fact that abortion is legal in Nigeria only when it is deemed necessary to save a woman's life, most abortions are often performed under clandestine and unsafe conditions and about half of this results into serious complications. These complications account for about 20 – 40% of all maternal deaths in Nigeria (WHO: 2004). Studies indicate that young women are the most abortion seekers in Nigeria (Oye-Adeniran, Adewole, Umoh, Fapohunda and Iwere, 2004) and they are the ones most likely to characterize a pregnancy as unwanted and it is estimated that young unmarried women below the age of 25 are most affected by complications of unsafe abortion (Fawole and Ayodeji, 2002). The 2003 NDHS revealed that women are now marrying late as they are now more interested in acquiring more academic qualifications and as a result, they engage more in premarital sex. These set of women will be safe from unplanned pregnancy if they can ensure consistent use of condom.

Moreover, unplanned and unwanted pregnancies is also very common among secondary school students in Nigeria and it is a major reason why more girls and adolescents drop out of school in Nigeria. Olaitan (2011) identified unprotected sexual intercourse as a major cause of unwanted pregnancy among secondary school students in southwest Nigeria. This agrees with the work of Fagbamigbe, Adebowale and Olaniyan (2001) that revealed the rate of condom use among out-of-school youths in Southwest Nigeria (40.8%) to be greater than that among in-school youths (29.8%). This could be because the school health policy in Nigeria does not allow for condom use to be advocated for among secondary school students even in HIV campaigns and intervention programmes, the message should be abstinence. Perhaps further research into this area can reveal results that can influence the policy as avoidable, unplanned and unwanted pregnancies among teens is growing at an alarming rate and can be avoided together with its accompanying social and health implications by consistent condom use.

2.4.2 Sexually Transmitted Infections (STI)

Sexually transmitted infections (STI) are spread primarily through person-to-person contact, although some of the pathogens that cause it, especially Human immunodeficiency virus (HIV) and syphilis, can be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer (WHO, 2011; Nsuami, Sandals and Taylor, 2010).

According to 1999 WHO estimates, 340 million new cases of curable STIs (Syphilis, Gonorrhoea, Chlamydia and Trichomoniasis) occur annually throughout the world in adults aged 15 to 49 years. In the developing countries, STI and their complications rank in the top five disease categories for which adults seek health care (WHO, 2011). Some of these STI when not controlled can lead to severe complications. In men, gonorrhoea and Chlamydia trachomatis can lead to epididymitis. Inflammatory urethral stricture may arise later from poorly treated gonococcal urethritis, which in turn may lead to urinary retention and possibly chronic renal failure if not properly managed. Some of the diseases may result to genital ulcers, with few cases developing severe sacral dysfunction resulting in urinary retention (Richard and Jay, 2002; Gerald and Steven, 2002). Consequences of these STI include AIDS, spontaneous abortions, stillbirths, perinatal and neonatal morbidities, chronic pelvic pains, dyspareunia, infertility, increased risk of ectopic pregnancy and even death (De Schryver and Meheus, 1990; Chamberlain, 1995; Westrom and Mardh, 1990; Rice, 1991; Robinson and Ridgeway, 1996; Otolurin, 1999).

Interestingly, STI are preventable diseases and their prevention is even a priority for World Health Organisation (WHO) (WHO media centre, 2011). For adequate prevention, sound knowledge of the disease is very crucial. Knowledge of STI complication may play an important role in encouraging safer sexual behaviours (Mmbaga, Leyna, Mnyika, Klepp, 2007). Historically, knowledge about STI had been very low in communities where there is high prevalence of STI and some communities even viewed STI as unavoidable or as an "initiation into adulthood".

However, of all the infections and diseases that can be transmitted by sexual means, the HIV is perhaps of the greatest public health importance not just in Nigeria but globally. According to NACA and PEPFAR 2014 estimates, the prevalence of HIV in Nigeria is still 3.2% as reported in NDHS 2013 and there are approximately 3.4million people living with HIV in Nigeria 380,000 of which are children. Of the 3million adults living with the virus in Nigeria, 1.7million are women which explains the high number of children with the virus because of mother to child transmission as only around 30% of the women living with HIV have access to appropriate antiretroviral treatment. About 170,000 deaths occur due to the virus and around 1.6million children have been orphaned as a result of deaths due to HIV.

All these could be prevented cheaply by consistent condom use among both males and females. Condoms as earlier stated offer protection against unwanted pregnancies and sexually transmitted infections including HIV. But most interventions advocating for condom use have always targeted the men, it is however important to state that women should not be excluded. In fact, the use of male condom (since it is easy to use, cheaper and accessible) should be promoted among women. It should be noted that in the Nigerian and a typical African setting, men can be a challenge to condom use behaviour among women. Studies reveal that most women operate in the context of intimate partner violence and as a result, most women fear asking a partner to wear a condom as it may result in violence (MacPhail and Campbell, 2001). Hence, most research conducted suggests that women have limited power to negotiate sexual matters perhaps because the African culture dictates it to be so.

This study will therefore attempt to look at empowering women to possess and use the male condom from the perspective of men. It will bring to the fore the reasons why men may have a negative disposition to women's possession of the male condom and give an insight into the form of interventions targeted probably at males and females in order to ensure an increase in the rate of condom use and prevent unwanted pregnancies as well as STIs.

2.5.1 Theoretical Framework

The ecological model was used for this study. This model emphasizes the interaction between, and interdependence of factors within and across all levels of a health problem. It highlights people's interactions with their physical and socio-cultural environments.

The model has two key concepts which can help to identify intervention points for promoting health: first, behaviour both affects, and is affected by, multiple levels of influence; second, individual behaviour both shapes, and is shaped by, the social environment (reciprocal causation).

The first key concept of the ecological model (i.e. multiple level of influence) consists of five (5) levels of influence for health-related behaviours and conditions (McLeroy, Bibeau, Steckler and Glanz, 1988). These are:

- i. intrapersonal or individual factors;
- ii. interpersonal factors;
- iii. institutional or organizational factors;
- iv. community factors;
- v. public policy factors.

This is presented in the table below:

Table 2.5.1: The constructs of the ecological model

Level of influence	Description
Intrapersonal	Individual characteristics that influence behaviour e.g. knowledge, skills, self-efficacy, attitudes, belief, personal traits etc.
Interpersonal Family, friends, peers	Interpersonal processes and groups that provide identity and support and role definition.
Organisational Churches, stores, community organisations	Rules, regulations, policies, structures that constrain or promote the behaviour
Community Social networks	Community norms (community regulations)
Public policy Local, state federal	Policies and laws that regulate or support healthy practices/actions

The second key concept of the ecological model, reciprocal causation, suggests that people both influence, and are influenced by, those around them. This emphasizes on the impact of the environment on an individual's behaviour.

Application of the model

Due to the potential of ecological model in guiding comprehensive population-wide approaches to changing behaviour that will reduce serious and prevalent health problems, it has been applied to a wide range of research, practice and interventions. Reduction of tobacco smoking in the US since 1960 is credited to the model and the model has also been used in the prevention of violence (CDC, 2012) as well as in HIV related researches and interventions.

Using the various constructs of model, it will be applied to the current research as follows:

The intrapersonal level: at the individual level, various characteristics and personal traits of respondents such as attitude, perception, marital status, beliefs etc that can affect their willingness to promote or support possession of male condom by females (partners) will be identified.

