

**PERCEPTIONS OF WOMEN OF REPRODUCTIVE AGE (15-49) TOWARDS USE  
OF FEMALE CONDOM IN NKOYAPHIRI CLINIC-MOGODITSHANE VILLAGE-  
BOTSWANA**

by

**LEUNGO KGOMOKHUMO**



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## **DEDICATION**

This study is dedicated to my late father Keolebile Dialwa, my late maternal grandparents Mr. & Mrs Sebele Seane who gave me an inspiration to study, and were always happy with my achievements, not forgetting my late mother in-law Jane Gomotsang Kgomokhumo.

## **DECLARATION**

I, Leungo Kgomokhumo, declare that **PERCEPTIONS OF WOMEN OF REPRODUCTIVE AGE TOWARDS USE OF FEMALE CONDOM** is my own work and that all the resources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any institution.

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**LEUNGO KGOMOKHUMO**

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**DATE**

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## **ABSTRACT**

**BACKGROUND:** In Botswana, women and girls continue to be disproportionately affected by HIV/AIDS. According to the UNAIDS in 2009, 170 000 of the estimated 300000 adults living with HIV or one quarter of the population aged 15 and over were women. HIV prevalence trend among pregnant women (Botswana Sentinel Surveillance 2001-2009) aged 15-49 years attending antenatal in public clinics is 31.8%. The national HIV prevalence amongst the women surveyed has shown a decline of prevalence from 36.2% in 2001 to 30.4% in 2011.

**AIM OF THE STUDY:** The aim of the study was to determine the perceptions of women of reproductive age in Nkoyaphiri clinic, Mogoditshane village towards the use of female condom (FC).

**METHODS:** A descriptive cross-sectional design was used on a sample of 125 women of reproductive age in Nkoyaphiri clinic in Botswana. A self-administered questionnaire written in both English and Setswana were given to 125 women of reproductive age. Their responses were coded, cleaned and entered into SPSS version 21.0 software for analysis.

**FINDINGS:** About 92% of women of reproductive age heard about FC, more than half (64.8%) of respondents reported that they do not know how to use FC, and 88% have never used FC. The results had shown that a higher percentage (88%) of respondents have never ever used FC compared to (12%) that have used it. Most participants 46.4% believed that FC can prevent unwanted pregnancies, the Sexually Transmitted Infections (STI) and HIV/AIDS 42.4%. The results also show that 18.4% of respondents often use female condom inconsistently, while 3.3% cited it as their current contraceptive method.

**CONCLUSION:** The results of this study shows that the level of FC use is lower (12%) among respondents, compared to 88% who never used FC. This shows that majority of women had never used FC. This results show that a lot still needs to be done in promoting the use of FC and strategies should be designed to send information to all individuals. Lack of knowledge on the use of FC contributes to lack of use of FC among women.

**KEYWORDS:** Female condom, Contraception, Male condom, Perception, Reproductive age, Sexually transmitted infections

## **DEFINITION OF KEY CONCEPTS**

### **Operational definition**

**Contraceptive** – a product that prevents pregnancy (Williams & Wilkins, 2008). In this study, a contraceptive will mean a family planning method used by women to prevent themselves from unwanted pregnancies, be it a condom, pill, injection or intrauterine device.

**Female condom** – it is an intravaginal bag normally latex which lines the vulva and vagina, and is intended to prevent contraception during coitus (Williams & Wilkins, 2008). In this study, a female condom definition will be used as a device used by women by inserting it in the vagina to prevent unwanted pregnancy and prevent them from contracting sexual transmitted infections / HIV and passing it to their sexual partners

**Male condom** – a barrier that is put over the penis before sex to prevent pregnancy and the spread of sexual transmitted diseases (STDs) and HIV (Williams & Wilkins, 2008). In this current study male condom will mean a device used by men to cover the penis before sexual intercourse to prevent impregnating women and contracting sexual transmitted infections as well as passing it to their sexual partners.

**Perception** – mental process of becoming aware of or recognizing an object or idea, primarily cognitive rather than affective conative, although all aspects are manifested (Williams & Wilkins, 2008). In this current study, perception will mean idea and thoughts concerning the female condom.

**Reproductive age** – is years of life between menarche and menopause, ages at the risk of becoming pregnant 15 - 49 (WHO). In this current study reproductive age will be between age 15 to 49yrs of age.

**Sexual transmitted infections** – they are infections that spread primarily through person to person sexual contact (WHO). In this current study, STI will mean...diseases contracted through unprotected sexual intercourse



## **LIST OF ABBREVIATIONS**

AIDS: Acquired Immunodeficiency syndrome

ANC: Antenatal Clinic

FC: Female Condom

FP: Family Planning

FHC: Female Health Company

FHI: Family Health International

HIV: Human Immunodeficiency Virus

IPPF: International Planned Parenthood Federation

PSI: Population Services International

STD: Sexual Transmitted Disease

STI: Sexual Transmitted Infections

UNAIDS: United Nations Program on HIV/AIDS

UNDP: United Nations Development Programme

UNFPA: United Nations Populations Fund

WHO: World Health Organization

WRA: Women of Reproductive Age

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## CHAPTER 1

### INTRODUCTION AND BACKGROUND

#### **1.1. INTRODUCTION**

This chapter discusses the background of the study, the statement of the problem, aim of the study and objectives of the study.

#### **1.2. BACKGROUND OF THE STUDY**

Globally, HIV/AIDS is the leading cause of death among women of reproductive age (UNAIDS, 2011, November). Sub Saharan Africa is one of the world where majority of HIV transmission occurs during heterosexual contact, 12 million women are living with HIV/AIDS compared to 8.2million men. The highest rates of HIV/AIDS infections among 15-49 year old women occur in Southern Africa, particularly in Botswana, Lesotho, Swaziland and South Africa (Fustos, 2011). HIV / AIDS has affected every sector within the society and has caused morbidity, mortality and reduced the life expectancy of people.

Prevention strategies that have been widely implemented include comprehensive knowledge about HIV/AIDS, delay sexual debut (UNAIDS, 2010), and responding and responding to the challenging contexts of women's lives by addressing the underlying vulnerabilities faced by women. These include accessibility to prevention options that women can initiate and control (UNFPA, 2010). One such option is the female condom. Its promotion has provided hope as an alternative tool in empowering women in sexual matters.

Botswana is among countries in Southern Africa with the highest burden of HIV with a national prevalence rate of 18.5 % for the general population aged 18 weeks and above, and an estimated HIV adjusted incidence rate of 1.35% (Botswana AIDS Impact Survey IV – BAIS IV, 2013).

According to the UNAIDS, in 2009, 170 000 women out of the estimated 300 000 adults living with HIV/AIDS in Botswana continue to be disproportionately affected by HIV/AIDS. HIV prevalence trend among pregnant women (Botswana Sentinel Surveillance 2001-2009) aged 15-49 years attending antenatal in public clinics is 31.8%. The national HIV prevalence amongst the women surveyed has shown a decline of prevalence from 36.2% in 2001 to 30.4% in 2011.

Condom use saw a decrease among the general population both genders, and across all age groups with condom use in general population falling from 90.2 recorded in the 2012 BAIS IV. Decreased rates of condom use were evident in all females from 89.5% to 83.14 and all males from 87.8 to 77% and from 85.9 to 81% for all females as reported in BIAS III and IV respectively. Consistent condom use with casual sexual partners among 15 – 49 years olds stood at 41.9%.

Female condom (FC) is a loose fitting polyurethane sheath that functions like the male condom except that it is inserted inside the vagina. A flexible inner ring is used to insert the FC, and the soft inner ring remains outside the vagina during intercourse, it covers both the internal and external genitalia, thereby providing greater protection against sexually transmitted diseases. FC has been demonstrated to be effective at preventing pregnancy and sexually transmitted infections including HIV infection. The FC is an important addition to the arsenal of strategies for preventing Sexually Transmitted Diseases (STDs) and unintended pregnancy. Laboratory studies demonstrated that FC is highly effective against STD pathogens and trichomoniasis.



There is also evidence that its effectiveness in preventing STDs is probably comparable to that of the male condom (Hoffman, Mantell, Exner and Stein, 2004). Thus increased use of FC necessarily lead to increased levels of protection against HIV infections or other STDs (Meekers & Richter, 2005). Study by Maharaj and Mathenjwa (2012), found that FC use offers sex workers an independent method of protection as well as giving them more power and increases their ability to control their sexual and reproductive health.

Female Condoms (FC) are regarded as a woman-initiated dual protection method to prevent pregnancy and protect against HIV (Beksinska et al., 2013). FC are recognized as an empowerment tool to assist women in negotiating for safer sex. Female condoms are recognised as an empowerment tool to assist women in negotiating for safe sex. Women feel empowered and protected when they insert the FC themselves, without relying on the male condom which may have holes pierced in it by untrustworthy, dishonest male partners (Mantell et al. 2006).

Female condom strong weapon in the age of HIV/AIDS is securing the future for women regarding unsafe sexual intercourse and unwanted pregnancy. Because it also save as a contraceptive some century ago until to date, condom has been used as an effective contraceptive in the prevention of pregnancy and also diseases (Haoses-Gorases, 2006).

Over the years, due to rapid spread of HIV/AIDS, the government of Botswana included FC in HIV/AIDS prevention strategy, took the initiative to procure and supply FC free of charge throughout the country through Central Medical Stores. The idea to use FC was recommended in 2001, the FC was launched officially in 2006, followed by active marketing by the government of Botswana, Ministry of Health and stakeholders. The government even went further to brand its own FC called BLISS. The FC is distributed free of charge by the government in the health

facilities as well as other institutions through the Central Medical Stores to ensure that it is available alongside the male condom. The Ministry of Health also continues to provide intensive training to health workers with the aim of promoting the FC as a dual method for protection against both pregnancy and sexual transmitted infections including HIV/AIDS.

It has been argued that the reason underlying the rapid spread of HIV among women is that, with the possible exception of the FC, no reliable HIV/sexually transmitted diseases (STD) prevention method is available that women can use without their partner's consent. This has led to a call within the health care community for the development of more "female controlled" methods of HIV/STD prevention.

The FC has the potential to protect the health of millions of women at the risk of STIs, including HIV as well as unwanted pregnancies. Unprotected sexual intercourse, including low uptake of FC continues to put women at the risk for STDs and unintended pregnancy (Holmes, Ogunbade, Ward, Garrison, Peters, Kalichman, LahaiMomoh, Esseini, 2008).

Despite the availability of female condom (FC) and theoretically based interventions to promote its use, studies have indicated low level acceptability of their use among sexually active women (Holmes et al, 2008).

Even though the FC has been introduced some years back in Botswana as the only female-initiated prevention method that provide dual protection against pregnancy and STDs, it is not widely used as such women continue having unplanned pregnancies as well as contracting HIV infection because of unprotected sexual intercourse. Due to this low uptake of the FC throughout Botswana, the researcher decided to conduct a study on the perception of women of reproductive age in Mogoditshane village, in which there might be an answer to why women are not using FC

to protect themselves from STIs including HIV/AIDS and unplanned pregnancies. Studies with other populations have shown the difficulties involved in using FC (Deniaud, 1997). Women of reproductive age in Mogoditshane might be facing similar challenges. The government of Botswana has done a lot to market FC, through the media, television and some health talks at the health facilities. FC is not well utilized in Botswana despite the fact that HIV prevalence is more than 17% women. It is against this background that perception of FC study is recommended in Mogoditshane amongst women of reproductive age. The researcher is interested in finding whether women are using female condoms or not and if not, then why women are not using FC to protect themselves from STIs including HIV/AIDS and unwanted pregnancies.

### **1.3. HIV PREVENTION STRATEGIES**

HIV prevention strategies in Botswana targeting women passes through health education which encompasses abstinence from sex before marriage, faithfulness, sticking to one sexual partner, and use of condoms either male or FC. Condoms are provided in public health facilities which make them available and accessible to individuals and community at large free of charge. Despite the availability of condoms, the incidence of HIV infection among Botswana women is still on the rise.

#### **1.4. RESEARCH PROBLEM**

Even though the female condom has been introduced some years back in Botswana as the only female-initiated prevention method that provide dual protection against pregnancy and sexually transmitted diseases, it is not widely used, as such women of reproductive age continue having unplanned pregnancies as well as contracting HIV infection because of unprotected sexual intercourse. Unprotected sexual intercourse, including low uptake of FC continues to put women at the risk for sexually transmitted diseases and unintended pregnancy (Holmes et al, 2008). Kaler et al.(2004) observed that uptake of FC in the West and developing countries has been longer than it was anticipated, showing that the successful introduction will not be as straight forward as thought.

Due to this low uptake of the female condom throughout Botswana, the researcher decided to conduct a study on the perception of women of reproductive age in Nkoyaphiri clinic in Mogoditshane village towards it. The FC has been manufactured and introduced as a female initiated dual protection strategy for the control of pregnancy, prevention of STIs, including HIV virus. FC is not fully utilized and accepted by women of reproductive age in Botswana, to ensure that FC is used for the control of pregnancy, prevention of STIs and HIV. This is supported by Chirwa, (2011) in a study that indicated that 80% of participants reported having not used FC, it also indicated low acceptability among the female Health Care Workers in Francistown, Botswana. The study by Jackalas et al 2010, indicated that there is low interest in the use of FC in Chobe district, Botswana, attributed to a number of factors including culture, religion and lack of knowledge amongst others.

