



*A qualitative exploration of female condom use among female university students in Durban, South Africa*

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## ABSTRACT

In South Africa, the high levels of HIV/AIDS and unwanted pregnancy among young people especially women represent huge public health concerns. The female condom is the only available female-initiated device to give women protection from sexually transmitted infections (STIs) including HIV as well as pregnancy. Although efforts have been made to raise population awareness on female condom use, studies suggest low levels of female condom use in South Africa. The aim of the study was to explore the factors that facilitate and inhibit the use of female condoms among female university students. This is a qualitative study that drew on fifteen individual in-depth interviews with female condom users in Durban, South Africa.

The results of the study highlight several factors that facilitate and inhibit the use of the female condom. Protection from sexually transmitted infections including HIV and pregnancy prevention facilitates the use of the device. In addition, students express positive attitudes towards the female condom and prefer it over other contraceptive methods because it offers them dual protection. Other factors that facilitate use include absence of side effects, and greater power and autonomy to initiate safer sex. Inadequate availability, partner objection, stigma, insertion difficulties, and lack of awareness serve as significant barriers to the consistent use of the female condom.

Despite the wide availability of the female condom in South Africa, a number of factors exist that create barriers to the use of the device. Interventions should aim to address these challenges by educating both women and men on the use of the device and the benefits of using the female condom to increase acceptability, also increase availability and accessibility of female condoms.

**KEY WORDS:** Female condoms, Female condom users, Female university students, South Africa

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## LIST OF ACRONYMS

AIDS	: Acquired Immune Deficiency Syndrome
CHANGE	: Center for Health and Gender Equity
DOH	: Department of Health
SADHS	: South African Demographic and Health Survey
FC	: Female Condom
FHI	: Family Health International
HEAIDS	: Higher Education HIV/AIDS Programme
HIV	: Human Immune Virus
STI	: Sexually Transmitted Infection
UNAIDS	: United Nations Aids Programme
UNFPA	: United Nations Fund for Population Activities
UNICEF	: United Nations Children’s Emergency Fund
USAID	: United States Agency for International Development
USFAD	: United States Food Administration
WHO	: World Health Organization

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## CHAPTER 1: INTRODUCTION

### 1.1. Background

High levels of sexually transmitted infections (STIs) among young people together with unwanted pregnancy remain crucial global health concerns. According to WHO Global Report (2013), 5 million young people (15-24) were living with HIV worldwide in 2012, with the prevalence rate of 0.5% among females and 0.3% among their male counterparts. The sub-Saharan Africa region presented with high prevalence rates, with younger women having a higher prevalence rate than men. UNAIDS (2009) and UNICEF (2008) assert that the high HIV prevalence rates in sub-Saharan Africa indicate that people are engaging in high sexual risk behaviours, which do not only increase their risk of having an unplanned pregnancy, but also the risk of them contracting HIV and other sexually transmitted infections. Most studies indicate that sub-Saharan Africa remains the most severely affected regions in the world with nearly one in every twenty adults living with HIV (UNAIDS Global Report, 2012). According to the latest UNAIDS Global Report (2013) more than two-thirds (70%) of all people living with HIV, 25 million live in sub-Saharan Africa, including 88% of the world's HIV positive children. There were approximately 1.6 million new infections, and 1.2 million adults and children died of AIDS, accounting for 75% of the world's AIDS deaths in 2012 (UNAIDS Global Report, 2013).

The main portal entry facilitating the spread of HIV in many parts of the world is heterosexual intercourse. Many studies indicate that due to neglect of potential preventative measures and high risk behaviour, STIs remain higher in the younger population in Africa (UNAIDS, 2007). However, women remain more susceptible to infections compared to their male counterparts due to existing gender differences (Sarkar, 2008). According to UNICEF (2011) young women accounted for approximately 3.2 million of people living with HIV/AIDS as compared to approximately 1.7 million of young men living with HIV/AIDS. UNAIDS (2007) reported that the rate of being infected with the virus among young women aged (15-24 years) is 3 to 4 times higher compared to men in sub-Saharan Africa. The reasons behind such differences in susceptibility according to Dunkle et al. (2004) could be attributed to economic dependency of women on their male partners, lack of power in sexual decisions, as well as lack of political will.