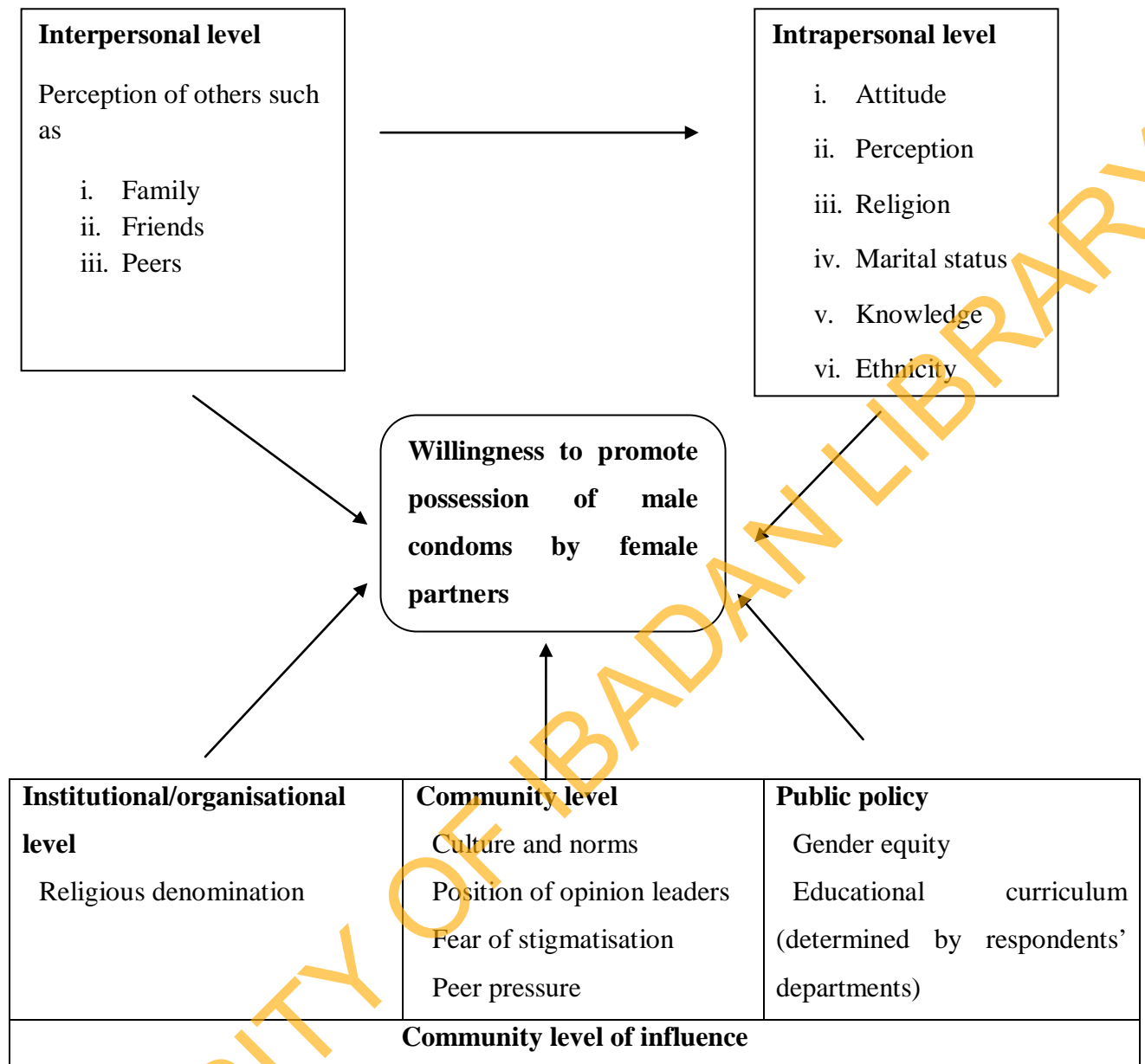
The interpersonal level: at this level, the model will reveal how respondents' relationships with other people in the environment such as family members, friends, peers or colleagues influence the behaviour. The influence of the perception of the people with which the respondents are involved in one relationship or the other (subjective norm) on their attitude towards the behaviour will be determined.

The community level: at the level of influence, the influence of institutions/organisations, the community as well as public policies on the behaviour will be discussed and identified. These elements constitute the community level of influence on the behaviour. Therefore, the effect of culture and ethnicity of respondents, opinions of religious leaders, educational curriculum, etc on the behaviour will be determined.

2.6 Conceptual framework

The model discussed above is conceptualised below:

Figure 1



CHAPTER THREE

3.0 Methodology

3.1 Study design

The study design that was adopted for this study is the descriptive cross-sectional design using semi-structured self-administered questionnaires.

3.2 Study location

The study was carried out in the Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria. The University was established in 1948 as a college of the University of London and it became a full-fledged university in 1962 (the first in Nigeria) following Nigeria independence in 1960. The university has academic programs in thirteen faculties which are Arts, Sciences, Agriculture and Forestry, Social Sciences, Education, Pharmacy, Veterinary Medicine, Technology, Law, Basic Medical Sciences, Clinical Sciences, Public Health and Dentistry. The last four faculties are organised as College of Medicine. Other academic units in the university include Institute of child health, Institute of Education and institute of African Studies among others. There are twelve halls of residence and 1212 housing units in the university.

The Faculty of Public Health where the study took place was founded in 2002 as the first faculty of Public Health in Nigeria and it was carved out of the then Department of Preventive and Social Medicine. The faculty currently has six departments and one institute which are Epidemiology and Medical Statistics (EMS), Health Promotion and Education (HPE), Health Policy and Management (HPM), Environmental Health Sciences (EHS), Human Nutrition, Preventive Medicine and Primary Care and Institute of Child Health.

The faculty is located inside the University College Hospital and the faculty building where all the departments (except Human Nutrition and Institute of Child Health) are located is named after late Prof. Oladele Ajose.

Being the foremost and leading school of public health in the country, carrying this study out at this location will ensure that the results and recommendations from the study can be adopted by the other schools of public health in the country.

3.3 Study population

The study population for this study consisted of male postgraduate students in the faculty of public health of the University of Ibadan. As at the time of this study, there were estimated one hundred and seventy-seven (177) master degree male students in the faculty. Public health specialists are generally promoters of healthy behaviours in the population regardless

of their religious or cultural affiliations. Conducting this study among this population will therefore serve to inform the necessary stakeholders on how to better equip the males especially to serve in this capacity and because it will make better sense if males were to be the ones promoting possession of male condom by female partners.

3.4 Inclusion criteria

All male postgraduate students in all the departments in the faculty of public health who consented to participate in the study were included in the study.

3.5 Exclusion criteria

Female postgraduate students were entirely excluded from the study. Also male students in the faculty who did not consent (those who gave informed dissent) were excluded from the study.

3.6 Sampling procedure

The entire faculty was stratified into the various departments constituting it. After this has been done, census method of sampling was used in that all consenting postgraduate students who are males across all the departments were selected for the study. With this method, the opinions of everybody concerning the subject matter was collected and documented.

The total number of male students in all the departments of the faculty as gathered through the various class representatives and departmental offices is presented in the table 3.6 below:

Table 3.6: Number of male students in the faculty

S/N	Departments	No of male students for:		
		2014/2015	2015/2016	Total
1	Health Promotion and Education	12	13	25
2	Health Policy Management	15	15	30
3	Epidemiology and Medical statistics	21	23	44
4	Environmental Health Sciences	18	25	43
5	Community Medicine	13	10	23
6	Human Nutrition	01	01	02
7	Institute of Child Health	01	09	10
<u>TOTAL</u>		<u>81</u>	<u>96</u>	<u>177</u>

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3.7 Instrument for data collection

Quantitative method was used for data collection. This involved the use of self-administered semi-structured questionnaires. The questionnaire was developed using information obtained from literature on HIV, STI, safe sex practices and the rate of possession and use of the male condom by women. The instrument for the study had five (5) sections: the first section was designed to elicit data on socio-demographics of the respondents. The second section was designed to assess the level of knowledge of respondents on protected sex while the third section was meant to collect information on the perception of male postgraduate public health students of the University of Ibadan towards possession of male condom by female partners. The fourth and fifth sections focussed on attitude of male postgraduate students of public health of University of Ibadan towards possession of male condom by females (partners) and the willingness of male postgraduate students of public health of University of Ibadan to promote possession of male condoms by female partners.

3.8 Validity of the data collection instrument

Validity of the instrument for data collection was ensured by reviewing relevant literature on perception, attitude and willingness related to possession of male condom by female partner. The project supervisor was also consulted on how the instrument should be designed and subsequently his comments were used to improve the tool. The draft of the proposed instrument was also subjected to independent, peer and expert reviews, particularly to experts in public health.

3.9 Reliability of the instrument

The reliability of the instrument was determined by pre-testing the instrument among male postgraduate students of public health of the Obafemi Awolowo University, Ile-Ife, Osun State. Copies of the instrument were administered to forty (40) respondents. After the pre-test, the data gathered was checked for errors and completeness. After that had been done, each questionnaire was numbered for easy recall and a coding guide was prepared to facilitate entry of the data into the system. The data were then subjected to descriptive statistics which was basically frequencies and charts. The reliability coefficient which is also called the Cronbach Alpha was also calculated to be 0.964.

Following the pre-test, the tool was reviewed and ambiguous questions were removed. Also, questions considered by the respondents as too sensitive especially those related to their history of sexual behaviour were either removed or revised.

3.10 Data collection procedure

For this study, serially numbered self-administered questionnaire was used. The data were collected by the researcher with the assistance of the representatives of each of the departments who had been trained prior to the process as research assistants.