## 1.5. RESEARCH QUESTION

What are the perceptions of women of reproductive age in Nkoyaphiri clinic, Mogoditshane village towards the use of female condom?

## 1.6. AIM OR PURPOSE AND OBJECTIVES

The aim of the study was to determine the perceptions of women of reproductive age in Nkoyaphiri clinic, Mogoditshane village towards the use of FC.

The primary objective of this study was to provide a better understanding of perceptions that may lead to low uptake of the FC among women of reproductive age in Nkoyaphiri clinic, Mogoditshane village. The following objectives were constructed to help achieve the aim of this study.

### OBJECTIVES

- To determine the uptake of FC by women of reproductive age
- To investigate the factors that may influence the use of the FC
- To establish the level of knowledge of FC among women of reproductive age
- To describe the perception of women of reproductive age towards the use of FC
- To assess the attitude of women towards FC.

## **1.7. SIGNIFICANCE OF THE STUDY**

The research study should have the potential to contribute to health sciences knowledge in a meaningful way (Brink, 2008). The uptake of FC is of great concern in Botswana, as evidenced by the national health statistics. This study will hopefully identify the barriers to the use of FC by women and its findings will assist the government and its stakeholders to come up with appropriate strategies to address the problem. The interventions / promotion activities identified will increase access to FC. The findings will also be used to improve the uptake of FC, and this in turn will contribute to the reduction of unwanted pregnancies and sexual transmitted diseases including HIV/AIDS. The findings will assist in building local capacity, in the health facilities of Mogoditshane village, and other health facilities in the country and in research. It is in this view that the researcher wanted to investigate the factors that are hindering utilization of FC by women of reproductive age in this community and further most, it is believed the findings may assist the service providers to come up with appropriate strategies to address the problems.

## **1.8. CONCLUSION**

This chapter gives the background of the study, the research problem, research question, aim and objectives of the study. The next chapter will discuss the literature related to the research topic.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

The chapter discusses the past literature related to the study, research question, aim of the study and specific objectives.

The literature review helps to lay and provide context for new study. By doing a thorough review, researchers can determine how best to make a contribution to the existing base of evidence (Polit and Beck, 2008). A literature review also plays a role at the end of the study as researchers try to make sense of their findings (Polit and Beck, 2008).

The literature review focuses on perceptions of women of reproductive age towards use of FC, the literature searched covers experiences on FC nationally, regionally and internationally. The literature search was conducted using various sources such as internet and journals from the library.

#### **2.2. Effectiveness of the female condom**

The FC is an important addition to the arsenal of strategies for preventing sexually transmitted diseases (STDs) and unintended pregnancy. Laboratory studies have found female condoms to be impermeable to sexually transmitted infections, including HIV, one of the common STIs occurring in women. It has been found to give comparable levels of protection against STIs and pregnancy as the male condom (Kaelo & Malema, 2014). The study by Choi & Hoff (2008),

reported that women are more likely to use the FC if they believe that it provides better efficacy over the male condom.

Study conducted by Gallo, Kilbourne-Brook & Coffey (2012), when reviewing published data on effectiveness and acceptability of the FC for protection against pregnancy and infection, data available suggested that FCs may provide similar degrees of protection of protection against pregnancy and STIs as do latex male condoms.

The FC's polyurethane texture is impermeable to a number of small viruses, including HIV. In one study, the FC's effectiveness was proved to range from 80%-90% at preventing HIV transmission (Sippel, 2008). Concurring with this results is Trussel (2008), who indicated that correct and consistent use of the condom for a year by a woman having sexual intercourse twice a week with an HIV-positive partner could reduce her risk of acquiring HJV by more than 90%.

### **2.3. The need for female condom**

The male condom remains a key tool in preventing the spread of HIV and the FC holds similar potential, as such there is need for a rigorous campaign to promote the use of FC by women and also increase their availability in public health sector facilities such as government clinics and hospitals (Guerra et al., 2014). The campaign will improve the chance of women using FC a cost effective device that has the potential to protect both their rights and lives, male condom is only used and controlled by males without any consultation with their female partners.

It has been argued that the reason underlying the rapid spread of HIV among women is that with the possible exception of the FC, no reliable HIV/STD prevention method is available that women can use without their partner's consent. Women's health advocates called for the



development of female controlled barrier methods in the early 1990s (Population Council, 2009), hence the first FC was invented in 1988 by Lasse Hessel (Danish MD) and manufactured by the Female Health Company using polyurethane (Population Council, 2009).

The most vulnerable groups female prostitutes, girl child and women face the challenge of being infected with the HIV virus in the absence of protection. FC is a strong weapon in the age of HIV and AIDS, and women can insert it without relying and informing their partners about it (Haoses-Garoses, 2006).

FC have several advantages over the male condom. Firstly women are in control over when they use them. The use of male condoms often has to be negotiated by women over and over again and relies on the cooperation of men. FC has to be negotiated once. If partners agree, women can simply apply the FC to themselves every time they have sex. They can need to be interrupted (Lucie van Mens & Ilze Smit, 2008). FCs are promoted as an additional tool in the HIV prevention toolbox for women (Mantell et al, 2006).

The FC is the only device controlled by women themselves without any interference by men, the device is effective against STIs, including HIV infection. Several studies conducted in many countries have confirmed that FC has a high acceptability level among both women and men.

The study which was done in Botswana by Nkobodo (2014) reported that University of Botswana female students cited lack of knowledge as barriers mostly associated with non-use of FC. This led to high prevalence of HIV/AIDS in Botswana and Mogoditshane, this also led the researcher to assess the perception of women of reproductive age concerning use of FC which they can initiate, use without active participation of male partners to protect themselves against

both pregnancy, STDs and HIV/AIDS. The review of literature shows that a similar study has never been conducted in Mogoditshane. It is in this view that the researcher want to investigate the factors that are hindering utilization of FC by women of reproductive age in this community and further most, it is believed the findings may assist the service providers to come up with appropriate strategies to address the problems.

The other reason is that although FC offers dual protection from pregnancy and STIs including HIV/AIDS, there is still high prevalence rate of HIV/AIDS amongst the women of reproductive age, who were surveyed in 2011, during pregnancy with the prevalence rate of 30.4% (Botswana Sentinel Survey 2011). Women are more vulnerable to HIV infection than men because of female physiology (that the anatomical designs of their sexual organs) social and structural reasons (Nyoni, 2008). Women in sub-Saharan Africa are at high risk of HIV infection and may struggle to negotiate condom use. This has led to a focus on the development of female-controlled barrier methods such as the female condom, microbicides and the diaphragm. One of the advantages of such products is their contribution to female empowerment through attributes that make covert use possible (MacPhail, 2009).

Regarding this promotion of barrier method such as FC is most effective to prevent both STIs and pregnancy as well giving women more autonomy in its application (Liao, Weeks, et al, 2011).

Increased use of the FC and its positive impact on health is therefore substantial, particularly in the context of the growing feminization of HIV/AIDS epidemic and high maternal mortality as well as high unmet need for contraception (Mathenjwa, 2010). Unprotected sexual intercourse,

including low uptake of FC continues to put women at the risk for STDs and unintended pregnancy (Holmes et al., 2008).

#### **2.4. Prevention of unwanted pregnancy and sexual transmitted diseases including HIV/AIDS**

The FC have the potential to protect the health of millions of women at the risk of unwanted pregnancies, but women as confirmed by different studies are not using any contraception for one reason or another.

The World Health Organization (WHO) estimates that in developing countries more than one third of all pregnancies are unintended. This has more implications for the health of women as unwanted pregnancies are more likely to end in induced abortion (FHI, 1995).

Grimes, Benson, Singh, Romero et al (2006) stated that an estimated 68000 women die annually from complications of unsafe abortion, many permanent.

Meanwhile every minute, one woman dies from complications related to pregnancy or childbirth (WHO, 2005). Studies has found that when the FC is used correctly with every act of sex, there would only be an estimated five unintended pregnancies in one year for every woman using the FC (FHI, 2001).

The findings of the study conducted in China by Xu, (1999), that examined the contraceptive efficacy of the FC with the male condom showed better results with the female than the male condom that is 1.06 and 1.69 pregnancies per 100 women, respectively, over six months.

The findings of the study conducted by Meekers and Ritchter, (2005), in Zimbabwe suggested that in marital unions, the female condom is largely used as a mechanism for pregnancy prevention, which is consistent with the way the product has been marketed in non-marital relationships. However, the FC appears to be used for both pregnancy and STI prevention. Farr et al in their study to determine the contraceptive efficacy and acceptability of FC, indicated that because of the acceptability and effectiveness of this device, it may play an important role in the prevention of the unwanted pregnancy and STDs.

Kerrigan et al, (2004), revealed that women find it easier to negotiate use of FC as contraceptive than to negotiate for prevention of diseases. Vijayakumar et al (2006), also indicated that FC offers an option to hormonal methods of contraception.

The burden of sexual transmitted infections in women is five times that of men and the impact is particularly evident among women of childbearing age with the youth being disproportionately infected (WHO 2006). Access to protection has become increasingly urgent as the number and relative proportion of women infected with HIV have risen rapidly, especially in sub-Saharan Africa. This proportion rose from 50% of people living with HIV in 1998 to 59% in 2007. Thus the provision of a dual protection method against unintended pregnancies, STIs and HIV needs to be accessible and available to women as one of the essential but underutilized contraception method for improvement of maternal health (Mullan, 2013).

Articles reviewed by Vijayakumar et al, (2006), five studies indicated strongly the benefit of female condom use in increasing protected sex acts, and two studies found promising decreases in sexually transmitted infections (STIs) reducing the risk of HIV acquisition and transmission with the introduction of the FC.

The female condom is an important addition to the arsenal of strategies for preventing sexually transmitted diseases (STDs) and unintended pregnancy. Laboratory studies demonstrated that it is a highly effective against STD pathogens and trachomoniasis. There is also evidence that its effectiveness in preventing STDs is probably comparable to that of the male condom (Hoffman et al, 2004). When used correctly, the FC is as effective as the male condom in reducing HIV transmission, in addition it can be inserted hours before intercourse, and it is therefore less likely than the male condom to reduce sexual spontaneity. Thus increased use of FC necessarily lead to increased levels of protection against HIV infections or other STDs (Meekers & Richter, 2005).

The highest rates of HIV/AIDS infections among 15-49 year old women occur in Southern Africa, particularly in Botswana, Lesotho, Swaziland and South Africa (Fustos, 2011). In Botswana, women and girls continue to be disproportionately affected by HIV/AIDS, according to the UNAIDS in 2009, of the estimated 300000 adults living with HIV or one quarter of the population aged 15 and over, 170 000 were women (UNAIDS,2011).

The 2013 Botswana AIDS Impact Survey IV estimated the national HIV prevalence at 18.5% for general population (aged 18 weeks and over) with females at 19.2% and males at 14.2%, respectively. While in 2008 it was 17.6% with rates for females and males being 20.4% and 14.3% respectively. HIV prevalence trend among pregnant women (Botswana Sentinel Surveillance 2011) aged 15-49 old attending antenatal in public clinics is 30.4%. There is strong gender disparity in HIV prevalence appearing throughout BAIS IV. Given the number of women with HIV globally, international support for women's reproductive and sexual health and rights and the empowerment of women and not least due to the demand expressed by users, one

would have expected the FC to be widely accessible 16 years after. This expectation has not materialized; instead, the FC has been marginalized in the international response to HIV and AIDS (Peters, Jansen & Driel, 2010).

## **2.5. Barriers to female condom use**

There have been both successes and disappointments in the uptake of this method around the globe. However, continued promotion of this method is important, as currently it is the only barrier alternative to male condoms and can provide women with increased control in reproductive health making (Napierala, Kang, Chipalo, Padian, Straten, 2008). Perhaps this is due to factors identified in other studies where other populations have shown the difficulties involved in using the FC (Deniaud, 1997). Numerous barriers challenge the general uptake of the FC, including limited accessibility, higher cost compared to the male condom, and lack of knowledge among service providers (Aimee, Campbell, Tross, Hu, Pavlicova, Kenny, Nune, 2011). Study by Naik & Brady (2008), in Ghana revealed that many providers have a bias against the FC, often due to negative perceptions about acceptability and lack of personal experience with the product. Thus, providers are likely not promoting or championing the product very actively. The other challenge was that the stakeholders felt that lack of demand for FC was a more important problem than lack of supply.

In order for women to have the choice to use female condoms, supply chains need to function well. Female condom programmes implemented up until now tend to run out of stock quickly after, or sometimes during programmes. If women cannot rely on the availability of the product

at the time they will lose interest. There should be more choice of product so that women can get the female condom that suite them, that the best, and that they personally find easiest to use (Lucie van Mens and Ilze Smit, 2008)

### **2.5.1. Reaction of partners, appearance and cost**

The review of 15 studies carried out in sub-Saharan African countries between 1990 and 1996 compiled by the World Health Organization revealed that acceptability of the FC among women other than prostitutes faces two obstacles. These obstacles are the reaction of the women's regular partner and attitudes to the device itself (appearance, difficulties or uneasiness concerning its use).