According to USAID (2009) the global levels of fertility has increased dramatically especially in developing nations among young women and continues to be a major challenge. A number of

studies in Southern Africa suggest that fertility among young women is high in this region (Pettifor et al., 2005). Several youth interventions have been implemented to address the challenge of high fertility in young women, but most distressing is that the rates of pregnancy continue to increase in this population group. According to Statistics South Africa (2001) in South Africa fertility among young people is higher and has increased steadily in the last few years. In 2011, the United Nations Fund for Population Activities (UNFPA) estimated that approximately 51000 South African schoolgirls gave birth; in addition, the Department of Health reported that 8% of the women who give birth in public hospitals and clinics are less than 18 years old. Thus, in this context it is important to ensure that women have more than available prevention methods that they can initiate and control in order to reduce the risk of HIV transmission and pregnancy, and the female condom remains the key strategy to address these challenges.

## **1.2. Female condoms**

According to Hoffman et al. (2004) and Deniaud (1997) the introduction of the female condom in the 1980s was a strategy to empower women to practice safer sex. This dual protection method is designed for women to initiate in order to enable protection against infections and conception. It is now available in different types, effective and acceptable in many parts of the world, and widely used for prevention in developing countries with a high HIV incidence. The female condom is the only female-initiated barrier method that is known to be safe and effective to prevent HIV and other STIs as well as pregnancy. Askew and Berer (2003) provide an important argument that, women-initiated prevention options such as the female condom which offer the possibility of protection from transmission of HIV and STIs while at the same time addressing reproductive planning interests have significant potential to enhance women's power, to further reduce their risk of infection and or transmission. Research from previous studies had found that when the female condom 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 female condom (FHI, 2001). Brown et al. (2007) assert that the female condom has virtually no side effects. Research on barriers to contraceptive use has found that the use of hormonal methods was limited by concerns of severe side effects, especially fear of infertility (Williamson et al., 2009; Woods and Jewkes, 2006). Some women believe that modern contraceptives are not only unsafe but toxic to women's health. A number of studies have shown that the female condom use increases the number of protected sex acts, consequently reducing STIs and the risk of transmission and

contracting HIV (Hoffman et al., 2004; Gollub, 2006). The effectiveness of the device in the protection against infections and pregnancy has been evidenced from previous studies on the female condom and its acceptability has been evidenced from various users of the device in different locations. The acceptability of female condoms has been evidenced from research that has been conducted in several countries with an acceptability range of 37% to 96% for both women and men from different social backgrounds (Hoffman et al., 2004). Gollub (2000) asserts that evidence from several international trials on the female condom demonstrate certain “empowerment effect” among women who are trained to use the device. It has been indicated in the literature that the female condom provide women with an opportunity to take part in sexual negotiations rather than leaving all sexual decisions in the hands of men. Qualitative studies including that conducted by Hoffman et al. (2004) indicate that women view the female condom as a means of enhancing safer sex bargaining power within the relationship. This is very interesting because, it has always been difficulty for women to initiate sexual discussions but now with the availability of the female condom women have the power to take an active role in protecting themselves in the relationship.

Although both male and female condoms provide dual protection, Mathews and Harrison (2006) argue that the female condom is comparable to the male condom in terms of pregnancy prevention. Trussell (2004) states that in the first year of female condom use 21% of women using the device will become pregnant compared to 15% of male condom users with their partners. Mathews and Harrison (2006) assert that with correct and consistent use, 5% of female condom users and 2% of male condom users will experience a pregnancy in the first year of use. However, the first comparative effectiveness study of male and female condoms confirm that the male and the female condom are substantially equivalent in preventing unwanted pregnancy (Deperthes, 2005). This brings us to the conclusion that both types of condoms play a significant role in preventing pregnancy if they are used correctly and consistent. Furthermore, the female condom has been found to confer as much protection from STIs as male condoms (Minnis and Padian, 2005). But the design of the female condom as argued by Mathews and Harrison (2006), offer more protection to women than the male condom because the outer ring covers the external genitalia, blocking the passage of microorganisms including HIV. Also Kerrigan et al. (2000) reported that some women perceive the female condom to be stronger than the male condom because of its strength and resistance against breakage.