This was after the study had been accurately explained to them clearly. Both the benefits and the possible harms that may arise as a result of participating in the study were explained to them. Afterwards, the students were met in their various classes and the researcher also provided correct and understandable information to them about the research including the benefits and whatever harms that may result from participating in the study. This was necessary in order to obtain informed consent from every participant.

The informed consent forms (attached to the questionnaires) were distributed to the potential participants after they had known about the study. After the questionnaires had been filled, the researcher checked for completeness and errors before leaving the field.

3.11 Data management and analysis

Serial numbers were written on the copies of the questionnaire for easy entry and recall. A coding guide was developed along with the data collection tool in order to facilitate its analysis. Statistical Package for Social Sciences (SPSS) was used to analyse the data obtained with the questionnaires. Using the coding guide, the data collected was carefully entered into the statistical software and was analysed using descriptive statistics such as mean, median and mode and inferential statistics such as Chi-square. The results obtained from the SPSS analysis was summarized and presented in tables and charts.

Respondents' knowledge of protected sex was measured on a 31-point knowledge scale. Knowledge Score (KS) of ≤ 10 was rated as poor knowledge, KS of $>10 \leq 20$ was considered fair and KS ≥ 20 was rated as good knowledge.

A 16 – point perception scale was used to assess perception towards possession of male condom by female partners. A perception score ≤ 9 represents poor perception while a score >9 represent a good perception towards possession of male condom by female partners.

Also, a 15 – point scale was used for attitude, where a score ≤ 9 represents poor attitude and a score >9 represent a good attitude towards possession of male condom by female partners.

Chi square test statistic was conducted to investigate the relationship between religion, department, perception societal norm and willingness to promote possession of male condom by female partners.

3.12 Ethical consideration

Ethical approval was sought and obtained from the Social Sciences and Humanities Ethics Committee of the University of Ibadan before going to the field for data collection. Also, written informed consent was attached to the questionnaire. To ensure confidentiality of research participants, identifiers such as names and other information that can reveal the identity of research participants were not included in the research instruments. The nature of the study, benefits and objectives were explained to the respondents and they were assured that the information given would be treated with utmost confidentiality. Respondents were also intimated about the opportunity to withdraw their consent freely at any point during the study. Confidentiality of each participant was maximally maintained during and after the collection of their information. Information gathered from the respondents was stored in the computer for analysis by the researcher while copies of the filled instruments were kept for maximum safety.

3.13 Study limitations

That students in year two (MPH 2 and MSc. 2) in the faculty are scattered after the culmination of their course work is considered a limitation for this study as they were difficult to reach during the study. A snowballing approach was however used during the study by keeping tabs on the class representatives and/or other available class members through whom the others were reached.

CHAPTER FOUR

RESULTS

4.0

4.1 Socio-demographic characteristics of the respondents

Overall, a total of 167 male postgraduate public health students of University of Ibadan took part in the study. The mean age of the respondents was 27.7 ± 4.4 years with minimum and maximum ages of 22.0 and 46.0 years respectively. Majority, 121 (72.5%) of the respondents were of the Christian faith, some, 44 (26.3%) were of the Islamic faith while few, 2(1.2%) were atheist. Except for the few, 22 (13.2%) who reported to be married, most, 145 (86.8%) of the respondents were single. Most, 116(69.5%) of the respondents were of the Yoruba ethnic group but 19(11.4%) were Igbo, 14(8.4%) were Ibibio and other ethnic groups such as Annang, 1(0.6%), Esan, 1(0.6%), Efik, 1(0.6%), Bini, 2(1.2%), Tiv, 5(3%), and Urhobo, 5(3%) were also represented. The most occurring first degree disciplines among them were Human anatomy, 20(12.0%), Physiology, 14(8.4%), Health Education, 15(9.0%), MBBS 14(8.4%), Demography and social statistics, 16(9.6%), Human nutrition, 14(8.4%), Biochemistry, 13(7.8%), Chemistry, 7(4.2%) and Optometry, 6(3.6%). Of all the respondents, 70(41.9%) were in MPH 1, 55(32.9%) in MPH 2, 22(13%) in MSc 1, 17(10.2%) in MSc 2 while 3(1.2%) were MHSA students. In total, 24(14.4%) of the respondents were students of HPM, 6(3.6%) from RFH, 23(13.8%) from HPE, 45(26.9%) from EHS, 2(1.2%) from Human nutrition, 27(16.2%) from EMS, 6(3.6%) from Public health biotechnology, 6(2.4%) from Medical demography, 9(5.4%) from Field epidemiology, 2(1.2%) from Child and adolescent health and 10(6%) were from Global health.

4.1.1 Respondents' history of sexual activity

Almost all 166(99.6 %) the respondents had had sex before and majority, 106(63.5%) of them had had sex without a condom before. In the last six months preceding the study, about one third, 36(37.9%) of the respondents engaged in unprotected sex and about half, 33(53.2%) and 39(59.1%) in the last 3 months and the last 3weeks respectively. However, condom awareness was 100% among the respondents and the media is the most reported source of awareness.

This information is presented in table 4.1 below:

Table 4.1: Socio-demographic information of respondents

Socio-demographic variables	Responses	N (%)	
Age (in years)	20-25	50(32.9)	
	26-30	82(53.9)	
	31-35	12(7.9)	
	36-40	1(0.7)	
	41-45	7(3.9)	
	46-50	1(0.7)	
	Total	153(100.0)	
Religion	Christianity	121(72.5)	
	Islam	44 (26.3)	
	Atheism	2(1.2)	
	Total	167(100.0)	
Marital status	Single	145(86.8)	
	Married	22(13.2)	
	Total	167(100.0)	
First degree discipline	Physiology	14(8.4)	
	Health education	15(9.0)	
	MBBS	14(8.4)	
	Microbiology	15(9.0)	
	Demography and social statistics	16(9.6)	
	Human nutrition	14(8.4)	
	Biochemistry	13(7.8)	
	Chemistry	7(4.2)	
	Optometry	6(3.6)	
	Human anatomy	20(12.0)	
	Others	33(19.8)	
	Total	167(100.0)	
	Level of study	MPH 1	70(41.9)
MPH 2		55(32.9)	
MSc 1		22(13.2)	
MSc 2		17(10.2)	
MSHA		3(1.8)	
Total		167(100.0)	
Department/course of study		Health Policy and Management	24(14.4)
	Health Promotion and Education	23(13.8)	
	Environmental Health Sciences	45(26.9)	
	Human Nutrition	2(1.2)	
	Epidemiology and Medical statistics	40(24.0)	
	Child and adolescent health	8(4.8)	
	Preventive medicine	19 (11.4)	
	Total	167(100.0)	
	Ethnic group	Yoruba	116(69.5)
		Igbo	19(11.4)
		Ibibio	14(8.4)
Others		18(10.8)	
Total		167(100.0)	

Table 4.1.1: Respondents' history of sexual activity

Sexual activity	Response	Percentage(%)
Have you had sex before	Yes	166(100)
Number of sexual partners	None	10(8.1)
	One	93(75.0)
	Two or more	21(16.9)
	Total	124(100.0)
Condom awareness	Yes	166(100.0)
Source of awareness	Media	151(41.0)
	Health facility	65(17.7)
	Health personnel	74(20.1)
	Friends and family	78(21.2)
Condom use in the first sexual encounter	Yes	54(42.2)
	No	74(57.8)
	Total	128(100.0)
Sex without discussing condom first	Yes	86(66.7)
	No	43(33.3)
	Total	129(100.0)
Have you ever had sex without a condom before	Yes	106(81.5)
	No	24(18.5)
	Total	130(100.0)
Sex after taking alcohol or drug	Yes	34(26.2)
	No	96(73.8)
	Total	130(100.0)
If yes, did you use condom in that sexual encounter	Yes	20(58.8)
	No	14(41.2)
	Total	34(100.0)
Condom use with partner in the last:		
The last six months	Yes	59(62.1)
	No	36(37.9)
	Total	95(100.0)
The last three months	Yes	29(46.8)
	No	33(53.2)
	Total	62(100.0)
The last 2-3 weeks	Yes	27(40.9)
	No	39(59.1)
	Total	66(100.0)
Description of a female with male condom	Informed and aware	11(11.2)
	Proactive and protective	47(48)
	Smart/Knowledgeable	25(25.5)
	Unfaithful and promiscuous	
	It could be because of her work (e.g. health worker)	9(9.2)
	It is normal	2(2.0)
		4(4.1)

4.2 Respondents' knowledge of protected sex

Table 4.2 below presents information on the knowledge of protected sex among the respondents. Most, 140(83.8%) of the respondents had fair knowledge scores and except the 5(3.0%) that had good knowledge score, the rest 22(13.2%) had poor knowledge scores.