At the same time, problematic aspects of FC use were noted. Several providers thought that the inner ring was too hard and inflexible, and the aesthetics of the FC put some providers off, which was reflected in descriptions such as "big, "greasy," and "not sexy." Some providers did not recommend the FC because it is not a skin-tight male which holds in semen, some providers said they not sure why or why it was developed and why it was even needed (Napierala et al, 2008). The women who were negative thought it was complicated and uncomfortable to use.

The study conducted by Mahlalela & Maharaj (2015) in South Africa, showed that inadequate availability, stigma, insertion difficulties, lack of awareness and partner objection served as significant barriers to consistent FC use. Still in Zimbabwe, Callegari et al (2008) revealed that married women face multiple challenges in negotiating condom use with their partners. Callegari also mentioned gender roles and power dynamics making it difficult for women to discuss sex or HIV and for women to refuse sex without a condom; economic dependency also renders many women unable to negotiate condom use. Some researchers studying the acceptability of the FC

between 1991 and 1993 found that where female participants tended to drop out of the studies before completion, it was mainly due to partner's reactions (Ankrah & Attika, 2010). Interventions should aim to increase availability of the FC, and male involvement should be increased to facilitate consistent use of the method (Mahlalela & Maharaj, 2015).

The study by Mathenjwa, (2010) in Swaziland indicated that partner objection, cultural and social beliefs, and limited availability served as barriers to the use of FC. While FC is seen as an improvement on the male condom, the device has limited value because of the need to agree on its use before sex. Although FC use involves negotiation with clients, the fact that it offers sex workers an independent method of protection gives them more power and also increases their ability to control their sexual and reproductive health (Mathenjwa & Maharaj, 2012).

Jackalas et al (2010), a study in Chobe district in Botswana, revealed that low uptake of FC was attributed to the size of condom, difficulties of use, the noise during sexual activity and the present of the male condom in the market. A good number of female participants stopped out of fear that it is too large and could cause problem if it goes into the vagina (Ezire et al 2013). Beksinka et al (2010), mentioned that the hardness to insert and remove FC might pose a problem to some women.

The FC, an effective barrier method for HIV/STI prevention continues to be absent from most community settings, including reproductive health and treatment clinics. Reducing or eliminating basic barriers, including lack of awareness, knowledge of proper use, and access to free samples, may significantly increase use among those who want or need them (Hoffman, 2013). Oxfam report (Holden, 2008) argues that lack of donor investment in the female condom has been a key deterrent to universal access, and both the Oxfam report and the UNAIDS Global



Study by Kresge (2013) cited the high cost of FC compared to the male condom as one of the principal barriers to the uptake of the FC. Study by Tarkang et al (2014), revealed that sexually active students in this study who have never used FC mentioned unavailability and cost as their reasons.

Other obstacles include lack of communication between sexual partners and between providers and patients, and the stigma attached to all condoms (Warren et al 2003). Male partner objection was the most pervasive factor preventing initial and continued use of FC (Moore, Beksinka, Rumphs, Festin & Gollub. 2015). Warren et al. 2003 suggested that to overcome the barriers, quality information should be made available, quick response to requests for information and supplies of the FC, support should be given to the development of introduction strategies, and new ideas should be catalyzed to expand good practice.

Study by Weeks, Coman & Hilario et al, (2013), indicated that many women will potentially initiate and continue using FC when basic barriers are reduced or eliminated including lack of awareness, knowledge of proper use, access to free samples. Brief FC education with free trial samples should be built into standard clinical practice and public health programs.

### **2.5.2. Knowledge and Attitude towards female condom**

Sethibang (2008), conducted a study in Lobatse, Botswana on knowledge, attitude and practices of men and women towards FC, the study revealed that men and women were at least aware of its importance, they also had knowledge on it, where to get it, but had their own reasons for not using it, like it is too noisy, it is too lubricated, it looks awful, it is disturbing as it is inserted earlier before sexual act and some may remain in the reproductive organ. Overall findings of this

study revealed that attitude towards use of female condom had a great impact on the practice of the method. Literature suggests the need to improve both lack of knowledge and positive attitudes towards the FC. The knowledge and attitudes towards FC are considered to be among the FC determinants (Holmes et al. 2008).

Lack of knowledge concerning FC seems to be a contributing factor as evidenced by the study conducted by Chipfuwa et al. (2014), in Zimbabwe which was conducted to determine level of awareness and uptake FC, the study revealed that respondents, women aged 18 to 49 years reported to have heard about the method, however majority has not received health education on the method from health care providers, and most respondents (83.5%) had not used it.

## **2.6. Conclusion**

This chapter mentioned different factors and perceptions which may hinder or influence use of FC by women of reproductive age, such as attitudes towards the FC, knowledge of using the FC, difficulties facing the use/insertion, provider's attitude towards FC and provider's lack of knowledge on the FC use.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1. Introduction

The chapter discusses the research design and methodology used in the study, it also describes the population of from which the sample was taken using random selection technique, standardized questionnaires from the quantitative approach.

#### 3.2. Research design and method

A descriptive, cross sectional design was used to describe and assess the knowledge, attitudes and perception of women of reproductive age towards use of FC, as well as to examine the factors which may influence or hinder the use of FC by the women of reproductive age.

The purpose of the descriptive design is to help to observe, describe and document perception of women of reproductive age towards use of FC in Mogoditshane.

Descriptive designs are concerned with gathering information from representative sample of population. The emphasizes in the collection of data in descriptive studies is on structured observation, questionnaires and interviews or survey studies (Brink, 2006).

Cross-sectional designs are conducted in the present time to examine what currently exists and they are fundamentally characterized by the fact that all data are collected on time (Brink, 2006).

Overall, method used to collect data from the various sources in this study was a questionnaire. The responses to the questionnaire were generated from 125 women attending Nkoyaphiri clinic in Mogoditshane village.

### **3.3. Study Setting**

The study was conducted in Nkoyaphiri clinic which is in Mogoditshane village, in Kweneng district. Kweneng district lies on the southern part of Botswana. Mogoditshane is a village within Kweneng district. It is peri-urban village situated 5 kilometers from the capital city Gaborone, it has a population of 46,000 people. The community of this village is made up of different tribes as the village is near the capital city where a lot of people are working as such they are accommodated in Mogoditshane. Mogoditshane has a total of 3 clinics, one with maternity wing, two clinics operate 24 hours, including the Nkoyaphiri clinic, offering primary health care services. The study was conducted in Nkoyaphiri Clinic which is one of the three clinics in Mogoditshane village. Mogoditshane clinic is situated in the middle of the village and it is widely accessible to most of the population of this village. The clinic is situated on a density populated area with the statistics which is more than the statistics of the other two clinics in Mogoditshane.

### **3.4. Study Population**

The population of interest was women of reproductive age visiting Nkoyaphiri clinic in Mogoditshane village for sexual reproductive health services. Women of reproductive age between aged 15 to 49, both married and unmarried, visiting Nkoyaphiri clinic (Nkoyaphiri, for antenatal care and family planning in Mogoditshane village.. The study therefore, targeted all women of reproductive age registered for family planning and ante natal care in Nkoyaphiri clinic, according the sexual reproductive health register, there was a total of 130 women registered for family planning and 432 for antenatal care as of February 2014. In total there are 562 women of reproductive age registered for both family planning and antenatal care in Nkoyaphiri clinic as of February 2014.

### 3.5. Sampling and Sample

Systematic simple random sampling was done to come up with the population to be interviewed. Sampling is referred to as the researcher's process of selecting the sample from a population in order to obtain information regarding a phenomenon in a way that represents the population of interest (Brink, 2006). The sample has been rationalized through consultations with the Ministry of Health personnel. Based on the information collected from the relevant clinic registers, the sample is constituted of all women of reproductive ages in the study area of Nkoyaphiri Clinic in Mogoditshane Village. The clinic under study has registered 562 of women of reproductive age in both family planning and ante natal care. Sample consists of a selected group of the elements or units of analysis from a defined population, (Brink, 2006), as such the selected group were women aged 15 to 49 visiting the clinic for either antenatal care or family planning services. Mogoditshane village in Kweneng district is selected by simple random sampling. The researcher recruited every second woman who registered for either family planning or antenatal care.

A systematic simple random sampling procedure was used; a sample of 125 women of reproductive age were selected from sexual reproductive register of 562 women.

- Sample size was drawn from women registered for family planning and antenatal care from the time of data collection.
- The age ranges from 15 to 49 years, this is because women of reproductive ages ranges from 15 to 49 years (Botswana Demographic Health Survey, 2009).

To determine the size of the sample registered women of reproductive age enrolled for both family planning and ante natal care was made as per the table below.

**Table 1.0: Attendance of Family Planning and ANC at Nkoyaphiri Clinic**

	<b>Attendance</b>	<b>Sample Size for the study (20%)</b>
Women of Reproductive Age Registered for Family Planning	130	26
Women of Reproductive Age Registered for Ante-Natal Care	432	86
<b>Total</b>	<b>562</b>	<b>112</b>

There are a total of 562 women of reproductive age registered for both family planning and ante natal care as of October 2014 to February 2015.

Stoker's table of representative sample of population was used. The table is as follows:-

POPULATION	% SUGGESTED	NO OF RESPONDENTS
20	100%	20
30	80%	24
50	64%	32
100	45%	45
200	32%	64
500	20%	100
1000	14%	140
10 000	4.5%	450
100 000	2%	2000
200 000	1%	2000

Based on the current numbers where 562 women who attended the Nkoyaphiri clinic and of these 112 plus 10%, 125 women were randomly chosen and included in the study (using the Stoker's table as above).

#### 3.4.1. Ethical issues related to sampling

The nature and purpose of study was fully explained to the respondents. All respondents signed consent forms before responding to the questionnaire. Respondents were also assured of confidentiality and their names were not written down in any of the questionnaires during the entire duration of the study. Names of respondents were not included in the final report and confidentiality was upheld at all times.

### **3.5. Data collection approach and method**

Data was collected using quantitative research method. Structured questionnaires were written in both English and Setswana for the participants to give their responses.

The study objectives was explained to women of reproductive age and were required to give their concern in which they were given self-administered questionnaires to fill in their responses. They were informed of confidentiality and that if they do not want to participate they were free to do so.

#### **3.5.1. Development and testing of the data collection instrument.**

The researcher carried out a pilot study involving only a few samples (15) that served to help test the questionnaire. The objective of the pilot study was to check appropriateness, accuracy, and quality of the instruments. The pilot study helped to establish effectiveness and appropriateness of the language used. The questionnaire was pre tested on women of reproductive age at Gabane clinic in Gabane village, which is 10 kilometres from Nkoyaphiri clinic, Mogoditshane village. The pre-test helped to evaluate if the questions answer the research questions. The results from the pre-test assisted in restructuring and validating the questionnaire.

#### **3.5.2. Characteristic of the data collection instrument**

The data collection instrument was a written structured questionnaire written in both English and Setswana.

### **3.6. Data collection**

Data were collected using self-administered questionnaires with both close and open ended question. The questions were written in both English and Setswana. The questionnaire was



administered by the researcher to those women who are able to read and write, and oral interview (using the same questionnaires) were conducted with those who cannot read and write. The researcher explained the questionnaire and gave instructions and some clarifications when need arise. The questions focused on knowledge and attitude, experience with female condom, and factors hindering the use of female condom. The research instrument was questionnaire that was applied to all sampled cadres of women of reproductive age in the mentioned clinic. The questionnaire dealt with major variables of the study to address both the scope and objectives of each study dimension. The variables covered in the study included the following: knowledge and attitude, perceptions towards female condom, experience with female condom, factors hindering use of female condom.

### **3.6.1. Data collection process**

Data was collected through use of self-administered questionnaires, in February 2015, the questionnaires were piloted before.

### **3.6.2. ETHICAL CONSIDERATIONS**

Ethical clearance was requested from University of Limpopo Research Ethics Committee, Medunsa Research and Ethics Committee (MREC). , Permission to conduct the study was requested from Botswana Research Unit (Ministry of Health), Gaborone, before commencing the study, as well as the respondents who were illegible to take part in the study. The nature and purpose of study was fully explained to all concerned parties. All respondents signed consent forms before responding to the questionnaire. Respondents were also assured of confidentiality and their names were not written down in any of the questionnaires during the entire duration of the study. Names of respondents were not included in the final report to protect their identity.

### **3.6.3. Data analysis**

Data were collected using the self-administered questionnaires written in both English and Setswana were coded, cleaned and entered into the SPSS version 21 and analyzed.

**Missing data** – there were some questionnaire which were not completely answered, this has led to inconsistency of numbers in data analysis, missing data were assigned codes for easy analysis. The data were collected using a self-administered questionnaire. Each question was assigned a data code. Out of a total of 140 questionnaires distributed, 125 were returned by the participants, leading to a response rate of 89%, some questions were skipped. The questionnaires were numbered for easy identification when doing data entry. Data were entered into statistical package for social scientists (SPSS version 21). Data cleaning was done to check for inconsistencies and to ensure the data quality. Data analysis was done using, frequencies, cross-tabulations, and tables and graphs were used for data presentation as shown below.