Despite the high observed acceptability and its effectiveness in providing protection against infections and pregnancy, several factors exist that hinder the wide distribution of the device and its use. One of the most important factors hindering the distribution of the device is the lack of interest to invest in this product more especially by donors. Hoffman et al. (2004) state that in spite of the substantial unmet need to distribute condoms, in 2009 only 0.38% of female condoms formed part of the total donor expenditure. Stockouts remain the most significant factor contributing to lack of interest from donors to make investment in the device, and this has created massive challenges to the introduction of this device in several countries (Hoffman et al., 2004). Hoffman et al. (2004) further state that the wide distribution of this device remains significant, nevertheless its usefulness will only be realized through continued investment in the product which might also facilitate the consistent use of this device. The high price of the device including stigmatization and lack of political will remain the most significant factors contributing to lack of investment on this product and also inhibiting the use of this device globally.

An argument provided by Peters, Jansen and Van Driel (2010) is that since its introduction in 1984 the device still remains unpopular compared to the male condom. This argument is supported by the increasing figures of women globally who are currently living with HIV as well as the growing health programs that support the empowerment of women. Peters, Jansen and Van Driel (2010) argue that the female condom distribution program has not yet met its initial demands as it was anticipated as the device continues to be inaccessible to many women. The wide distribution of the device in response to the fight against the HIV pandemic has not been achieved, other than that the device is still marginalized at the international level. Peters, Jansen and Van Driel (2010) argue that factors hindering the wide distribution of the device should not be attributed to female condom users and reluctance of the government as it is always cited, but female condom acceptability remains a major problem at the international policy level.

### **1.3. Female condoms in South Africa**

Like in other parts of the world, young people in South Africa are faced with major challenges of STIs including unwanted pregnancy, and these represent urgent public health problems (Maharaj, 2006). A growing body of literature has revealed that the country has the highest prevalence rate of HIV and continues to have the highest figures of people living with HIV/AIDS in the world (Lurie et al., 2003). As indicated in many studies, the majority of the adult population

that is infected became infected at a young age. According to Cowan and Pettifor (2009) every day in South Africa approximately 3500 of the young people become infected with the HIV virus. A study conducted by Shisana et al. (2008) found that among the youth in South Africa, the rate of HIV infection has increased recently. Early child bearing among young people has also been cited by the South African government as one of the significant problems in this country. Research shows that at the national level majority of young women in South Africa became pregnant at an early age (Maharaj, 2006). Thus, the increasing promotion of the device is facilitated by the growing challenges of STIs facing young people in South Africa including pregnancy.

The female condom was first introduced into the South African community in 1998, and is still the only female-initiated tool available that provides a strong dual protection for women. Since its first introduction knowledge about, support and demand for female condoms have increased dramatically in South Africa. Today, the majority of Primary Health Care (PHC), together with hundreds of NGOs and other informal distribution sites are receiving female condom supplies for distribution (Mash, Mash and de Villiers, 2010). In South Africa, the distribution of the device formed part of the National Strategic Plan of South Africa's Health Ministry to combat the scourge of HIV/AIDS. The National Strategic Plan aims at creating more awareness of the female condom and to make it widely accessible. Therefore, this highlights the importance of the female condom in addressing the challenges of the HIV pandemic in the country. The female condom distribution programme in South Africa is one of the biggest programmes compared to other countries. However, female condom use continues to be low despite to the increasing availability of the device. This is consistent with the findings from two surveys conducted in South Africa (the Demographic and Health Survey of 1998 and National Survey of 2003) which indicated low levels of female condom use among women 15-49 years and low consistent use of the device from women in the ages of 15-24 (MacPhail et al., 2007). In a national survey of 2008 about 30% of people aged 20-24 years were found to be using female condoms (Peltzer et al., 2010).

A few challenges are preventing the wide accessibility and use of this dual method in South Africa. The South African Sonke Gender Justice Project argues that in comparison with the male condom the device costs 36 times higher (Mash, Mash and de Villiers, 2010). Therefore, this affects the circulation of this device, as it is not distributed as much as the male condom.