However, the mean knowledge score was 15.1 ± 4.1 with minimum and maximum scores of 0.0 and 24.0 respectively.

Reported definition of protected sex

On the definition of protected sex, majority, 86 (53.5%) of the respondents defined protected sex as sex in which the male or the female condom is used correctly, and 24(15.1%) defined it simply as using contraceptives. Other definitions offered were 'sex without condom', 5(3.2%), 'abstinence', 1(0.7%), 'prevention of STI and pregnancy', 22(13.8%), 'safe sexual practices', 5(8.0%), 'having condom during sex', 2(1.4%), 'sex without exchanging seminal and vaginal fluids', 5(3.2%), 'sex with single partner with or without a device', 2(1.4%), and 'sex with little or no chance of unwanted pregnancy', 4(2.6%). Overall, 13.8% gave correct definition, 68.6% incomplete definition and 17.6% gave a wrong definition for the term

How sex can be protected

Majority, 123(79.4%) of the respondents reported that sex can be protected by using condom, 16(10.3%) by using contraceptives and only 1(0.6%) by negotiation and abstinence. However, the most outstanding method of protecting sex (condom use and faithfulness to one uninfected partner) was offered by only 4(2.6%) of the respondents. Other ways of protecting sex reported are 'faithfulness to a partner', 8(5.2%), 'using condom and sex pills', 1(0.6%), and 'abstinence or condom use', 2(1.3%). In total, 82.0% correctly reported how sex can be protected, 17.4% stated it incorrectly while only 0.6% gave a wrong answer.

Necessity for protecting sex

Most, 114(74.5%) of the respondents reported that it is necessary to protect sex in order to prevent transmission of STIs and unwanted pregnancies while 25(16.4%) stated that it is just to avoid infections. Only 10(6.5%) stated that it is to prevent unwanted pregnancies and 4(2.6%) reported it is for economic reasons. About three quarter (74.5%) got the question correctly, 22.9% incompletely and while 2.6% gave wrong answers.

Diseases that can result from unprotected sex

As shown in the table 4.2 below, 117(80.1%) of the respondents were able to mention correctly four infections or diseases that can result from unprotected sexual intercourse, 29(9.0%) could mention only three, 11(7.5%) only two while 5(3.4%) were able to mention only one.

Benefits of using condom

Apart from the 7(4.3%) and 20(12.4%) who could mention none and only one respectively, most, 135(83.3%) of the respondents were able to mention correctly two benefits of using condom.

Reported number of condom that should be worn to prevent pregnancy or disease

Except for the 3(2.1%) and 9(6.1%) who reported none and two, respectively, nearly all the respondents 135((91.8%) reported that only one condom is needed to protect pregnancy and infections per intercourse.

Health complications of inconsistent condom use

Of the four complications required of the respondents, 12(8.1%) were not able to give any correct answer. Only 3(2.1%) mentioned three correct answers while 101(68.2%) and 32(21.6%) gave one and two correct answers, respectively.

Reported frequency of female involvement in the use of male condom

Overall, only 39(34.2%) reported that a woman should ensure the use of male condom in every sexual intercourse as long as she has no intention of conceiving while 19(16.7%) reported never. About 40(35.2%) said always, 6(5.3%) said base on negotiation, 7(6.2%) said once but 1(0.9%) reported it is only appropriate if a woman is having sex with a non-regular partner and 2(1.8%) had no idea.

Table 4.2: Respondents' knowledge of protected sex

Knowledge variable	Response	%
Definition of protected sex	Incomplete	68.6
	Wrong	17.6
	Correct	13.8
	Total	100.0
How sex can be protected	Correct	82.0
	Incomplete	17.4
	Wrong	0.6
	Total	100.0
Why it is necessary to protect sex	Correct	74.5
	Incomplete	22.9
	Wrong	2.6
	Total	100.0
Diseases or infections that can result from unprotected sexual intercourse	One correct answer	3.4
	Two correct answers	7.5
	Three correct answers	9.0
	Four correct answers	80.1
	Total	100.0
Benefits of using condom	No correct answer	4.3
	One correct answer	12.4
	Two correct answer	83.3
	Total	100.0
Number of condoms to be worn to prevent pregnancy or disease	None	2.1
	One	91.8
	Two	6.1
	Total	100.0
Health implications of inconsistent condom use	No correct	8.1
	One correct answer	68.2
	Two correct answers	21.6
	Three correct answers	2.1
	Total	100.0

Knowledge variable	Response	%
Female involvement in the use of the male condom	Every sexual intercourse	34.2
	When having sex with non-regular partner	0.9
	Never	16.7
	Base on negotiation	5.3
	Always	35.2
	Once	6.2
	No idea	1.8
General knowledge score	Poor	13.2
	Fair	83.8
	Good	3.0
	Total	100.0

Average KS = 15.1±4.1

Minimum KS = 0.0

Maximum KS = 24.0

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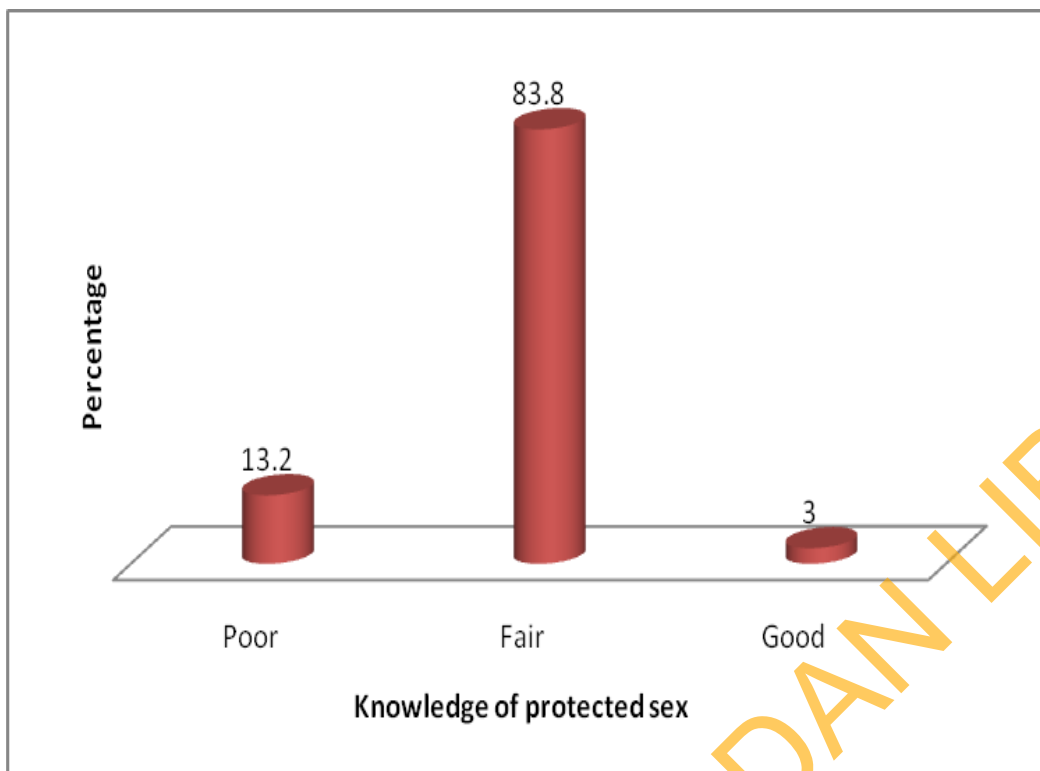


Figure 2: General knowledge score

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4.3 Respondents' perception towards possession of male condom by female partners

The perception of the respondents towards possession of male condom by female partners is presented in table 4.3 below. Majority, 157(95.7%) of them perceived that condom use is a major way to reduce the severity of the threat posed to human health by STIs including HIV/AIDS and 148(89.7%) also agreed that condoms have the ability to prevent HIV/AIDS and other STIs. Less than one-fifth, 28(17.0%) stated that it is normal for a man to have more than one sexual partner but more than half, 86(52.8%) perceived condom reputation to be poor. Most, 122(74.8%) do not see anything wrong with a woman having a male condom in her bag or house and majority, 138(86.3%) perceived that women should have free access to the male condom. More than half, 91(56.2%) of the respondents perceived that condom interfere with sexual pleasure but only 43(26.5%) believed possession of condom by a woman to be proof of unfaithfulness. About three-fifth, 99(61.1%) reported that a woman can only protect herself with a condom if her partner has an STI and almost half, 79(48.8%) stated that a woman should be responsible for securing other methods of contraception apart from condom. While majority, 134(84.7%) perceived that women are legally permitted to possess the male condom, three-fifth, 99(60.4%) were of the opinion that it would be against their culture for women to carry the male condom but most, 146(89.6%) of them agreed that condom adverts are ways of encouraging even the women to have the male condom. Although, 65(39.6%) perceived it to be against their culture and 107(65.6%) opined that their community frown at women who carry the male condom, most, 132(81.5%) perceived that they are obliged as public health specialists to promote possession of male condom among women.