### **3.7. Internal and external validity of the study**

Study validity is a measure of the truth or accuracy of the claim (Burn and Groove, 2009). An instrument cannot validly measure an attribute if it is inconsistent and inaccurate (Polit & Beck, 2008) Validation efforts should be viewed as evidence –gathering enterprises, in which the goal is to assemble sufficient evidence from which validity can be inferred (Polit and Beck, 2008). There is no point using an instrument that is not valid, however reliable it may be. By the same token, if an instrument measures a phenomenon of importance but the measurements are not consistent, it is of no use (Brink, 2006).

Content validity was established by sending the questionnaires to experts such as colleagues, researchers and the supervisor. Piloting was conducted on women who share the same characteristics as those eligible to be studied.

Questions for perception, knowledge and attitude were derived from pre-validated tools and also, Alpha method was used to ensure reliability of questions asked such that each quest scoring  $\alpha$  close to 1 will be reliable.

### **3.8. Conclusion**

Quantitative qualitative methods were used to arrive at the results obtained. The researcher used questionnaires to collect data. The questionnaire was explained to the participants, and they were also informed of confidentiality, anonymity and their right to participate or refuse to participate. This approach was found to be useful in generating relevant and reliable data from the respondents.

## **CHAPTER 4**

### **RESULTS**

#### **4.1. Introduction**

This chapter provides information on how the data was analyzed, the software used. The section also provides data management. Firstly overview of the findings as they relate to the objectives of the study. Secondly the section will also provide conclusion of the findings.

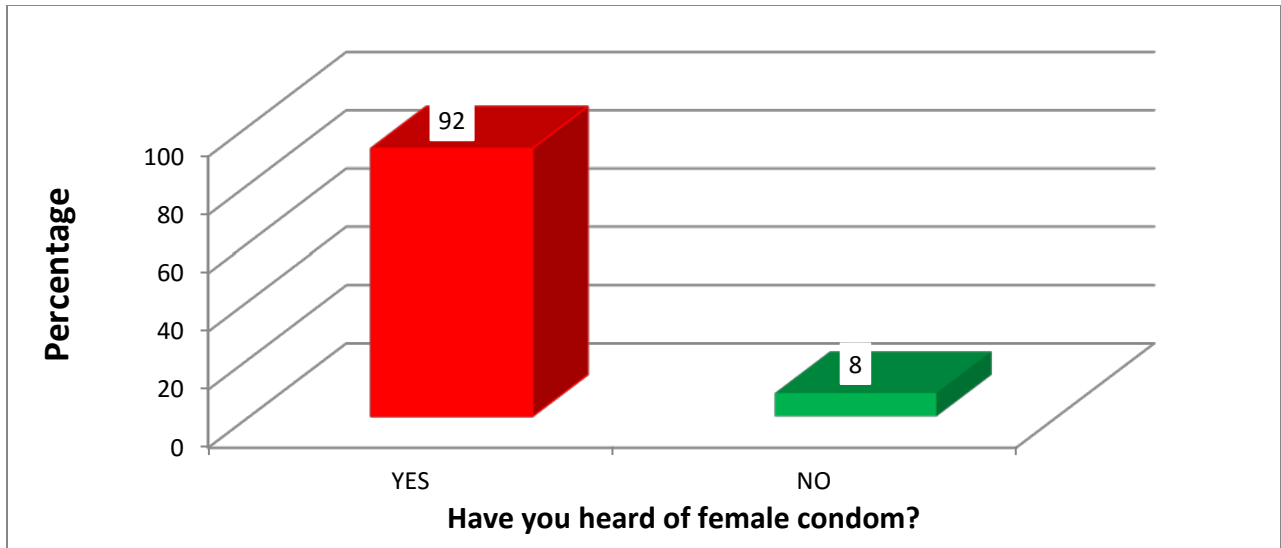
#### **4.2. Data Analysis**

The data analysis process was discussed in Chapter 3, questions were analyzed by use of SPSS version 21.0, statistical package.

### **RESEARCH RESULTS**

#### **4.3. Awareness about FC**

The results describe whether women of reproductive age have heard of FC.



**Figure 4.1: Awareness about Female condom**

The figure 4.1 above shows whether respondents have heard about female or not. The results from the chart shows that the majority 115(92%) of respondents have heard of FC compared to 10 (8.0 %) who have not heard of female condom.

#### **4.4. Sources of information on FC**

This part of the results describes the sources of information where the women of reproductive age have heard about FC.

**Table 4. 1: Sources of information on Female condom AS REPORTED BY RESPONDENTS**

Source of information	Frequency	Percentage
I don't know	19	16.1
Health workers	27	22.9
Friends	9	7.6
Relatives	5	4.2
School	27	22.9
Radio programme	7	5.9
Pamphlets/books	24	20.3
Total	118	100.0

Table 4.1 above shows the sources of information on female Condoms (FC). The results show that (22.9%) of respondents reported health worker and school as a source of information on FC, respectively. Also, (20.3%) of respondents use pamphlets/books; (7.6%) and (5.9%) of respondents use friends and radio programme as sources of information on FC, respectively. A small percentage (4.2%) use relatives and (16.1%) of respondents said that they don't know source of information on FC

#### **4.5. Ever seen FC, where FC was seen, and where FC are collected**

Respondents were asked if they have seen FC, where they have seen it as well as where FC is collected.

**Table 4. 2: Self-report on whether respondents have seen a female condom and where they have seen it**

<b>Question</b>	
<b>Have you ever seen a Female condom (n=125)</b>	
Yes	95(76.0)
No	30(24.0)
<b>Where respondents have seen Female Condoms (n=</b>	
Never seen them	30(24.0%)
Health facility	91(72.8%)
Office	1(0.8%)
Entertainment area	3(2.4%)
<b>Where female Condom are collected</b>	
I don't know	30(24.0%)
Health facility	89(71.2%)
Private doctor	2(1.6%)
Office toilet	1(0.8%)
Private pharmacy	3(2.4%)
<b>Total</b>	<b>125 (100)</b>

The results from table 2 above show whether respondents have seen a FC and where they have seen FC. The results show that the majority (76.0%) of respondents report that they have seen a female condom. The results show that the majority (72.8% and 71.8% respectively) report that they have seen and collected FC at the health facility.

#### 4.6. Where women prefer to collect FC

This part of the results describes where women of reproductive age prefer to collect the FC

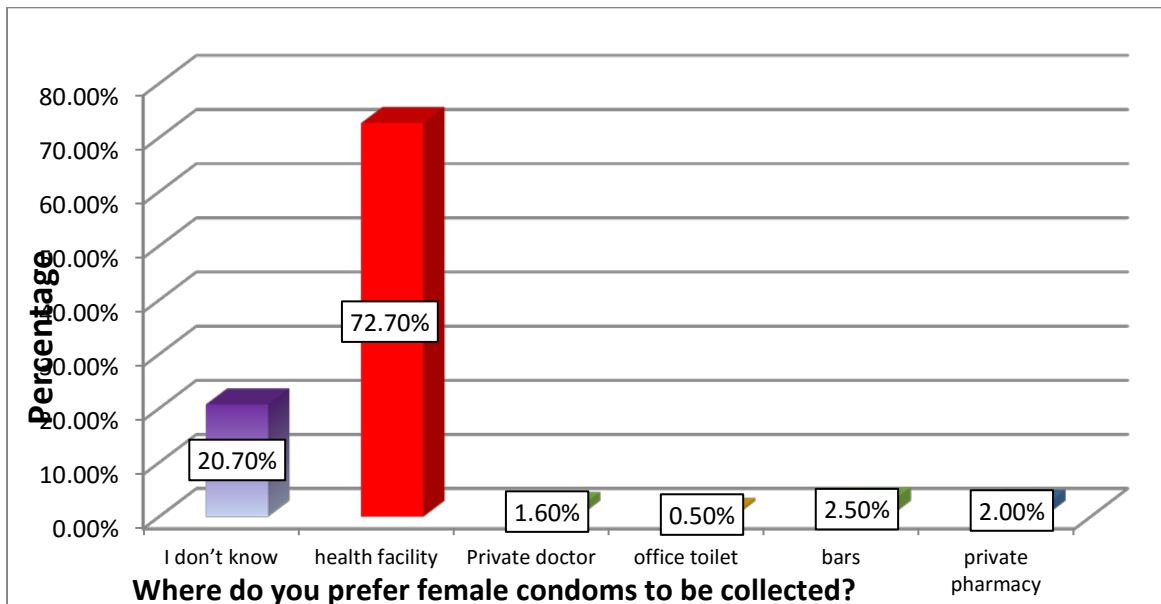


Figure 4.2: Respondents preference on where to collect FC

Figure 4.2 shows that 20.7% of respondents reported that they don't know where they preferred FC to be collected from, whilst 72.7% reported that they prefer FC to be collected from the



Health facility. Also, (2.5% and 0.5%) of respondents reported that they prefer FC to be collected from bars and office toilets respectively.

#### 4.7. Awareness of women on FC

This part describes whether women of reproductive age have ever attended lessons on FC demonstrations, whether they know how to use the FC, whether FC can be used again and have they ever used it before

**Table 4.3: Awareness of women on Female Condom**

Question	Yes	No	
Have you ever attended lessons and demonstrations on use of female condom	52(42.6%)	70(57.4%)	
Do you know how to use female condom	44(38.2%)	81(64.8%)	
	<b>Yes</b>	<b>No</b>	<i>Not sure</i>
Can female condom be used again (n=122)	12(9.8%)	70(57.4%)	40(32.8%)
Female condom is inserted hours before sexual intercourse (n=123)	55(44.7%)	18(14.6%)	50(40.7%)
Have you ever used female condom (n=125)	15(12.0%)	110(88.0%)	0

Table 4.3 above shows that 70(57.4%) of respondents have never attended demonstrations on the use of FC. On the other, hand 81(64.8%) of respondents don't know how to use FC and (57.4%) of respondents reported that FC cannot be used again. The results also show that 55/123(44.7%) of respondents knew that FC is inserted hours before sexual intercourse, whilst

50(40.7%) were not sure. In addition, the results show that the majority 110(88.0%) of respondents have not used FC.

#### 4.8. Contraceptive method used by women of reproductive age

This results describes the different contraceptive methods used by women of reproductive age

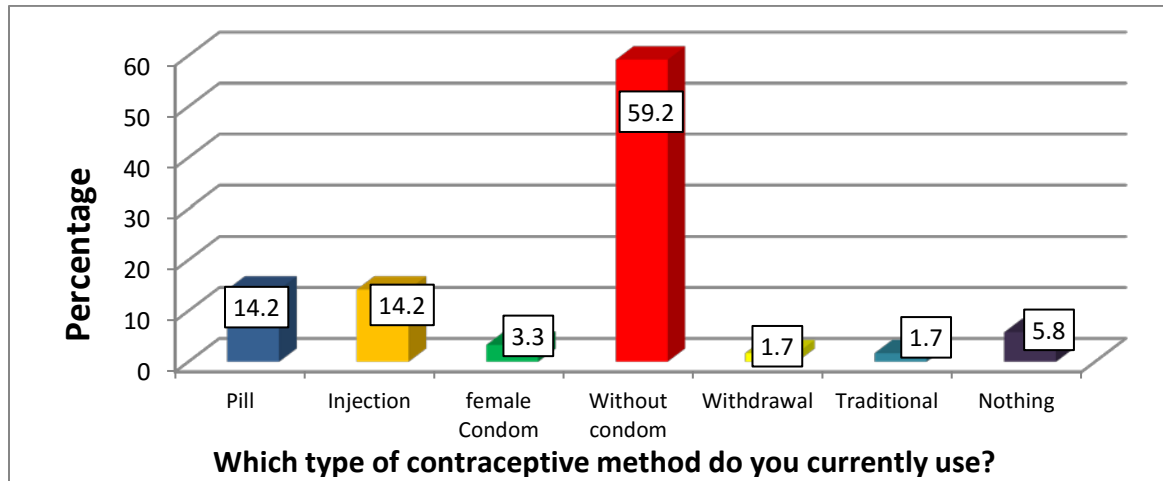


Figure 4.3: Type of contraceptive method used by respondents (n=125).

Figure 4.3 shows the type of contraceptive method that respondents are currently using. The results show that most of respondents (59.2%) are using male condom, followed by Pill and injectable at (14.2%) and 5.8% of respondents were not using any contraceptive method. The results also show that (3.3%) and (1.7%) were using female condom and withdrawal, respectively.