Research shows that in South Africa there have been questions in the past about government's transparency in its process of awarding tenders to suppliers of female condoms, which impact negatively on the competition of suppliers and inadvertently the pricing of the female condom (Mash, Mash and de Villiers, 2010). This also contributes to the female condoms not being available in every South African community. Additionally, female condom acceptability has been identified as a common barrier for female condom use in South Africa. Studies indicate that the low acceptability could be attributed to lack of promotion and lack of understanding of the device (Mash, Mash and de Villiers, 2010). Thus, barriers to the availability of female condoms have contributed to lack of acceptability of the female condom in most South African communities. Conversely, the design of this device has also impacted on misconceptions about its ability to enable sexual pleasure (Mantell et al., 2011). A most common stereotype about the female condom is that an object so large cannot enable sexual pleasure (Mash, Mash and de Villiers, 2010). Thus, this indicates that acceptability of this device is far from being achieved and continues to be a significant factor inhibiting female condom use in South Africa.

Nevertheless, literature shows that although efforts have been made to raise population awareness with regards to female condom use, little is known concerning the current status of its use among university students (Valens and Joseph, 2013). According to Oladeinde et al. (2011) the female condom remains the most important protection tool that provides dual protection for women against infections and unwanted pregnancies. While reviewing the literature on female condom use, the researcher found that there is a significant lack of information regarding female condom use in a South African context. Data on female condom use in South Africa is scanty, as the focus has largely been on male condom use. Against this background and the need to provide insights into female condom use among university students, this study will be conducted. Mantell et al. (2011) argue that students are more susceptible to infections despite the general low prevalence rate of HIV in the higher education sector. According to HEADS (2010) among sexual active students approximately 3.8% of them were living with HIV, the numbers also rose in the province of KwaZulu Natal to approximately 6.1% in total and the figures remained high especially among African students with approximately 8.7%. Young and De Klerk (2008) argue that being away from parental monitoring for the first time and with increasing autonomy create situations that facilitate risk behaviours. However, despite being at risk, students are also perceived as agents for change in society and as a result, are likely to be using female condoms (Seutlwadi, 2012). Therefore, focusing on students will be one of the ways to get in-depth

insights about the use of the device in this group of female students. Of particular importance this study aims to look specifically at female condom use among users of the device in a South Africa context.

#### **1.4. Problem statement**

A growing body of literature indicates that South Africa has the highest prevalence of HIV and continues to have the largest number of people living with HIV/AIDS in the world (Shisana et al., 2009). In 2012, South Africa had a national HIV prevalence of 12%, which indicates an increase from the estimates of 10.6% in 2008 (Shisana et al., 2014). Most distressing is the high incidence of HIV infections among young people especially among women. In South Africa, the high levels of HIV/AIDS and unwanted pregnancy among young people represent huge public health concerns. The female condom provides dual protection for women against infections and conception. Although efforts have been made to raise population awareness on female condom use, studies suggest low levels of female condom use in South Africa. The study aims to explore factors facilitating and inhibiting female condom use. Since the female condom remains one of the key strategies in addressing the challenges of the HIV pandemic in South Africa, it is important to explore factors facilitating and hindering the use of the device, especially among young people in particular women who are largely affected by HIV. More interesting about this research is that it is not only looking at barriers to female condoms as most previous studies have done, but it goes further exploring factors facilitating female condom use. This is critical in the development of interventions that aim to increase the usage of the device. The study also focuses on the population group that is more at risk of infections (young people), and which is also perceived as agents of change.

Holmes et al. (2008) argue that female condom use is low despite its increasing availability and widespread interventions promoting the use of this device. Research shows that there are many complex factors that influence individual's sexual decisions, and sexual behaviour is shaped by existing strong social and cultural forces (Marston and King, 2006). Providing explanations of the factors influencing the use and the non- use of this device at different levels, will facilitates the development of successful marketing strategies of this device as well as increase support at the community level. Understanding of the various factors that play a crucial role in female condom use at different levels necessitates the examination of these factors individually and simultaneously as this provides an understanding of experiences of women with female



condoms. The study seeks to explore use of female condoms and since the study seeks to understand factors influencing and inhibiting female condom use, therefore, focusing on female condom users is imperative for the study to obtain such information.

### **1.5. Aims and Objectives**

The main aim of the study is to explore female condom use among university students in Durban, South Africa. The specific objectives of the study are to understand factors influencing the use and the non-use of the female condom.

The proposed study sought to address the following research questions

- What are the primary contributing factors of female condom use among university students?
- What are the barriers to the consistent use of the female condom among university students?
- What are the perceived benefits of female condom use among university students?