Table 4.3: Respondents' perception towards possession of male condom by female partners

Perception statement	Agree (%)	Disagree (%)	Total (%)
Condom use is a major way to reduce the severity of the HIV/AIDS and STI threat to human health especially women	157(95.7)	7(4.3)	164(100.0)
Condoms prevent HIV/AIDS and STIs	148(89.7)	17(10.3)	165 100.0)
It is normal for a man to have more than one partner	28(17.0)	137(83.0)	165 (100.0)
Condoms have a poor reputation	86(52.8)	77(42.2)	163 (100.0)
I don't see anything wrong with a female having a condom in her bag or house	122(74.8)	41(25.2)	163 (100.0)
Women should have free access to male condom	138(86.3)	22(13.8)	160(100.0)
Condoms interfere with sexual pleasure, deter arousal by reducing sensitivity and curtailing spontaneity during sex	91(56.2)	71(43.8)	162 (100.0)
Possession of condom by women is proof of unfaithfulness	43(26.5)	119(73.5)	162(100.0)
A woman can only use condoms to protect herself from getting STI if her partner has it	99(61.1)	63(38.9)	162(100.0)
A woman should be responsible for securing other methods of contraception except condom	83(51.2)	79(48.8)	162(100.0)
Women are legally permitted to carry male condom since it is not a crime	138(84.7)	25(15.3)	163(100.0)
Condom adverts and social marketing are ways of encouraging everyone including women to have the male condom	146(89.6)	17(10.4)	163(100.0)
Perception statement	Agree (%)	Disagree (%)	Total (%)
As a public health specialist, I am obliged to support possession of male condoms by women	132(81.5)	30(18.5)	162(100.0)
It is against my culture for women to carry male condom	65(39.6)	99(60.4)	164(100.0)
My community frowns at women who carry male condom	107(65.6)	56(34.4)	163(100.0)
Women should be prohibited from having male	31(19.0)	132(81.0)	163(100.0)

condoms in order to avoid moral decadence in
the society

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Total perception score

Majority, 118(70.7%) of the respondents scored high on a 16-point perception scale while only 49((29.3%) had poor perception (see table 4.31 below). The mean perception score was 10.7 ± 3.3 while the lowest and highest scores were 1.0 and 16.0 respectively. See table 4.31 below.

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Table 4.31: Total perception score

Perception score (PS)	N (%)
Poor perception (PS \leq 9)	49(29.3)
Good perception (PS $>$ 9)	118 (70.7)
Total	167 (100)

Average perception score = 10.7 ± 3.3

Minimum perception score = 1.0

Maximum perception score = 16.0

4.4 Respondents' attitude towards possession of male condoms by female partners

A total of one hundred and seven (68.2%) of the respondents will allow their partners to carry male condom only with their consent while about half, 66(43.7) don't even see the need for

their partners to do because they do not allow condom negotiation in their relationship and because it is against their religion, 44(27.7%) but few, 34(22.5%) are more worried of their partner getting pregnant than contracting HIV from a failed condom. Nineteen (12.2%) of them cannot use a male condom provided by their partner and most, 123(79.4) do not even expect their partners to provide the condom but 22(14.7%) feel embarrassed to disengage from sexual activity if condom is not available. Most, 147(96.1%) have trust in the male condoms and majority, 136(89.5%) believe that it can protect women from STI. Few, 49(32.0%) cannot trust their partners if they find male condom in her possession and 42(28.6) reported it to be against their religious belief for women to carry the male condom. Twenty (12.8%) of them cannot promote possession of male condom among women because their religion does not allow the use of contraceptives, 65(41.9%) will not because it is against their societal norm and 20(12.7%) because they believe it will give their partners too much power in their relationship. See table 4.4 below:

Table 4.4 Respondents' attitude towards possession of male condoms by female partners

Attitude statement	Yes (%)	No (%)	Total (%)
My partner can only possess male condom with my consent	107(68.2)	50(31.8)	157(100.0)
My partner doesn't need to carry male condom since she cannot negotiate its use with me	66(43.7)	85(56.3)	151(100.0)
I am more worried about my partner getting pregnant that contracting HIV from a failed condom	34(22.5)	117(77.5)	151(100.0)
Condom use is against my religious belief so my partner does not need to have it	44(27.7)	115(72.3)	159(100.0)
I cannot use a male condom provided by my partner	19(12.2)	137(87.8)	156(100.0)
I expect my female partner to provide the condom whenever we want to have sex	32(20.6)	123(79.4)	155(100.0)
If there is no condom available, I feel embarrassed to disengage from sexual activity	22(14.7)	128(85.3)	150(100.0)
I do not have trust in male condom so I do not see a reason for my partner to have one	6(3.9)	147(96.1)	151(100.0)
I don't believe the male condom can protect women from STIs including HIV/AIDS	16(10.5)	136(89.5)	152(100.0)
I cannot trust my partner if I find a male condom in her purse or house	49(32.0)	104(68.0)	153(100.0)
I cannot allow condom use because it is an abomination	4(2.6)	152(97.4)	156(100.0)
It is against my cultural belief for women to carry male condom	42(28.6)	105(71.4)	147(100.0)
I cannot promote possession of male condom among women because my religion does not allow the use of any contraceptives	20(12.8)	136(87.2)	156(100.0)
It is against my societal norm for women to carry male condom	65(41.9)	90(58.1)	155(100.0)
I cannot allow my partner to carry male condom because it will give too much power in our relationship	20(12.7)	137(87.3)	157(100.0)

Total attitude score

The table 4.41 below presents the total attitude score of the respondents. They were assessed on a 15-point attitude scale. Overall, 77(46.1%) had good attitude while 90(53.9%) had poor attitude. The mean attitude score was 9.9 ± 3.4 while the highest and the lowest scores were 15.0 and 0.0 respectively.

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Table 4.41: Total attitude score

Attitude score (AS)	N (%)
Poor attitude	90 (53.9)
Good attitude	77(46.1)
Total	167 (100)

Mean attitude score = 9.9 ± 3.4

Minimum attitude score = 0.0

Maximum attitude score = 15.0

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4.5 Willingness to promote possession of male condom by female partners

Overall, 93(57.8%) of the respondents were willing to promote possession of male condom among women while 68(42.2%) were not willing (see table 4.5 below).

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Table 4.5: Willingness to promote possession of male condom by female partners

Willingness statement	Yes (%)	No (%)	Total (%)
Will you be willing to promote possession of male condom among women	93(57.8)	68(42.2)	161(100.0)
Can you allow your partner and other women to freely make their choice of contraceptive	124(78.0)	35(22.0)	159(100.0)
Can you allow your partner to buy and keep male condom in her purse or room without your permission	66(41.8)	92(58.2)	158(100.0)
Does your religion permit you to promote possession of male condom among women	48(31.2)	106(68.8)	154(100.0)
Do you think you have enough knowledge and skills to promote possession of male condom by female partners	113(76.4)	35(23.6)	148(100.0)
Do you believe possession of male condom by women will enhance gender equality	52(32.7)	107(67.3)	159(100.0)
Can women possession of male condom lead to distrust in relationships	115(73.2)	42(26.8)	147(100.0)

4.6 Statistical tests of hypotheses

Hypothesis 1: There is no statistically significant relationship between respondents' religion and willingness to promote possession of male condom by female partners

Table 4.6 below presents the results of the cross tabulations between respondent's religion and willingness to promote possession of male condom by female partners. In general, of the 117(100.0%) respondents that were Christians, 68(58.1%) were willing to promote possession of male condom among female partners while 49(41.9%) of them were not.

However, 23(54.8) of the Muslim respondents were willing to promote possession of male condom by female partners while 19(45.2) of them were not willing.

Chi square analysis was used to test for association between these two variable and this revealed that there is no statistically significant association ($X^2 = 0.142$; $df= 1$; $p =0.706$) between them. Thus, the null hypothesis that there is no statistically significant relationship between respondents' religion and willingness to promote possession of male condom by female partners was accepted.