#### 4.9. Discussion of contraceptive method with the partner before making a choice

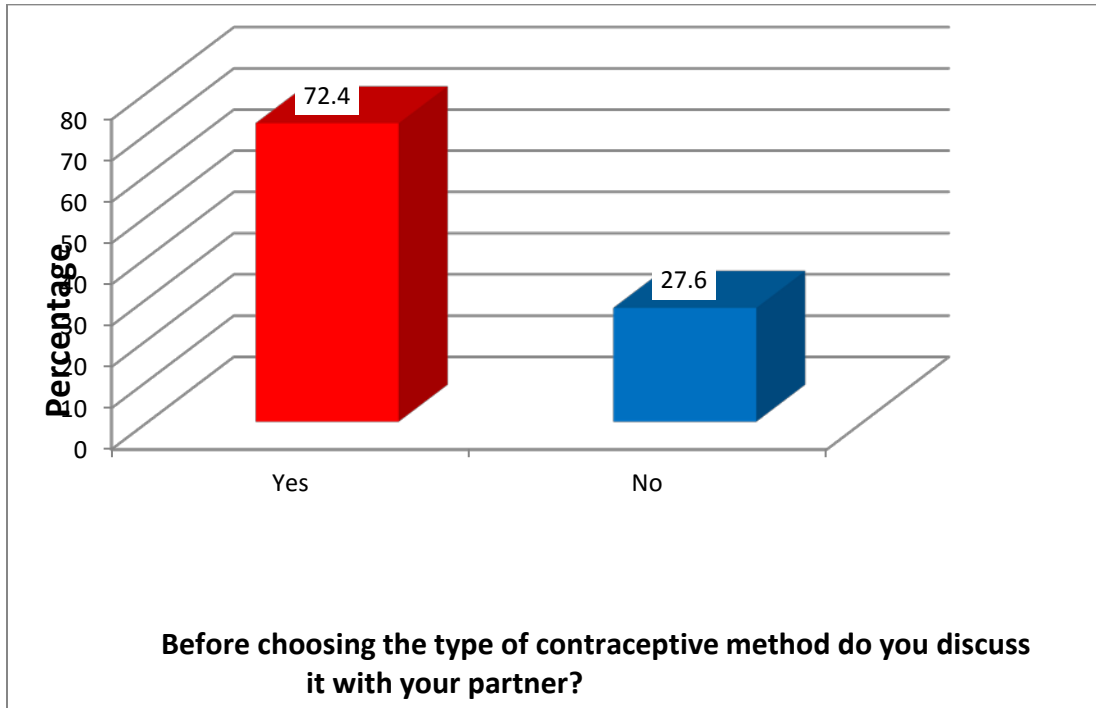


Figure 4.4: Discuss contraceptive method with the partner

Figure 4.4 above shows that the majority of respondents (72.4%) reported that before choosing the type of contraceptive method they discuss with their partners, compared to (27.6%) who reported that they do not discuss with their partners.

#### 4.10. Practice of FC method by women of reproductive age

**Table 4.4: Practice of women on the use of female condom**

<b>Question</b>	<b>Yes</b>	<b>No (%)</b>
<b>Have you ever used Female Condom (n=122)</b>	<i>Yes</i>	15(12.3)
	<i>No</i>	107(87.7)
<b>How often do you use Female Condom (n=15)</b>	Consistently	6(40.0%)
	Inconsistently	9(60.0)
<b>Was it difficult to use (n=15)</b>	Yes	7(46.7)
	No	8(53.3)

Table 4.4 above shows that the majority 107(87.7%) of respondents have never used FC compared to (12.3%) that have never used it. The results also show that of those 15 females who reported that they have used female condoms, 9(60.0%) use female condom inconsistently and only (40.0 %) used FC consistently, also, of those who used FC (n=15); 53.3% reported that it was not difficult to use FC.

#### 4.11. Beliefs that FC can prevent STIs including HIV/AIDS

**Table 4.5: Respondents' belief that female condom can prevent sexual transmitted infections including HIV/AIDS**

Belief	Frequency	Percentage
Believe	53	42.4
Strongly believe	35	28.0
Don't believe	9	7.2
Strongly disbelieve	13	10.4
Don't know	12	9.6
<b>Total</b>	<b>125</b>	<b>100.0</b>

Table 4.5 shows that 42.4% of respondents reported that they believe that female condom can prevent sexual transmitted infections while 10.4% strongly disbelieved and 9.6% don't know if female condom can prevent STIs including HIV/AIDS.

#### 4.12. Belief that FC can prevent pregnancies

**Table 4.6: Respondents belief that female condom can prevent unwanted pregnancies?**

Belief	Frequency	Percent
Believe	58	46.4%
Strongly believe	50	40.0%
Strongly disbelieve	11	8.8%
Don't know	6	4.8%
Total	125	100.0%

Table 4.6 shows that, Out of a total of 125 respondents 58(46.4%) believe that FC can prevent unwanted pregnancies, while 50(40%) strongly believe and 6(4.8%) don't know if FC can prevent unwanted pregnancies. A small percent 11(8.8%) of respondents strongly disbelieve that FC can prevent unwanted pregnancies.

#### 4.13. Whether women of reproductive age likes FC

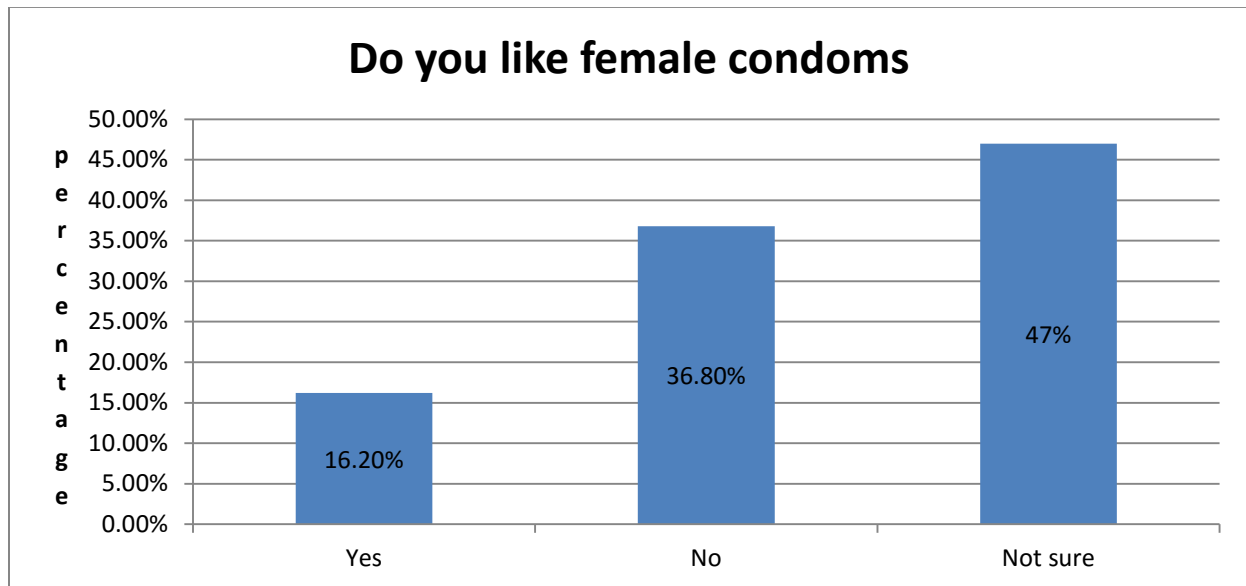


Figure 4.5: Response on whether participants liked female condoms

Figure 4.5 above shows that a low percentage (16.2%) of respondents said yes they like FC, while (36.8%) said that they don't like and (47%) were not sure whether they like FC or not.

#### 4.14. REASONS FOR LIKING FC

**Table 4.7: Reasons for liking the female condoms (n= 9)**

	Frequency	Percent
Avoid unwanted pregnancy, prevent sperms from getting in the vagina	5	55.5
Use without consulting anybody, safe for women to be in control and also to take responsibility	4	44.5
Total	9	100

Table 4.7 shows Respondents were asked reason why they like FC. Respondents mentioned some reasons why they like FC which include; avoid unwanted pregnancy because it prevent sperms from getting in the vagina 5(55.5%), I can use it without consulting anyone, it is safe for woman, to be in control and we also take the responsibility as women 4(44.5%).



#### 4.15. PERCEPTIONS OF WOMEN OF REPRODUCTIVE AGE ON FC

This part describes the perceptions of women of reproductive age towards FC

**Table 4.8: Perceptions of women on female condom**

Perception questions	N	Minimum	Maximum	Mean	Std. Deviation
Female condom can prevent STIs including HIV/AIDS	123	1	5	2.19	.895
Health workers teach about male condom only	96	1	5	3.45	1.160
Male condoms are always on display, for self-dispensing in health facilities while female condom is not.	98	1	5	2.33	1.156
Female condom not easy to use and takes long to insert as compared to male condom	98	1	5	2.35	.943
Female condom too big, noisy, oily and messy	97	1	5	2.73	.771
Female condom not easy to get	97	1	5	2.68	1.186

The table 4.8 above shows means scores for the perceptions of women on FC. The results show that the mean scores range between 1 and 3. The results show that the highest mean score is for health workers teach about the male condom only vision (mean = 3.45). The results also show that female condom too big, noisy, oily and messy and FC not easy to get have mean score of 2.73 and 2.68, respectively. In addition, FC not easy to use and takes long to insert as compared

to male condom and male condoms are always on display, for self-dispensing in health facilities while female condom is not, have mean score 2.35 and 2.33, respectively.

## **Conclusion**

There many perceptions that influence women of reproductive age to use or not use the FC. Majority of women know about the FC, have seen the FC but have not used it as well as having lack of knowledge of using the FC. Women of reproductive age prefer to use the male condom than the FC, cite that male condom is always available in health facilities for collection whereas FC is not always available. These findings implies that FC is not effectively by women of reproductive age for prevention of pregnancy STIs including HIV/AIDS.

## CHAPTER 5

### DISCUSSION; CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

#### 5.0 DISCUSSION

##### 5.1. Introduction

The discussion was based on the results of the research of the study perception of women of reproductive age towards use of FC in Nkoyaphiri clinic Mogoditshane village, Botswana. The findings will be discussed according to the study objectives.

*5.2. Objective: 1.To establish the level of knowledge of female condom among women of reproductive age in Nkoyaphiri clinic*

Prevention strategies – often summed up by the “ABC” approach: - Abstain, Be mutually faithful and use Condoms – do not enable women to adequately protect themselves from HIV. A UNAIDS sponsored survey conducted in Harare, Durban and Soweto in South Africa found that 66% of the women reported having one life partner, 79% had abstained from sex at least until the age of 17, yet 40% of these young women were also HIV positive, and most had been infected despite staying faithful to one partner (UNAIDS, 2005). Therefore, there is need to promote the use of FC, in order for women to be sure that they are in-charge of protecting themselves and this can help control the spread of HIV among women.

## **Sources of information**

The study revealed that the majority of respondents have heard of female condoms (FC). On the other hand the results of the study show that with regard to the sources of information used close to a quarter of respondents used health worker and school as source of information.. Health providers are well placed to serve as advocates for the FC, as clients look up to them for help in making decisions around methods to use for pregnancy and disease prevention (Mantell et al., 2011). In contrast, findings by Ogunlela (2012) revealed that most of the respondents heard about the FC from friends, followed by information from the clinic. The current study imply that health workers do give information about FC, though at a smaller scale than one would like to see. Studies further show that the media and billboards campaigns play a significant role on providing information and awareness of the FC. However, not all countries have reported success following mass-media campaigns. For example, a mass-marketing campaign for the FC in Lusaka, Zambia, used this method to raise awareness but FC use is still reported to be lower in that country, (UNFPA, 2002). Also, Marseille & Kahn (2008) concluded that, besides the role of different organizations in promoting FC; there is inadequate communication about female condoms, especially via the mass media. Hoffman, Mantell & Exner (2004) describe this as an information gap, as clinics and the media should be primarily involved in the dissemination of vital information about female condoms in order to increase its uptake. Currently in Botswana FC campaigns are mostly in the health facilities, both public and private, while radios, televisions are sometimes used on rare occasions. Sources such as radio, television and media if used regularly to disseminate information to men and women can assist with marketing of FC. Therefore, women of reproductive age should interact and discuss issues of sexuality more

specially use of FC as both a contraceptive and barrier method against STIs including HIV/AIDS with others in different forums.

### **Contraceptive method used**

From the current results, most respondents reported that their partners used male condoms, and only 3.3% reported that they used FC. Similarly, Marseille & Kahn (2008), found that women were in support of male condom over female condoms. These results show that male condoms are preferred than the female condoms meaning, women are not keen on using the strategy that is supposed to be in their own control to prevent themselves against STIs, HIV and unwanted pregnancies. In contrast, Mathenjwa (2012), found that women liked the FC and preferred it over male condoms because it offers them more options and moreover they control its use. From the results of the current study, it seems women knew about female condoms, but they simply preferred that their partners used the male condoms than them using female condoms. These results further imply that females are still reluctant to take charge of their sexual behavior and rely on males to practice safe sex, instead of ensuring that they are empowered so that they can reduce HIV and STI by using FC.

### **Knowledge of FC and use**

The results of this study revealed that the majority of women of reproductive age reported that they had never used FC. The results of this study also revealed that level of knowledge of women on the use of FC is low. These results are supported by Guerra & Simbayi (2014) and Tobin-West & Maduka et al (2014) findings where lack of knowledge of FC use was reported to be a barrier to its uptake. This current study further revealed that the respondents believed that FC have rules and regulations that needed to be strictly followed. The results showed that a smaller

percentage of respondents mentioned that they will use FC again. Study by Olandeinde et al (2011), had similar findings where awareness of FC was significantly higher with poor FC use among undergraduate students. A study by Gwebu (2012), concur with this study findings, where usage of FC was also very low. Similar finding where awareness of FC was high with most students having lack of knowledge of how to use it, was reported in Kigali (Valens & Joseph, 2013). These findings are also similar to reports by Pandya, Siddiqi and Naqvi (2011) among South Asian women. Study by Sobze, Fokam, Guetiya, Russ, Onohiol, et al., (2013) found that 75.7% of university students in Cameroon reported that they were aware of the existence and availability of FC, but uptake of FC was still low, irrespective of their level of awareness. Lack of knowledge regarding correct use of FC was also a concern in a study by Naidu (2013) who reported that this lack of knowledge was the main barrier to the FC uptake, and the same study revealed that high numbers of beneficiaries who were meant to gain from female initiated contraception have little exposure and knowledge of the FC.