### **1.6. Significance of the study**

Meekers and Richter (2005) argue that in spite of the major challenges of STIs and pregnancy facing the youth, few studies have been conducted on potential factors that influence female condom use. In South Africa, studies that have been conducted on female condom use have largely focused either on factors that facilitates protection against infections or conception but not on both angles simultaneously. Maharaj (2006) argues that understanding the various methods of protection that young people are using to fight the challenges of infections and pregnancy remains imperative as well as understanding various factors that make them to use these methods. Providing information on potential factors inhibiting and facilitating female condoms use is essential in the development of interventions targeting to decrease the risk of infections and pregnancy. Most previous studies conducted on the female condom have largely focused on awareness of and attitude towards the device. Interesting about this study is that, it explores simultaneously both the factors facilitating and inhibiting female condom use. This is very important especially in a country which is largely affected by the HIV/AIDS pandemic. This remains crucially in the development of interventions that seeks to facilitate continuous and successful female condom use. Little attention has been given to factors facilitating and inhibiting consistent female condom use among university students, a population group at high

risk of infections and pregnancy. In general, condoms have had lots of factors contributing to their use or non-use based on gender inequality in sexual decision making; peer pressure; gender violence; including socio-economic status. Underlying problems associated with the use of the condom in general might hinder female condoms uptake including its popularity. Therefore, the researcher anticipates that the findings of this research will facilitates knowledge on factors that influence and inhibit the use of this dual method of protection. Furthermore, the researcher also believes that the importance of developing educational programmes on female condom use among university students will be emphasized by the findings of the study in order to encourage health sexual behaviours, and in order to address the challenges of the HIV pandemic in South Africa especially among young women.

### **1.7. Organization of Dissertation**

This study is made up of five chapters. Chapter one gives contextual information on female condom use in both the global and the South African context. It further provides details on the study aims and its objectives. Chapter two provides information on female condom use from former studies, recognizes the major inputs made by previous studies in understanding factors that facilitates or inhibits the consistent use of the device, and provide details on the principal theory guiding this study. Chapter three gives a detailed account of the research methodology of this study. It outlines the target population and study sample; the selection process; data collection process and analysis; ethical consideration and limitations of the study. Chapter four presents the study findings. Chapter five summarizes the study findings and compares it with findings from other studies and also presents recommendations for action.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

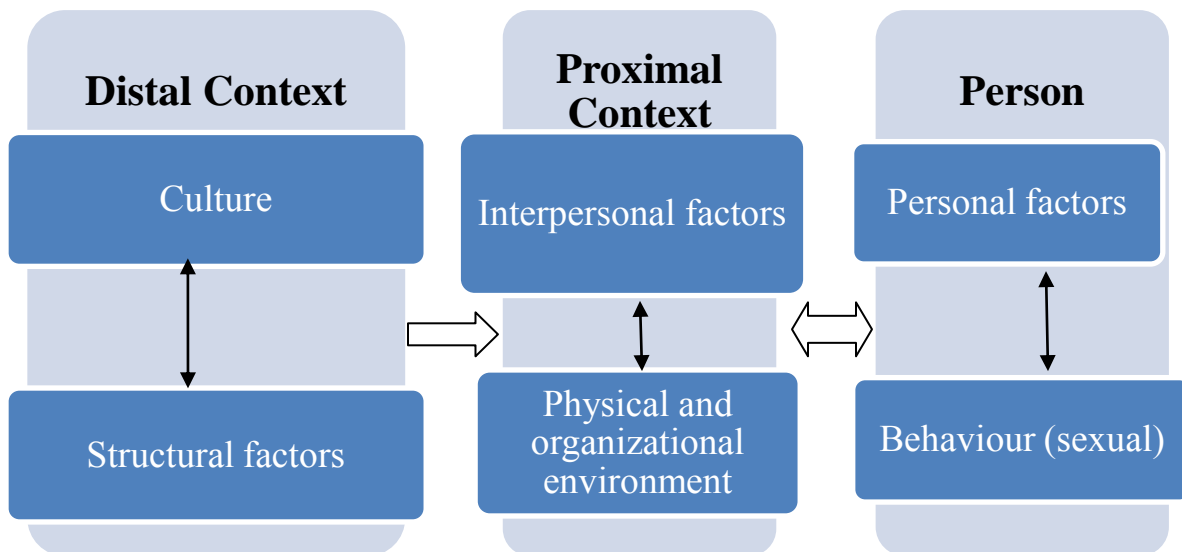
The growing evidenced that heterosexual intercourse including women's lack of sexual power to initiate safer sex increases the susceptibility of women to infections in sexual relationships facilitated the advocacy for the female condom (Holmes, Karon and Kreiss, 1990). According to Hoffman et al. (2004) unequal distribution of sexual power among men and woman in societies is one of the most significant factors increasing the spread of infections. This became the most important factor that facilitated the development of protective measures that will enable women to have power over their sexual health. For instance, advocates that are concerned with the health of women made a call to the development of these protective methods that women will have control over. Hoffman et al. (2004) state that following vigorous campaigns that demanded the introduction of female condoms in 1993 the U.S. Food and Drug Administration officially permitted the use of this device. Parker, Easton and Klein (2000) state that due to unequal distribution of sexual power, figures of HIV positive women have increased steadily worldwide representing the largest proportion of people living with HIV/AIDS. For instance, UNAIDS (2009) reported that in sub-Saharan Africa more than 60% of women are living with the HIV virus. However, several countries including Cambodia and Thailand have demonstrated that increasing the use of condoms is one of the most effective strategies in addressing the challenge of HIV/AIDS (Hoffman et al., 2004)