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Table 4.6: Chi square test statistic to investigate the relationship between the religion of respondents and willingness to promote possession of male condom by female partners

Religion	Willingness to promote male condom by female partners		Total	df	X ²	p value
	Willing (%)	Not willing (%)				
Christianity	68(58.1)	49(41.9)	117(100.0)	1	0.142*	0.706**
Islam	23(54.8)	19(45.2)	42(100.0)			
Total	91(57.2)	68(42.8)	159(100.0)			

*Chi square test statistic was used

**Not significant (p>0.05)

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Hypothesis 2: There is no statistically significant relationship between respondents' departments and willingness to promote possession of male condom by female partners.

Cross tabulations between departments and willingness to promote possession of male condom among female partners is presented in the table 4.7 below:

In total, there were 24 respondents from Health Policy Management (HPM), 15(62.5%) of whom were willing to promote possession of male condom among women. In HPE, 19(82.6%) of the 23 respondents were willing to promote possession of male condom by female partner while 20(51.3%) of the 39 respondents in EHS were willing. Half, 1(50%) of the 2 respondents from Human nutrition were willing but only two-fifth, 18(39.1%) of the 46 respondents from EMS were willing. Majority, 18(94.7%) of the respondents from ICH were willing while 3(37.5%) of those in preventive medicine were

Analysis revealed a significant relationship between respondents' departments and willingness to promote possession of male condom by female partners ($X^2 = 27.824$; $df = 6$; $p = 0.000$). Thus, the null hypothesis was rejected.

Table 4.7: Chi square analysis to test for association between departments and willingness to promote possession of male condom by female partners

Department	Willingness to promote possession of male condom by female partners		Total	df	X ²	p value
	Willing (%)	Not willing (%)				
HPM	15(62.5)	9(37.5)	24(100.0)	6	27.824*	0.000**
HPE	19(82.6)	4(17.4)	23(100.0)			
EHS	20(51.3)	19(48.7)	39(100.0)			
Human Nutrition	1(50.0)	1(50.0)	2(100.0)			
EMS	18(39.1)	28(60.9)	46(100.0)			
ICH	3(37.5)	5(62.5)	8(100.0)			
Preventive medicine	18(94.7)	1(5.3)	19(100.0)			
Total	94(58.4)	67(41.6)	161(100.0)			

*Fisher's exact test statistic was used

**Significant (p<0.05)

Hypothesis 3: There is no statistically significant relationship between respondents' perception and willingness to promote possession of male condom by females (partners)

As presented in table 4.8 below, 38(77.9%) of the 49 respondents with poor perception were unwilling to promote possession of male condom by females while only 11(22.4%) of them were willing to promote the behaviour. On the other hand, 112 respondents had good perception and most, 82(73.2%) of them were willing to promote possession of male condoms by females while only slightly above a quarter, 30(26.8%) were not willing.

Chi square test revealed a statistically significant relationship between perception and willingness to promote possession of male condom among females ($X^2=36.007$; $df=1$; p value=0.000). Therefore, the null hypothesis was rejected.

Table 4.8: Chi square test statistic to investigate the relationship between perception and willingness to promote possession of male condom by female partners

Perception	Willingness		Total	df	X ²	p value
	Yes (%)	No (%)				
Poor perception	11(22.4)	38(77.6)	49(100.0)			
Good perception	82(73.2)	30(26.8)	112(100.0)	1	36.007*	0.000**
Total	93(57.8)	68(42.2)	161(100.0)			

**Significant (p<0.05)

*Chi square test statistic was used

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Hypothesis 4: There is no significant relationship between societal norm and willingness to promote possession of condom among women

As presented in table 4.9 below, 65 respondents perceived that it is against their societal norm for women to carry male condom and are therefore adjudged to have a negative societal norm. On the other hand, 90 respondents had a positive societal norm.

Among those with negative societal norm, 19(29.2%) were willing to promote possession of male condom among female partners while 46(70.8%) were not.

In contrary, majority, 72(80.0%) of those with positive societal norm were willing to promote possession of male condom by female partners while 18(20%) were not.

Chi square test statistic revealed a statistically significant association between the two variables ($X^2=40.130$, $df=1$, $p=0.000$).

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Table 4.9: Test of relationship between societal norm and willingness to promote possession of male condom by female partners

Societal norm	Willingness to promote male condom by female partners		Total	df	X ²	p value
	Willing (%)	Not willing (%)				
Negative	19(29.2)	46(70.8)	65(100.0)	1	40.130*	0.000**
Positive	72(80.0)	18(20.0)	90(100.0)			
Total	91(58.7)	64(41.3)	155(100.0)			

*Chi square test statistic was used

**Significant (p<0.05)

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CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Discussion

5.1.1 Socio-demographic profile of male postgraduate public health students of UI

The data collected had shown that male postgraduate public health students of UI are within the age group 22-46 years with the majority of them being single. Most of the respondents are of the Yoruba ethnicity as expected because the University of Ibadan where the study was conducted is the capital city of Oyo state which is in the South-western part of Nigeria where Yoruba is the major ethnic group. Most of the respondents are Christians and nearly all of them are sexually active. More than three-fifth have had unprotected sex before but only about a fifth had in the last 2-3weeks preceding the study. Nearly all the respondents had heard about condom before and their training in public health suggests that they are probably more informed than most people in the general population as far as healthy sexual behaviour is concerned but the findings from this study revealed that they still engage in unprotected sexual intercourse.

It is important to note here that religion, marital status and ethnicity were not equitably distributed in this study population because most of the respondents were Christians, single and Yoruba.

5.1.2 Knowledge of protected sex

The study revealed the respondents' level of knowledge of protected sex. Most of the respondents had poor knowledge scores as discussed earlier. Although, literature is scarce on men's knowledge of protected sex, several are available on HIV/AIDS and this finding is in contrast with many of the findings in available literature.

Various studies have reported high level of knowledge of HIV/AIDS among men (Jakalas et. al., 2010;Durojaiye, 2011; Lammers et. al., 2013; NDHS, 2013) and despite good knowledge of HIV/AIDS, even public health students still don't have good knowledge of protected sex. This is an indication that there is still work to be done in this area. Many of the respondents even defined protected sex as sex with little risk of getting pregnant implying that many of the respondents are probably more weary of unwanted pregnancy than they are of HIV/AIDS.

5.1.3 Perception towards possession of male condom by women

Although, various studies have been conducted among health workers but few have been done among public health students. Specifically, few studies have been conducted to reveal the perception of public health specialists or students towards female possession of male condom in Nigeria and its environs. This study revealed that majority of the respondents have

positive perception towards possession of male condom by female partners but more than half of them reported that condom interfere with sexual pleasure. Perhaps this is responsible for why some of them still engage in unprotected sex.

Also, many of them were of the opinion that a woman is only excused to possess a condom to protect herself from STI if her partner has it. This finding is in line with NDHS 2013 which reported that according to 88% of the men, a woman will be justified to demand her husband to use condom if she knows he has an STI. In fact, according to the same publication, majority of men and women who took part in the survey reported that a woman will be justified to deny her husband sex altogether if she knows that the husband has sex with other women. How practicable this can be remains a major cause for concern. This is because in most African societies, women do not have equal rights with men and are usually expected to be on the receiving end of men's actions especially on issues of sexuality (Jakalas et. al., 2010). Even among the educated ones, condom negotiation was found to be 41% (Iwuagwu et. al., 2000) and in another study, condom coercion and condom sabotage by males and self-silencing of condom negotiation by females are found to be impediments to safer sexual intercourse among adolescents (Teitelman, Tennille, Julie, Bohinski, Julia, Jemmott, Loretta, Jemmott and John, 2011).

Moreover, about half of the respondents reported that women should be responsible for securing other methods of contraception apart from the condom. Similarly, another study reported that men do not agree that they have decisive roles to play in family planning issues and contraceptive use (Ijadunola, Abiona, Ijadunola, Afolabi, Esimai and OlaOlorun, 2010). Both of these findings are in line with another study in Uganda that reported that men generally perceive family planning to be women domain while men are more concerned with making enough money to take care of the family (Kabagenyi, Jennings, Reid, Nalwadda, Ntozi and Atuyambe, 2014).

5.1.4 Attitude towards possession of male condom by women

Generally, several studies have been conducted among mainstream health workers (the likes of medical doctors, nurses, pharmacists, medical laboratory scientists, community health extension workers etc) but relatively few to none among public health specialists. In fact, most of these studies were investigated either by public health specialists alone or in collaboration with clinical or social scientists.

As a result, the attitude of health workers have been implicated or appraised several times in various studies and reports against various health behaviours or even in the way they discharge their duties and most times documented.