### ***5.3. Objective 2: To determine the uptake of FC by women of reproductive age in Nkoyaphiri clinic***

The results of this study revealed that the level of use of FC was lower among respondents. These results are similar with the findings of the Jackalas (2010) where low FC use among women in Botswana was found. The National Survey, the Botswana AIDS Impact Survey of 2008 reported that only 8% of respondents have used the FC at least once. The low use of FC by University of Botswana students was highlighted by Nkobodo (2013) in Gaborone Botswana. Even health workers in Francistown, Botswana in a study by Chirwa (2011) were reported not to be using the female condom. Of interest is that health workers are seen as information givers, counsellors and providers of the health services, therefore, it is expected that they would be championing and using FC for themselves as well. The use of female condom was still low following its launching and social marketing campaign in Botswana (Mmegi Newspaper, 2010), whereas, in Zimbabwe the number of FC users was reported to be higher, factors associated with use included perceived ease of use and affordability (Meeker & Ritchter, 2005). The Ministry of health in Zimbabwe launched a distribution of FC which escalated from 300,000 in 1998 to 1.6 million in 2002 (Warren & Philpott, 2003). Interestingly, FC made only 1% of total number of condom distributed in Botswana (Laila, Serumaga & Smith, 2013).

The contraceptive preference as indicated by the respondents in the current study showed that male condom was preferred by over half women, while FC use was preferred by only 3.2% as a form of contraceptive. These results have shown that FC is not preferred by the respondents as contraceptive method. Similarly, FC use was also low in Zambia according to Mwamba (2015). Perceptions shown by women of reproductive age in this study also might hinder uptake of FC, perceptions such as difficult to use, FC not well marketed by health workers like male condom

and clumsiness of FC. Therefore, the training of how to use the FC will enable proper message on FC use and myths will be minimized. Negative perceptions of health workers towards use of FC may influence both distribution of and access to FC (Nkobodo, 2014).



***5.4. Objective 3: To investigate the factors the factors that influence the use of the FC in Nkoyaphiri clinic***

Generally, in this study the low use of FC may be due to the fact that women of reproductive age lack knowledge of how to use FC, in availability and low marketing of FC by the health workers. Witte et al (2006) mentioned that one of the primary barriers to FC uptake for HIV/STI prevention or contraception appears to be health care providers and educators themselves, whose own skepticism about potential popular attitudes and use of the product keeps them from introducing it to their clients and patients as well as supporting its use and further promotion. The sustained availability and support provided by healthcare providers contributes to acceptability of the FC2 and encourages the use thereof (Peters et al, 2010). Evidence grows suggesting that removal of basic obstacles could result in greater FC use and reduced unprotected sex in the general population (Witte et al 2006). Barriers of accessing and using FC is lack of adequate awareness campaigns, necessary information and availability of FC stock (UNFPA, 2004). Napierala et al (2008) reported that with access, proper education and promotion, FC may be a valuable option for Zimbabwean women. Factors such as negative attitude towards FC, poor perceptions, unavailability of FC in health facilities, appearance of the FC, as well as preference of male condom over FC have been recorded several times in literature.

Warren et al (2003) suggested that to overcome the barriers, quality information should be made available, quick response to request for information and supplies of the FC, support should be given to the development of introductory strategies, and new ideas should be catalyzed to expand good practices. Provider and user problems identified need to be tackled through education and

information for a better understanding and acceptance so that the device can be given a fair chance (Seedat, 2011). Mantell et al (2011), stated that unless and until provider training on the FC is greatly improved, broader acceptance of this significant public health contribution to preventing HIV/AIDS and unwanted pregnancy will not be achieved.

### ***The attitude of women of reproductive age towards use of FC***

The results of this study found that the majority of respondents strongly agreed that FC can prevent sexual transmitted diseases including HIV/AIDS. However Tarking (2013), in Cameroon found that respondents had an unfavorable attitude and poor perceptions towards use of FC. An analysis found that in sub-Saharan Africa alone, expanded prevention drive could prevent 55% of the 53 million new HIV infections projected to occur in the region between 2003 and 2020 (Salomon, 2005). A study by Valens and Joseph (2013), in Kigali, found that most respondents had a favorable attitude towards the efficacy of the FC in prevention of STI and unwanted pregnancy. With the number of HIV-infected women out numbering HIV-infected men, there is an urgent need promote prevention efforts that will reduce the vulnerability of women, such as increasing FC uptake.

In the current study, more than a third of females strongly believed that FC can prevent unwanted pregnancies, while only a tenth strongly disbelieved that FC can prevent unwanted pregnancies. Similar results of FC preventing STI and unwanted pregnancies were reported by Napierala et al., (2008) and Spizzichoni et al., (2007). However, this current study revealed that the majority of women of reproductive age did not like FC. This is surprising as FC have been shown to be effective at preventing transmission of HIV and other STIs. Knowledge about FC is limited and many people still hold negative attitudes towards its use (Hardwick, 2002). The

same negative attitude was found in this current study among women of reproductive age in Nkoyaphiri clinic. However Holmes et al (2008) found that women who were not knowledgeable about FC were less likely to use it than women who were knowledgeable. Supported by Weeks et al (2010) who also found that greater FC knowledge was associated with FC use. Ezire et al., (2013), also reported that adequate knowledge and skill to use FC contributes to its repeated use. There is therefore the need to provide adequate FC education to potential users in order to maximize the benefits. These results are giving hope as most women preferred male condom as a contraceptive method. Positive attitude towards use of FC should be increased by emphasizing advantages of FC like prevention of pregnancy and STIs and that FC has no side effects as compared to some contraceptives.

### ***The perception of women of reproductive age towards use of FC***

The current study had some perceptions from women of reproductive age in Nkoyaphiri clinic, perceptions were as follows: FC is a preventive method controlled by women; health workers talks about male condom only; male condom is always on display; FC not easy to use; takes long to insert as compared to male condom; FC too big, noisy, oily and messy; and FC not easy to get.

### ***Display of FC for self-dispensing***

The results of this study revealed that respondents perceived that male condom is always display at the health facilities for self-dispensing while FC is not. These findings imply that there is

minimal marketing of the FC as compared to the male condom and this error has significantly impacted on FC uptake.

Failure to put FC on display discourages individuals, couples to use it as they will not be sure of its availability. Participants in a study conducted by Chirwa (2011) strongly agreed that FC is not well promoted. The sense of making only male condom available and on display is not a good campaign strategy which can influence use of FC as one of the strategies meant to prevent unwanted pregnancies and STIs including HIV/AIDS, instead only the male condom is being marketed. The health workers in Botswana seem to be ignoring the existence of the FC while mainly promoting the male condom. Arz (2000), indicated that many clients will try, and some will continue to use FCs when they are promoted positively and women are trained to use them correctly and to promote them to their partners. So in this regard, FCs should be placed along or side by side with male condom and be self-dispensed as well, this might increase its use and improve protection from all forms of sexually transmitted infections. Availability of female initiated method in addition to male condoms has been associated with increased level of protection (Thomsen et al, 2006). Increasing visibility and accessibility of FC in locations where male condoms are typically distributed may help to improve overall attitude towards FC (Campbell, Hu, Pavlicova et al., 2011).

### **Health workers to educate about female condom**

Promotion of FC is done in health facilities through health education and counselling. Unfortunately, this health education is part of the promotional strategies used to educate about the male condom only as perceived by the respondents implies that health workers are promoting male condoms only. Agbibo, (2010) reported that lack of extensive promotion and marketing of

FC has led to its poor uptake. The respondents in this current study also perceived that health education by health workers is mainly emphasizing male condom use, leaving the FC out. These findings are similar with the study by Tarking (2014) who suggested that health workers were expected to take a leading role on education and dissemination of information of the FC were among the least of sources of information. This is true as in different studies the health workers or health facilities are the leading sources of information on FC. The health workers as reported to be giving education on male condom, may be because they do not have adequate knowledge and skills on use of FC. Health providers can play a key role in influencing clients to initiate and maintain use of the female condom (Mantell et al., 2011). The influence can only happen if in their lessons female condom is included and women are supported to use it. Many providers have a bias against the FC, often due to negative perceptions about acceptability and lack of personal experience with the product, these providers are likely not to promote or champion the FC product very actively (Naik and Brady, 2008). It is crucial that health providers receive training as well as information and support about the use of FC, so that they in turn feel confident and comfortable in promoting it to their clients. This will also prevent bias against the FC, prevent their beliefs from negatively influencing potential users (Chirwa, 2011).

Thomsen et al., (2006), reported that if FC use is to be expanded, the messages surrounding their introduction should be fine-tuned to avoid this product to be overshadowed by male condom marketing, which is already used. Women of reproductive age will use FCs when they are promoted positively and when they are trained to use them correctly.

### **FC not easy to use, takes long to insert as compared to male condom**

The results of this study further revealed that the respondents perceived that FC is not easy to use and it takes long to insert. These findings concur with study in Italy by Spizzichoni et al., (2007) where difficulties related to FC insertion was reported by majority of respondents. Mativo (2010), reported that unmarried women anonymously agreed that FC was difficult to use (insertion is difficult). Ezire et al., (2013), also found similar results of insertion being difficult and taking time to insert. The study by Mativo (2010), reported that respondents said the time is too long, they cannot wait for all the cumbersome process before having sex. Insertion difficulties can be made easy by giving women correct instructions of how to use and insert FC, as well as regular use of the female condom. Chizororo and Ntshalaga (2003), in Zimbabwe and Kulczycki et al., (2004), in Alabama also found similar results where respondents reported problems in inserting the FC. However, a study by Fernandez et al., (2008) found that FC was associated with discomfort, and the noise it makes and the appearance, the appearance was perceived as the most negative aspect. Chawatama (2014) in South Africa found that the majority of sex workers believed that FC was not easy to insert. Naidu (2013) had similar results where majority of respondents reported that FC was difficult to use. Mathenjwa and Maharaj (2012) sex workers in Swaziland mentioned that the FC design makes it difficult to insert and correctly position it. They further reported that they often had to deal with discomfort and even pains at times. Similarly Ezire et al (2013), in their study in Kenya highlighted that when women used the FC for the first time, they often experienced insertion difficulties and commented negatively about the amount of time it took them to insert it. Study by Mahlalela & Maharaj (2015) in South Africa female students also experienced insertion difficulties as well as Okunlola

et al 2006, Tobin-West, Maduka, Tella et al (2014), students in Nigeria experienced difficult insertion as well.

These results of this study revealed that women of reproductive age regarded FC as difficult to insert, this might be the other reason why the majority of them did not use the FC. Maleke (2012) reported that Kgosi Moffat Sinvula of House of Chiefs in Botswana, appealed to women to use FCs especially those who illegally trade as sex workers, he went on to say maybe they don't know how to insert them. Beksinka et al (2010) also mentioned that hardness to insert and remove the condom might also pose a problem to some women. The difficulty in insertion may make many women unwilling to use FC (Gwebu, 2012). Several studies have demonstrated that, with practice and repeated use, many of the problems that women had with female condom insertion would be far lessened (Mantell et al., 2011).

### **FC is too big, noisy, oily and messy**

Studies have revealed the low uptake of FC was due to its mechanical barriers or physical appearance. Similar in Botswana Jackalas et al (2010) indicated that low condom uptake was related to the size of the condom, difficulties of use and noise during sexual intercourse. Chipfuwa et al, (2014), mentioned that women experienced challenges with the FC, challenges which include discomfort during sex, excess lubrication, difficulty in using the device, women feeling uncomfortable inserting and men disliking the FC appearance. In the study by Naidu et al (2013) women commented that the outer ring looked too big, sending negative impressions to their sexual partners about the size of the vaginas. Beksinka et al (2010) mentioned that some women felt self-conscious because of the visible outer ring or frame outside the vagina. The health care providers in New York in a study by Mantell et al (2011) also noted the mechanical

barriers and thought that the inner ring was too hard and inflexible, and the aesthetics of the FC put some providers off which was reflected in descriptions such as “big, greasy and not sexy”. Another provider did not recommend the FC “because it is not a skin-tight male condom which holds in semen.”

The results of this current study found that the respondents also perceived that FC is too big, noisy, oily and messy. The most common discomfort that were reported included too much lubrication, the device being too large and noisy during sex (Chawatama (2014) also reported the same perception of FC being unattractive, as reported by respondents. Similarly in South Africa, there was resistance to its use, for a variety of reasons, including appearance, reluctance among male partners, over-lubrication and messiness, concern that the device is too large (Population Reference Bureau, 2003). The sex workers in Central America had some negative reactions towards the appearance and size of the FC (Mark, 2010

### **FC not easy to get**

The results of this study revealed that the respondents perceived that FC is not easy to get.. FC not being easy to get or not available women of reproductive age might lead to poor uptake, making women to further rely on males to use male condoms or (Thomsen et al., 2006).