Seedat (2011) argues that since there is no available cure for HIV/AIDS this indicate the importance of developing prevention tools such as the female condom which will give women power in sexual negotiations. Furthermore, the increasing figures of infections among women compared to their male counterparts underscores the need to develop more interventions targeting at giving women power in sexual relationships to have control over their own sexual health. Research shows that at present the device is one of the most significant tools providing a strong protection against infections and conception (Hoffman et al., 2004). By giving women power in sexual relationships to facilitate protection, female condoms provide them with more control to negotiate safer sex. This chapter will discuss the theoretical framework guiding the study and review literature on female condom use and most important will look at potential factors facilitating and inhibiting the use of this device.

## 2.2 Theoretical framework

Several theories such as Theory of Reasoned Action, Theory of Planned Behaviour, Health Belief Model and Social Cognitive Learning Theory have been used to provide explanations on adolescent and youth sexual behaviours. However, Eaton, Flisher and Aaro (2003) argue that these social cognitive theories are more applicable in Western countries context in which they were developed therefore, they cannot be applied to all problems in all situations. For instance, in developing societies where factors away from the individual have a fundamental influence and need to be taken into consideration. These socio-cognitive theories focus mainly on behavior and factors at the personal and interpersonal level. However, Eaton et al. (2003) acknowledge the fact that the importance of factors beyond the individual is taken into account by the social-cognitive theories. Nevertheless, they do not take into account the effects of other factors especially the cultural, social and distal factors (Eaton et al., 2003). Eaton et al. (2003) assert that when one wants to understand sexual behaviour especially in the Southern African context, the influence of all factors at different levels should be taken into consideration. As a result, the current study draws on this model of sexual behaviour in order to explain factors facilitating and inhibiting female condom use at different levels among female university students.

**Figure 1. Eaton's Model of Sexual Behaviour**



(Source: Eaton et al, 2003, 150)

The model developed by Eaton et al. (2003) provides explanations on factors that influence unsafe sexual behaviour among South African youth. According to this model the most significant factors facilitating risk behaviours or inhibiting the use of protection among young

people are divided according to three levels of analysis including the personal level factors, the proximal environment which is made up of (interpersonal factors and the immediate living environment), and last the distal context which consist of (structural and cultural factors) (Eaton et al., 2003). Eaton et al. (2003) state that the most important thing to know about these three levels of analysis is that they are not independent to each other but they are related and they influence each other to some extent. For instance, Meyer-Weitz et al. (1998) state that the various problems that people come across in discussing the use of the condom in relationships are further promoted by factors including self-esteem and self-efficacy in using condoms and cultural beliefs that prohibit any sexual discussions between men and women. The model also argues that personal factors and the proximal and distal contexts interact to encourage HIV risk behaviour in ways that are not fully captured by social cognitive models (Eaton et al., 2003). For instance, in terms of explanations for unsafe sexual behaviour among South African youth, the model suggests the powerful impact of the proximal and distal contexts, and in particular, the pervasive effect of poverty and social norms that perpetuate women's subordination within sexual relationships (Eaton et al., 2003).