That said, the attitude of potential public health scientists towards possession of male condom by women is investigated in this study. As presented in the previous chapter, more than half (53.9%) of the respondents had poor attitudinal disposition towards women having the male condom despite their training in public health. Also, about two-third of them, 107(68.2%) will not even allow their partner to carry the male condom without their consent while about half, 66(43.6%) reported that they do not even allow condom negotiation with their partners. In the study by Iwuagwu et. al. among female UI undergraduates in 2000, seventy-three percent of their respondents had ever negotiated condom use with their partners while only 41% did so in the last sexual intercourse preceding the study. Perhaps men are the reason why condom negotiation seems impossible for women because when even those with public health training do not allow condom negotiation to ensure safer sex, how much more the lay men in the community?

Moreover, 49(32%) will not trust their partner if they find her in possession of the male condom and 65(41.9%) believe it is against their societal norm for women to carry male condom. Studies have shown that most women would not buy or possess condom for fear of stigmatisation from significant others and even the society (Fitzpatrick, 2007; Hickson et. al., 2009). Although, the influence of culture and societal norm on individual sexual behaviour cannot be over-emphasized, in fact, culture has been revealed as one of the reasons for low condom use in the population (Jackalas et. al., 2010) but it is expected that public health students with their training should be able to do away with needless norms in order to ensure safer sex in the society.

5.1.5 Willingness to promote possession of male condom among women

Public health specialist who can also be referred to as society or community physicians are often times saddled with the responsibility of carrying out various public health and

behavioural interventions at various levels of health care. They are also expected to be promoters of healthy behaviours in the community but no studies have investigated their suitability and/or readiness to promote condom possession among women in the society. This study revealed that only about three-fifth, 93(57.8%) of male postgraduate public health students of UI were willing to promote possession of male condom by female partners despite the fact that above three-quarter, 113(76.4%) of them believe that they have enough knowledge and skills to do so. As it has been shown in various studies, knowledge does not always translate into healthy behaviour.

That religion is a major determinant of condom possession and use was agreed upon by both Hickson et. al. (2009) and Ankomah et. al. (2011). It is therefore not surprising that one hundred and six of the respondents (68.8%) reported that their religion does not allow them to promote possession of male condom by female partners. However, analysis showed that there was no significant association between religion and willingness to promote possession of male condom among female partners which is in contrast with the findings from the literature above, it would be best to state that this should be accepted with caution as coincidentally, Christianity is the dominant religion among the respondents and this finding may not be what is obtainable in the community. Also, majority, 115(73.2%) of them reported that possession of condom by women will lead to distrust in relationships and as a result, 92 (58.2%) of them will not allow their partners to keep a male condom in her purse or her house despite the fact that 124(78%) of them reported that they can allow their partners and other women to make their choice of contraceptive.

Jackals et. al. (2010) reported that culture is one of the main reasons for low condom use in Nigeria. Asekun-Olarinmoye and Oladele (2009) also reported low rate of consistent condom use among undergraduates in Osun state despite high level of condom awareness. These findings are in line Fitzpatrick (2007) and Asekun-Olarinmoye, Adebimpe, Bamidele, Odu and Asekun-Olarinmoye (2013) that the society discriminates and stigmatizes women who buy or keep condoms. In this study, it was found out that one hundred and seven (65.6%) perceived that their community frowns at women who are in possession of a male condom while some, 42(28.6%) of them still belief that it is against their culture for women to carry the male condom and analysis revealed a significant relationship between societal norm and willingness to promote possession of male condom among female partners. This implies that even among public health students, there is still work to be done in order to reduce the influence of culture and societal norms on their decision making in favour of safe sexual practices.

5.2 Implication of findings for health promotion

The findings from this study have implications for reproductive health education, prevention of STIs including HIV/AIDS and gender equality especially on issues that have to do with sexuality and women's health. It has been deduced from this study that the societal norms or culture has a direct influence on the willingness of men to support possession of male condom by their partners even if their attitude and perception towards such behaviour is good. Therefore, to improve and encourage men to support their female partners to take better charge of their sexual health, the following should be put in place:

Advocacy

Although, several work have been done in the past and even presently to ensure that women have equal chances and opportunities as their male counterparts, women are still considered to be inferior compared to men in most African societies. Therefore, more advocacy work needs to be done especially at community levels and through formulation of relevant policies that will empower women.

Intersectoral approach

Dealing with unprotected sex and its consequences at the community level should be made to cut across various sectors and not just the health sector alone. Although, this study did show that religion does not significantly affect the willingness of men to promote possession of male condom among female partners but it should be clearly stated that religion is a major factor that influences the behaviour of individuals. Therefore, religious leaders and even traditional rulers in communities should be engaged more in the promotion of male condom in order to ensure safe sexual practices.

5.3 Conclusion

In conclusion, the findings from this study have indicated that men, despite having good knowledge of HIV/AIDS are actually wanting on knowledge of protected sex but regardless of this, perception and attitude towards possession of male condom by female partners were positive. The study also revealed that most of the male public health students were willing to promote possession of male condom by female partners. While their knowledge can be improved through various forms of intervention, their positive perception, attitude and willingness can also be harnessed to promote possession of male condom among women. If women can have the support of men especially their partners in ensuring that they can freely buy, keep and possess the male condom as a means of protecting themselves and their spouses, we would have taken a giant step towards promoting safer sex, preventing the spread of STIs including HIV/AIDS as well as reducing the prevalence of unwanted and unplanned pregnancies together with the health and social consequences of it.

5.4 Recommendations

Base on the findings from this study, the following recommendations are anticipated:

1. Most of the students still have a somewhat negative disposition to condom possession among women despite their training in public health. This implies that their knowledge of public health has not completely translated into behaviour. Therefore there is need for the training of public health students to be more practical rather than being theoretical. Enough

field experience during the course of their study would go a long way in influencing their behaviour positively.

2. Also, there is need to change the approach in which condoms is currently being disseminated by NGO's and donor agencies. In this patriarchal society of ours, men should be involved and even encouraged to support their partners to possess the male condom for protection.
3. In addition, it is recommended that further researches should be done along this line to ascertain the suitability of men of various social, educational, economic and cultural backgrounds in the promotion of male condom possession among female partners.

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APPENDIX I
QUESTIONNAIRE

Dear Respondent,

Good day Ma/Sir, my name is **Olojede**, Omotayo Emmanuel. I am a postgraduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. The purpose of this study is to determine the “**perception and attitude towards possession of male condoms by female partners among male public health students of the University of Ibadan, Oyo state, Nigeria**”. This study will yield information that may be used in developing health intervention programs especially those related to HIV/AIDS and STI prevention. There are no right or wrong answers to the questions asked or the statements made, what is desired of you is your truthful and honest responses. Please note that the completion of this questionnaire is entirely voluntary. All information gathered as a result of your participation in this study will be treated with utmost confidentiality and will be used strictly for research purposes only.

Thank you.

I have read and understand the consent form and voluntarily agree/disagree to participate in the study by ticking [√] in the appropriate box below:

1. Agree [] 2. Disagree []

Signature

Date

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

Please tick (√) any of the responses that apply to you in the options provided or complete the blank spaces provided as applicable.

1. Age (in years) as at last birthday _____
2. Religion: 1. Christianity [] 2. Islam [] 3. Traditional [] 4. Others (specify) _____
3. Marital Status: 1. Single [] 2. Married [] 3. Divorce [] 4. Widowed [] 5. Separated [] 6. Cohabiting []
4. First degree discipline _____
5. Level of study: 1. MPH I [] 2. MPH II [] 3. MSc. I [] 4. MSc. II [] 5. PHD []
6. Department /Course of study _____
7. Ethnic Group: (1) Yoruba [] (2) Hausa [] (3) Igbo [] (4) Others (specify) _____

History of sexual activities

8. Have you had sex before? 1. Yes [] 2. No []
9. How many sexual partners do you have? 1. One [] 2. Two [] 3. Three or more []

10. Have you heard about condom before? 1.Yes [] 2.No []
11. If Yes please specify your source(s) of information (1) Media [] (2) Health facility [] (3) Health Personnel [] (4) Friends and Family [] (5) Others (specify)_____
12. Did you use condom with your partner in the first sexual encounter?
(1) Yes [](2) No []
13. Have you ever had sex without discussing condom first? (1)Yes [] (2) No []
14. Have you had sex without a condom before? (1)Yes [] (2)No []
15. Have you ever had sex after taking alcohol or drug? (1)Yes [] (2)No []
16. If yes, did you use condom in that sexual encounter? 1. Yes [] 2. No []
17. Did you use condom with your partner in the last sexual encounter during:
(a) The last six months (1) Yes [] (2) No []
(b) The last three months (1) Yes [] (2) No []
(c) The last 2-3 weeks (1) Yes [] (2) No []
18. Briefly describe how you would describe a female who is in possession of a male condom
-