The same study findings were established by Mativo (2010) in Kenya, where it was reported that FC was not easily accessible for the women in their reproductive age in that country. Study by Ezire et al., (2013), found that there was limited distribution channels and unstable prices experienced by some users and these were identified as factors that are affecting low repeated use of the product. Therefore, there should be subsidy in prices of FC to encourage full use of the product by individuals and couples, countries that are unable to provide free FC, should call for



donors to assist, so as to have continuous supply. Limited access of FC was a major barrier to FC use in a study by Welbourn (2006). In the current study, the majority of respondents reported that they have seen a FC. The results of the study also show that female condom is mostly available in health facilities. However, seeing the FC and their availability have not increased its uptake or usage amongst these respondents, as it also reported that only a tenth of them reported that they have ever used the female condoms. The results are consistent with the study by Phiri et al (2015) where participants mentioned that FC was not readily available because they were told it was expensive compared to male condoms. According to a study conducted in Zimbabwe, the FC2 is expensive at retail outlets in urban areas and unavailable in rural areas, therefore, unaffordable to the population (Napieriala et al. 2008). It was indicated by Greig (2008) in South Africa that FC are 36 times more expensive than male condoms.

In a study conducted by Mantell et al. 2011), participants openly mentioned the lack of FCs at specified points, meaning that their increased demand is ignored. It is without doubt that limited access to FC hinders consistent use. The study by Phiri et al (2015) confirmed that accessibility and availability are factors which influence FC use. Health providers identified with poor distribution and lack of FC stock in the clinic as being challenges. The unavailability of the FC discouraged health care providers from promoting its use, mentioning reasons that when women come to collect additional FC, most instances the clinics were out of stock as the supply quantities are less than required to service consumer demands.

### **Female condom can prevent unwanted pregnancies and STIs including HIV/AIDS**

The FC remains the sole female-initiated method of dual protection against unintended pregnancy and STIs including HIV (Gallo et al, 2012). The FC was introduced to support women with regard to negotiation of safe sex and prevention of unwanted pregnancy, FC was introduced

in 1993 (Guerra & Simbayi, 2014). Women welcomed the initiative as it was recognized as a dual protection method that prevents both unwanted pregnancy as well as STIs, including HIV/AIDS (Gallo, Kilbourne-Brook & Coffey, 2012). Study by Wanyenze et al., (2011), also found that all the female users appreciated FC as a tool to empower them to avoid STIs and unwanted pregnancies. Mahlalela & Maharaj (2015) in South Africa mentioned that the fact that FC protect from STIs including HIV/AIDS and prevention of pregnancy facilitated use of the device among female students. Students expressed positive attitudes towards the FC and preferred it to hormonal contraceptives because it offered them dual protection. Trussell, (2006), mentioned that FC are effective at preventing pregnancies and the risk of contracting STIs with prevention rates comparable to that of the male condoms.

Similarly the majority of respondents in this study believed that FC can prevent unwanted pregnancies and STI including HIV/AIDS. Hearst et al., (2004), mentioned that correct and consistent condom use whether male or female condoms, has been acknowledged to be effective towards successful prevention of STIs including HIV/AIDS. WHO (2006), affirmed that FC blocks passage of microorganisms, including HIV. Study by Minnis et al., (2005) and Hoke et al., (2007) established that the availability of FC was associated with better protection against STIs. Reliable evidence shows that the polyurethane FC is highly efficacious in preventing both pregnancy and STDs. Evidence of its contraceptive efficacy are the same range as those of other barrier methods (Hoffman et al 2007).

## **SUMMARY, RECOMMENDATIONS, CONCLUSIONS**

### **5.5. Introduction**

FC is the only method which offers women with dual protection such as unwanted pregnancy and sexual transmitted infections including HIV virus. FC is the only method which is controlled by women, which women can decide to use it when their partners refuse to wear male condom, thus women will participate on decision concerning the sexual issues which are dominated by men.

### **5.6. Research design and method**

The study used the descriptive quantitative method, in which structured questionnaire were written in both Setswana and English, they were used to collect data from women of reproductive age in Nkoyaphiri clinic - Mogoditshane village in Botswana.

### **5.7. Summary and Interpretation of the findings**

The study revealed that most of the participants have heard of the FC, have seen the FC and knew where to collect it. The participants have also indicated that they do not know how to use the FC and they preferred the male condom to FC. Lack of skills on how to use the FC is the contributing factors of low use of FC. If women can be empowered with skills of using FC there will be increased usage of FC. Although knowledge of FC use was low among women of reproductive age, few had got skills to use it. FC users should be provided with general information regarding mechanism of use, protective functions and effectiveness (Torres et al

1999). They also alluded that before choosing the contraceptive method they discuss with their partners, many of them indicated that they never discuss FC with their partners.

## **5.8. Conclusion**

Majority of respondents reported that they have seen FC at the health facility. This findings show that FC is mostly provided at health facility, unlike the male condom which can be collected in multiple areas. The results also revealed that more than half (56%) of respondents have never attended lessons and demonstrations on use of FC. Majority of women had never used FC. This calls for some campaigns to sensitize women and their partners on the use of FC. These results concur with those of Tarkeng & Bain (2014), awareness was high but very few respondents had skills to use FC appropriately.

Moreover, more than half of respondents reported that they do not know how to use FC. This results show that a lot still needs to be done in promoting the use of FC and strategies should be designed to send information to all individuals. Lack of knowledge on the use of FC contributes to lack of use of FC among women. Majority of women of reproductive age preferred use of male condom than FC.

Majority of respondents also highlighted that they discuss family planning methods with their partners. This is an indication that there is a collective decision on which method to use among partners. Furthermore, the results show that a small percentage of respondents indicated that they like FC, but failure to display it or lack of FC access might as well discourage those who like it. As such it need to be marketed along with the male condom for women and their partners to have a choice.

## **5.9. Recommendations**

**The following recommendations are recommended for increasing the use of FC:-**

### **Interventions should be designed to promote the use of FC**

Most of respondents mentioned that they don't know how to use FC. Artz (2000) showed that many clients will try, and some will continue to use FC when they are promoted positively and when women are trained to use them correctly and to promote them to their partners. There is an urgent need to come up with interventions that are specifically designed to address this gap and educate women on the use of FC. There should be campaigns to promote use of FC, the campaigns should be accompanied by demonstrations of insertion and removal of FC. The findings of the study by Guerra et al (2014), support the need for rigorous campaigns to promote the use of FCs by women and also to increase their availability in public health sector facilities such as government clinics and hospitals in order to improve the chance of women using the FC, a cost-effective device that has the potential to protect both their rights and lives. Health workers should be trained on how to use FC. Skill training in risk reduction among women suggested that skills training can increase FC use and protected sexual acts (Choi et al. 2008). Promotional programs should be designed to reach out to males in particular, as it is clearly suggested by the international guidelines UNAIDS, 2004.

### **Roll out of FC to other recreational areas where people spend some time**

Majority of respondents said that they access FC from health facilities. FC should be distributed to other areas such as workplaces, libraries, and bars etc. order to be available to all individuals who are interested in using it. It is important to ensure steady supply of FC through the support of governments and donors.

## **Provision of health education to women and their partners**

The use of FC was low among women in the reproductive ages. Education should be provided to couples on the use of FC and some efforts should be made to ensure that misconceptions are cleared up. Training of women in negotiating safe sex use and use of FC should be continuously done with the aim to empower women, to protect themselves and their partners (Hoases-Garoses, 2006). Female condom should be provided with information of how to use it, the insertion and removal, the public should be provided with information through all means of Medias, not only at the health facilities because some people don't utilize the health facilities.. The FC male condom should be placed along with the male condom, for people to view and ask questions as the study revealed that the FC is not always seen like the male condom. Demonstrations on use of FC should be done in every gathering, media and television.

Backed by Dr. Pepper the Director of SUPPORT who said the key to acceptance lies with communication, "Where people have information and support in using FC, they are very popular, and that's what is creating the demand. She further stated that FC can't be given to people, what it is and how to use it. Skills should be given to both men and women to give them a choice. The potential users of FC need to be helped with education and information on how to use it properly.

Ministry of Health through department of Sexual Reproductive Health department should educate women on female condom as contraception and prevention strategy for STI including HIV/AIDS, they should also teach on female anatomy, teach to dispel negative attitudes, misconceptions and beliefs that hampers use of FC.

### **5.10. Contributions of the study**

The research study should have the potential to contribute to health sciences knowledge in a meaningful way (Brink, 2008). The uptake of FC is of great concern in Botswana, as evidenced by the national health statistics. This study will hopefully identify the barriers to the use of FC by women and its findings will assist the government and its stakeholders to come up with appropriate strategies to address the problem. The interventions / promotion activities identified will increase access to FC. The findings will also be used to improve the uptake of FC, and this in turn will contribute to the reduction of unwanted pregnancies and sexual transmitted diseases including HIV/AIDS. The findings will assist in building local capacity, in the health facilities of Mogoditshane village, and other health facilities in the country and in research. It is in this view that the researcher want to investigate the factors that are hindering utilization of female condom by women of reproductive age in this community and further most, it is believed the findings may assist the service providers to come up with appropriate strategies to address the problems.

### **5.11. Limitations of the study**

The study was limited to women of reproductive age registered for Antenatal care and family planning in Nkoyaphiri clinic in Mogoditshane, other women in the clinic not registered for these services were not included, and the other two clinics in Mogoditshane village were not included in the study. The study did not include men even though women of reproductive age mentioned that before choosing the contraceptive method they discuss and agree with them. Further studies including men are needed to be done to establish their perception towards the FC.

### **5.12. Concluding remarks**

The study was carried out using quantitative method, women of reproductive age were given self-administered structured questionnaires to get the results. The study revealed that most women of reproductive age are not using FC to protect themselves from unwanted pregnancies and sexually transmitted infections, however they are not using FC because it has also indicated that they do not know how to use the FC and have never attended the FC demonstrations. Male condom is preferred by women of reproductive age as compared to FC.



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## ANNEXURE A

**UNIVERSITY OF LIMPOPO**  
Medunsa Campus



**MEDUNSA RESEARCH & ETHICS COMMITTEE**

**CLEARANCE CERTIFICATE**

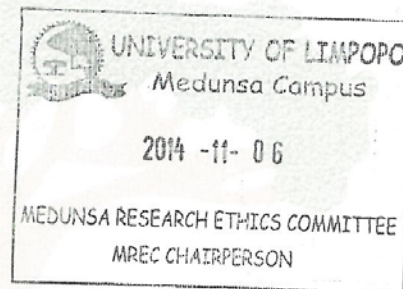
**MEETING:** 09/2014  
**PROJECT NUMBER:** MREC/HS/355/2014: PG  
**PROJECT:**  
**Title:** Perception of women of reproductive age (15 – 49) towards use of female condom in Nkoyaphiri Clinic-Mogoditshane village, Botswana  
**Researcher:** Ms L Kgomokhumo  
**Supervisor:** Prof L Skaal  
**Department:** Medical Science, Public Health & Health Promotion  
**Degree:** MPH

**DECISION OF THE COMMITTEE:**

MREC approved the project.

**DATE:** 06 November 2014

  
**PROF GA OGUNBANJO**  
CHAIRPERSON MREC



The Medunsa Research Ethics Committee (MREC) for Health Research is registered with the US Department of Health and Human Services as an International Organisation (IORG0004319), as an Institutional Review Board (IRB00005122), and functions under a Federal Wide Assurance (FWA00009419)  
Expiry date: 11 October 2016

**Note:**

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.



TELEPHONE: 363 2766  
FAX: 391 0647  
TELEGRAMS: RABONGAKA  
TELEX: 2818 CARE BD



Republic of Botswana

MINISTRY OF HEALTH  
PRIVATE BAG 0038  
GABORONE

REFERENCE NO: PPME 13/18/1 IX (176)

23 January 2015

Health Research and Development Division

Notification of IRB Review: New application

Leungo Kgomokhumo  
P.O. Box 502659  
Gaborone

Protocol Title:

**PERCEPTION OF WOMEN OF  
REPRODUCTIVE AGE (15-49 YEARS)  
TOWARDS USE OF FEMALE CONDOM IN  
NKOYAPHIRI MOGODITSHANE VILLAGE,  
BOTSWANA**

HRU Approval Date: 22 January 2015  
HRU Expiration Date: 22 January 2016  
HRU Review Type: HRU reviewed  
HRU Review Determination: Approved  
Risk Determination: Minimal risk

Dear Sir/Madam

Thank you for submitting new application for the above referenced protocol. The permission is granted to conduct the study.

This permit does not however give you authority to collect data from the selected site without prior approval from the management. Consent from the identified individuals should be obtained at all times.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research, Ministry of Health within 3 months of completion of the study.

Approval is for academic fulfillment only. Copies should also be submitted to all other relevant authorities.