SECTION B: KNOWLEDGE OF PROTECTED SEX

Instruction: The table below contains a set of statements/questions to assess your knowledge on condoms. Please fill in your responses

S/n	Questions	Options
18	What do you understand by protected sex?	
19	How can sex be protected?	
20	Why do you think it is necessary to protect sex?	_____ _____
21	Mention four(4) diseases/infections that can result from unprotected sex	
22	Mention two (2) benefits of using condoms?	_____ _____
23	How many condoms should be worn to prevent pregnancy or disease?	
24	What are the health implications of inconsistent use of condoms?	_____ _____ _____ _____

25	How can women be encouraged to possess male condoms?	_____
26	How often should a male condom be used by a female partner?	
27	Total score obtained	
28	Code	

SECTION C: PERCEPTION TOWARDS POSSESSION OF MALE CONDOM BY FEMALE PARTNERS

S/N	STATEMENT	Agree	Disagree
29	I think condom use is a major way to reduce the severity of STIs (including HIV/AIDS) threat to human health especially women		
30	I believe condoms prevents HIV/AIDS and other STIs		
31	I think it is normal for a man to have more than one sexual partner		
32	Condoms have a poor reputation in my religion		
33	I don't see anything wrong with a female having a male condom in her bag or house		
34	I think women should have free access to male condoms		
35	I think condoms interfere with sexual pleasure, deter arousal by reducing sensitivity and curtailing spontaneity during sex.		
36	I think possession of male condom by women is proof of unfaithfulness and promiscuity		
37	A woman can only use condoms to protect herself from getting STIs if her partner has it.		
38	A woman should be responsible for securing other methods of contraception except condom		
39	I think women are legally permitted to carry male condom since it is not a crime		
40	I believe condom adverts and social marketing are ways of encouraging everyone including women to have the male condom		

41	As a public health specialist, I think I am obliged to support possession of male condom by women		
42	It is against my culture for women to carry male condom		
43	My community frowns at women who carry male condom		
44	I think women should be prohibited from having male condoms in order to avoid moral decadence in the society		
45	Total score obtained		
46	Code		

SECTION D: ATTITUDE TOWARDS POSSESSION OF MALE CONDOMS BY FEMALE PARTNERS

Instruction: The table below contains a set of statements/questions to assess your attitude on condoms. Please tick (√) the most applicable answer.

S/n	Statement	Yes	No
47	My partner can only possess male condom with my consent		
48	My partner doesn't need to carry male condom since she cannot negotiate its use with me		
49	I am more worried about my partner getting pregnant than contracting HIV from a failed condom		
50	Condom use is against my religious belief so my partner does not need to have it		
51	I cannot use a male condom provided by my partner		
52	I expect my partner to provide the male condom whenever we want to have sex		
53	If there is no male condom available, I feel embarrassed to disengage from sexual activity		
54	I do not have trust in male condoms so I do not see a reason for my partner to have one		
55	I don't believe the male condom can protect woman from STIs including HIV/AIDS		
56	I cannot trust my partner if I find a male condom in her purse or her house		
57	I cannot allow condom use because it is an abomination		
58	It is against my cultural belief for women to carry male condom		

59	I cannot promote possession of male condom among women because my religion does not allow the use of any form of contraceptives		
60	It is against my societal norm for women to carry male condom		
61	I cannot allow my partner to carry male condom because it will give her too much power in our relationship		
62	Total score obtained		
63	Code		

SECTION E: WILLINGNESS TO PROMOTE FEMALE POSSESSION OF MALE CONDOM AMONG FEMALE PARTNERS

INSTRUCTION: Please tick (√) the most appropriate responses corresponding to the questions listed below.

64. Will you be willing to promote possession of male condom among women?

1. Yes [] 2. No []

65. Can you allow your partner and other women to freely make their choice of contraceptive? 1. Yes [] 2. No []

66. Can you allow your partner to buy and keep male condom in her purse or room without your permission? 1. Yes [] 2. No []

67. Does your religion permit you to promote possession of male condom among women?

1. Yes [] 2. No []

68. Do you think you have enough knowledge and skills to promote possession of male condom by females (partners)? 1. Yes [] 2. No []

69. Do you believe possession of male condom by women will enhance gender equality?

1. Yes [] 2. No []

70. Can women possession of male condom lead to distrust in relationships?

1. Yes [] 2. No []

APPENDIX II

List of correct answers to the knowledge questions

S/n	Questions	Options
18	What do you understand by protected sex?	With respect to HIV prevention, protected sex is one in which either the male or the female condom is used correctly and consistently
19	How can sex be protected?	By correct use of condom and faithfulness to one uninfected partner
20	Why do you think it is necessary to protect sex?	To prevent infections For family planning purposes
21	Mention four(4) diseases/infections that can result from unprotected sex	HIV/AIDS Gonorrhoea Syphilis Chlamydia Hepatitis etc
22	Mention two (2) benefits of using condoms?	Prevents unwanted pregnancies Prevents infections
23	How many condoms should be worn to prevent pregnancy or disease?	One
24	What are the health implications of inconsistent use of condoms?	Teenage pregnancies High infant mortality and morbidity Risk of contracting infections
26	How often should a female partner be involved in the use of the male condom	Always (except when she wants to get pregnant)
27	Total score obtained	
28	Code	

APPENDIX III
INFORMED CONSENT FORM

IRB number:

This approval will elapse on:

Title of research: Perception and Attitude towards possession of male condom by females (partners) among male postgraduate public health students of University of Ibadan.

Name of researcher: This study is being conducted by Olojede Emmanuel Omotayo of the department of Health Promotion and Education, University of Ibadan.

Purpose of research: The purpose of this study is to determine the knowledge of protected sex as well as the perception and attitude towards possession of male condom by female (partners) among male students of public health of university of Ibadan. The study will also reveal the level of willingness of the respondents to promote possession of male condom among women. I believe the findings from this study will assist to better equip potential public health professionals. The study will also yield information on how to promote possession and use of male condom by women so as to reduce the prevalence sexually transmitted infections (STI) to which women are more prone.

Procedure of the research: One hundred and seventy-four students (174) would be recruited for the quantitative research which will involve administration of questionnaires.

Expected duration of the research and of participant(s)' involvement: This study is supposed to last for 4 weeks. Questionnaire will take between 10minutes to 20minutes for each respondent to complete.

Risk(s): There are no risks involved in students participating in the study.

Costs to participants, if any, of joining the research: Students participation in this research will not cost them anything.

Benefits: At the end of the research, findings will be published for the consumption of the participants and the general public.

Confidentiality: All information collected in this study will be given coded numbers and there will be no use of names. This cannot be linked to any student in any way and students' names or any identifier will not be used in any publication or reports from this study.

Voluntariness: Students participation in this research is entirely voluntary.

Consequences of participants' decision to withdraw from research and procedure for orderly termination of participation: Students can also choose to withdraw from the research at any time. Please note that some of the information that has been obtained about you before you chose to withdraw may have been modified or used in reports and

publications. These cannot be removed anymore. However, the researchers promise to make effort in good faith to comply with your wishes as much as is practicable.

Any apparent or potential conflict of interest: None

Statement of person obtaining parental informed consent:

I have fully explained this research to _____ and have given sufficient information including benefits, to make an informed decision.

DATE: _____

SIGNATURE: _____

NAME: _____

Statement of person giving consent:

I have read the description of the research or have had it translated into a language I understand. I have also discussed with the researcher to my satisfaction. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research to judge that I want to take part in it. I understand that I may freely stop being part of this study at any time. I have received a copy of this consent form and additional information sheet to keep for myself.

DATE: _____ SIGNATURE: _____

NAME: _____

WITNESS' SIGNATURE (if applicable) _____

WITNESS' NAME (if applicable) _____

Detailed contact information including contact address, telephone, fax, email and any other contact information of researcher, institutional HREC and head of institution:

This research has been approved by the Ethics Committee of the University of Ibadan and the Chairman of this Committee can be contacted at the Sociology Department, University of Ibadan, Email: sayjegede@yahoo.com

In addition, if you have any question about your participation in this research, you can contact the principal investigator, Olojede Emmanuel Omotayo, Department of Health Promotion and Education, 08030849674, olojedeomotayoe@gmail.com