#### Continuing Review

In order to continue work on this study (including data analysis) beyond the expiry date, submit a Continuing Review Form for Approval at least three (3) months prior to the protocol's expiration date. The Continuing Review Form can be obtained from the Health Research Division Office (HRDD), Office No. 7A.7 or Ministry of Health website: [www.moh.gov.bw](http://www.moh.gov.bw) or can be requested via e-mail from Mr. Kgomoiso Moflhanka, e-mail address: [kgmoflhanka@gov.bw](mailto:kgmoflhanka@gov.bw). As a courtesy, the HRDD will send you a reminder email about eight (8) weeks before the lapse date, but failure to receive it does not affect your responsibility to submit a timely Continuing Report form

#### Amendments

During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDD approval before implementing it. Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 7A.7 or Ministry of Health website: [www.moh.gov.bw](http://www.moh.gov.bw) or can be requested via e-mail from Mr. Kgomoiso Moflhanka, e-mail address: [kgmoflhanka@gov.bw](mailto:kgmoflhanka@gov.bw). In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

#### Reporting

Other events which must be reported promptly in writing to the HRDC include:

- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at [pkhulumani@gov.bw](mailto:pkhulumani@gov.bw), Tel +267-3914467 or Lemphi Moremi at [lamoremi@gov.bw](mailto:lamoremi@gov.bw) or Tel: +267-3632754. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours faithfully

  
P. Khulumani

For Permanent Secretary



MINISTRY OF HEALTH

**Vision:** Model of Excellence in Quality Health Services

**Values:** *Boho, Equity, Timeliness, Customer Focus, Teamwork, Accountability*



TELEPHONE: (267) 3133658  
FAX : (267) 3907950  
REFERENCE : DHMT



REPUBLIC OF BOTSWANA

Gaborone District Health Management  
PRIVATE BAG 00258  
GABORONE  
BOTSWANA

Ref: DHMT/15/1/1 (1)

Leungo Kgomokhumo  
P.O Box 502659  
Botswana

28<sup>th</sup> January, 2015

Dear Madam,

**RE: PERMISSION TO CONDUCT STUDY**

This serves to let you know that permission is granted to conduct study on **"perception of women of reproductive age (15-49 years) towards use of female condom in Nkoyaphiri Clinic Mogoditshane village, Botswana"**

This permits you to go into the health facility but you need to ask respondents for their participation. It should also not disturb patient care in any manner during the course of the visit.

The facility allocated for your study is Nkoyaphiri clinic at Mogoditshane in Greater Gaborone DHMT domain.

By copy of this letter all health workers at the facility are informed of your intentions.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'G. M. Simoonga', written over a horizontal line.

Dr. G. M. Simoonga  
Coordinator DHMT

ANNEXURE C: ENGLISH QUESTIONNAIRE

**PERCEPTION OF WOMEN OF REPRODUCTIVE AGE TOWARDS USE OF FEMALE  
CONDOM IN MOGODITSHANE, GABORONE, BOTSWANA.**

**PLEASE ANSWER THE FOLLOWING QUESTIONS BY PUTTING A TICK(X) SIGN  
ON THE APPROPRIATE BLOCK**

<b>Questionnaire No</b>	<b>Response</b>
<b>Knowledge and use of female condom</b> 1. Have you heard of female condom	Yes No
2. If yes, What was your source of information	I don't know Health worker Friends Relatives School Radio programme Pamphlets/books
3. Have you ever seen a female condom	Yes No
4. Where did you see it	Never seen them

	Health facility Office Bar Entertainment area
5. Where is female condom collected	I don't know Health facility Private doctor Bars/beer hall Office toilets Private pharmacy
6. Where do you prefer female condom to be collected?	I don't know Health facility Private doctor Bars/beer hall Office toilets Private pharmacy
7. Have you ever attended lessons and demonstrations on use of female condom?	Yes No
8. Do you know how to use female condom?	Yes No
9. Can female condom be used again?	Yes No Not sure
10. Female condom is inserted hours before sexual intercourse	Yes No Not sure
11. Have you ever used a female condom	Yes

	No
(i) If yes how often do you use it?	Never used it Consistently Inconsistently
(ii) If yes, was it easy or difficult to use?	Never used it Yes No
(iii) If yes, what did you like about the female condom?	
(iv) If no why?	
12. Which type of contraceptive method do you currently use?	Pill injectable female condom male condom withdrawal traditional nothing
13. Before choosing the type of contraceptive method do you discuss it with your partner?	Yes No
i. Give reasons for your answer	
ii. If yes to the female condom, give reasons for your choice	
iii. If no to female condom give your reasons	
<b>3. ATTITUDE</b>	



14. Do you believe that female condom can prevent sexual transmitted infections including HIV/AIDS	Believe Strongly believe Don't believe Strongly disbelieve Don't know
15. Do you believe that female condom can prevent unwanted pregnancies?	Believe Strongly believe Don't believe Strongly disbelieve Don't know
16. Do you like female condom	Yes No Not sure
i). If your answer is yes, what do you best like about female condom?	
ii). If your answer is no, what do you hate most about female condom?	
17. Is the female condom important?	Yes No Not sure
i). Give reasons for your answer	
18. Can you recommend female condom to other women?	Yes No Not sure
i). If no give reasons	
19. Preference of condom use	Male condom Female condom None

20. Do you ever discuss female condom with your partner?	Yes No
21. What does your partner say about use of female condom	Too noisy too big funny looking does not like it don't know
22. Do you seek permission from your husband/partner to use female condom?	Yes No
i). If no give reasons	
Which of the following do you believe is the most factors for not using female condom ?(1 =strongly agree, 2= agree, 3= don't know, 4 =disagree, 5 =strongly disagree).	
23. Partners, spouses refuse to use female condom during sexual intercourse	Strongly agree Agree Don't know Disagree Strongly disagree
24. Female condom is a preventive method controlled by women	Strongly agree Agree Don't know Disagree Strongly disagree
25. Health workers teach about male condom only	Strongly agree Agree Don't know Disagree Strongly disagree
26. Male condoms are always on display, for self-	Strongly agree

dispensing in health facilities while female condom is not.	Agree Don't know Disagree Strongly disagree
27. Poor knowledge on use of female condom contribute to lack of its use by women and their partners to prevent unwanted pregnancies and sexually transmitted diseases	Strongly agree Agree Don't know Disagree Strongly disagree
28. Female condom not easy to use and takes long to insert as compared to male condom	Strongly agree Agree Don't know Disagree Strongly disagree
29. Female condom too big, noisy, oily and messy	Strongly agree Agree Don't know Disagree Strongly disagree
30. Female condom not easy to get	Strongly agree Agree Don't know Disagree Strongly disagree

**Thank you for your time**

<b>Knowledge and Attitude towards female condom (kitso le maikutlokasekausabomme)</b>	
1. A o kilewautlwalelelakasekausabomme	Ee Nyaa
2. Fakaraboyagagoeleee, utlwaletsekaekasone	Modirediwabotsogo Ditsala Ba masika Sekolo Seromamowa Dibukanatsamelaetsawatsabotsogo Gakeitse
3. Ao o kilewa bona sekausabommekamatlho	Ee Nnyaa
4. o kilewasebonawase bona kae	Gakeiseke se bone Kokelo/kokelwana Madirelo Marekisetso a bojalwa Maitiso
5. Sekaususabomme tsewakae se	Kokelo/kokelwana Ngaka Marekisetso a bojalwa Matlwana a boitiketso Marekisetso a melemo Gakeitse
6. Wena o kaeletsa gore se tseyekae se	Kokelo/kokelwana Ngaka Marekisetso a bojalwa Matlwana a boitiketso Marekisetso a melemo Gakeitse
7. A o kilewatsenelela di thutuntshokatirisoyasekausabomme	Ee Nnyaa
8. A o itse go dirisasekausabomme	Ee Nnyaa
9. A sekausabomme se kaboelediwa go dirisiwa	Ee Nnyaa Gakeitse
10. Sekaususabomme se tsenngwa di ourapelegatlhakanelodikob o	Ee Nnyaa Gakeitse
11. Ao o kilewadirisasekausabomme	E e Nnyaa

i). Fa o dumalana a o se dirisakanakotsotlhe	Ke se dirisakanakotsotlhe Gake se dirisakanakotsotlhe Gake is eke se dirisi
ii). Fa o dumalana a gone go le motlhofo, kana go semotlhofo go se dirisa	Motlhofo Go ne gosemotlhofo Gake is eke se dirise
iii). Fa o dumalana o ratileengkasekausabomme?	
iv). Fa o sadumalane, famabaka	
12.O dirisamofutaofewadithibela pelegi kana wakataloganyotsholo	Dipilisi Mokento Sekaususabomme Sekaususaborre Tsasetso Gakedirisesepa
13.Pele fa o katlhopha di thibelapelegi a o tlhoka go buisana le mokapelowagago	Ee Nnyaa Gakeitse
i). Famabaka a karaboyagago	
ii). Fa o dumalanakatirisoyasekausubommefamabaka a gago	
iii).Fa o sadumalanekatirisoyasekausubommefamabaka	
14.Aodumela gore sekaususabomme se kathibelamalwetseaatshelan wangkatlhakanelodikoboga mmogo le jwasegajaja.	Ke a dumela Kedumelathata Gakeitse Gakedumele Gakedumelethata
15.A o dumalana gore sekaususabomme se kathibelaboimana	Ke a dumela Kedumelathata Gakeitse Gakedumele Gakedumelethata
16.A o rata sekaususabomme	Ee Nnyaa Gaketlhomamisi
i). Fakaraboele “ee” keeng se o se ratangthatakasekaususabomme	








ii). Fakaraboele “nnyaa” keeng se o sa se ratengthatakasekaususabomme	
17.A sekaususabomme se botlhokwa	Ee nnya gaketlhomamisi
i). Famabaka a karabayagago	
18.Aokarotloetsabommebaban gwe go dirisasekaususabomme	Ee Nnyaa Gaketlhomamisi
i). Fa o sadumalanefamabaka	
19.KeofeMofutawasekausuo o kgalhegelang	Sa borre Sa bomme Gagona
i). Famabaka a kamofutaoo o kgalhegelang	
20.Aoete o buisane le mokapelowagagokasekaus usabomme	Ee Nnyaa
21.Mokapelowagagoarengkatiri soyasekaususabomme	Se modumo Se setona Ga se lebegesentle Ga a se rate Gakeitse
22.Aokopatetamomokapelong wa gago go dirisasekaususabomme	Ee Nnyaa
i). Famabaka a karaboyagago	
<b>FACTORS CONTRIBUTING TO LACK OF FEMALE CONDOM USE (MABAKA AA KA DIRANG TLHOKA TIRISO YA SEKAUSU SA BOMME</b>	
23.Bakapelobaganatirisoyasek aususabommotlhakanelo ngyadikobo	Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata
24.Sekaususabommekemofuta ootshireletsangoolaolwang kebomme	Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata










<p><b>25. Ba botsogobarutuntshabathofe lakasekausaborre</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>
<p><b>26. Sekaususaborre se nafela se le mopontsheng, go tsewakebadirisimodikokelw aneng fasabomme se sebewamopontsheng</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>
<p><b>Tlhokakitsokatorisoyasekausus abomme se dira gore bomme le bakapeloba bonebasekabasedirisa go itshireletsaboimana le malwetseaatshelanwangkatlha kaneloyadikobogammogo le segajaja</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>
<p><b>27. Sekaususabommegasemotl hofo go tsenngwa, se tsayalobakafa o se bapisa le saborre</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>
<p><b>28. Sekaususabomme se setona, se mafura, se modumoebile se tlatsaleswe</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>
<p><b>29. Sekaususabommegagomoti hofo o ka se bona</b></p>	<p><b>Kedumelathata Ke a dumela Gakeitse Gakedumalane Gakedumalanethata</b></p>



ANNEXURE : WORK PLAN

Time Frame : February 2014 - May2015

ACTIVITIES	Feb	M	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan
		ar	il			y						
Topic identification												
Literature review and writing												
Submission of 1 <sup>st</sup> draft proposal												
Correction of the draft and submission												
Presentation of the proposal to Public Health class												
Corrections and submission for High Degree Committee												
Presentation to the High Degree												

Committee												
Corrections and submit to MRC												
Preparation of research tools and pilot testing												
Administration of questionnaire												
Data collection												
Data coding and entry												
Data analysis and report writing												
Submission of the report draft												
Corrections of the report and submission												
Binding and Submission of the final report												

Graduation					May							
					2015							

## ANNEXURE : FINANCIAL BUDGET FOR RESEARCH PROJECT

Item	Amount (Pula)	Activities / Items
Stationery	P1,800.00	Printing paper A4 x 5 reams, Pens x 5, Stapler x 1, Box staples, binding, A4 envelopes x 10
Printing, photocopying and binding	P 600.00	Eight (8) binded copies
Telecommunications & Transport – Telephone, Internet services, petrol	P 5,900.00	Telephone monthly bill  Internet monthly subscription  Petrol used visiting the library and collecting data
Personnel (Statistician)	P1,500.00	Assisting in using the SPSS for data analysis
Travel & subsistence	P1,300.00	Traveling to Polokwane and back to Gaborone (Botswana) x 4 trips @ R200.00 each for Proposal Presentation (P800.00)  Meals P 500.00.

Accommodation	P1,200.00	Accommodation at Polokwane for Proposal Presentation (4 nights @300.00 = 1200.00).
Courier to South Africa from Botswana	P 600.00	Sending research proposal to the University of Limpopo
<b>Total sum:</b>	<b>P 12,900.00</b>	