Eaton et al. (2003) state that the personal factors are found within the individual person and they influence sexual behaviour and HIV risk. These factors encompasses knowledge and beliefs, perception of risk, self-efficacy, perceived costs and benefits and self-esteem (Eaton et al., 2003). The proximal context includes both interpersonal factors and their physical and organizational environment that influence upon individual's access to health services (Eaton et al, 2003). The interpersonal factors include factors related to interpersonal relationships such as negotiating condom use, coercive and male-dominated sexual relationships, peer pressure and interactions with adults (Eaton et al., 2003). The physical and organizational environment includes factors such as lack of access to condoms, lack of access to media, lack of recreational facilities, living on the street and being in prison (Eaton et al., 2003). Factors at the distal contexts include cultural factors such as norms, traditions, the organizational factors such as place of residence (urban versus rural) and poverty. Eaton et al. (2003) state that in South Africa poverty remains one of the most significant factors influencing sexual behaviour among young people including their susceptibility to infections.

### **2.3 Types of female condom available**

The original version of the female condom to be first available was the FC1 which came under different brand names such as Reality, Femy, Femidome, Dominique, etc. This condom was made of expensive material called polyurethane; however, its production has now been discontinued. The most common concerns with this condom were in respect of cost and acceptability. Several new female condoms have been designed and others are still under development to address the challenges of the FC1. These new products have the potential to lower the cost of female condoms, through a less expensive design and manufacturing, and they may meet the user's needs more effectively (Outlook, 2006). The FC2 female condom which is made of synthetic latex called nitrile was developed after the FC1 and received USFDA approval in 2009. The FC2 is made of cheaper material which makes it less costly and reported less noise during sexual intercourse than the FC1. The FC2 is widely available in many countries including South Africa. Other types of female condoms available include the VA Feminine Condom also known as Reddy, made of polyurethane sponge and latex pouch in V-shaped frame, and it is available through the private sector in several countries including, South Africa, Brazil and India. The latex made Cupid condom is also available in South Africa and other countries (Beksinska et al., 2013). This type of female condom has an octagonal outer frame and is inserted with a medical grade sponge, which also holds the condom in place during sex. The Natural Sensation Panty Condom made of reusable cotton and nylon, is also available in parts of South America and Europe, however, it is still under review for approval. It contains a replaceable panty liner made of synthetic resin that stretches like a male condom.

Female condoms under development include the Woman's Condom developed by PATH; this is a polyurethane pouch that is partially enclosed in a capsule to aid insertion. More interesting about this female condom is that it was made in consultation with women and couples to identify features that promoted comfort and ease of use. The Silk Parasol Female Panty Condom is also under development and is made of biodegradable latex and is reusable with refill condoms. It is designed to be worn like an undergarment, providing a complete barrier both internally and externally. Belgian female condom made of latex with thicker flexible collar is also still under development and has not yet received approval from the USFDA or WHO.

## **2.4 Acceptability of female condoms**

Napierala et al. (2008) state that the uptake of the female condom faced some successes and disappointments worldwide. 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 decision making (Napierala et al., 2008). WHO (2007) reported that depending on the settings and populations, female condom acceptability vary worldwide ranging from 37% to 96%. Hoffman et al. (2004) state that more than 90 developing countries have already introduced the device and this was made through the support from the UNAIDS, donors and the manufacturers. Several countries including South Africa, Brazil, and Zimbabwe have introduced and supported the use of the device and have shown a steadily increase in the sales of the device (Hoffman et al., 2004). For instance, a high demand for the female condom was shown by an acceptability study conducted in Zimbabwe where women subsequently petitioned the government to make female condoms widely available (Warren and Philpott, 2003).

Several studies conducted among women and heterosexual couples in China, Kenya, South Africa, and Zambia also found relatively high levels of female condom acceptability (Xu et al., 1998; Beksinska et al., 2001; Musaba et al., 1998). In addition, acceptability studies of the female condom have indicated high acceptance of the device particularly among women at high risk of STIs such as sex workers and STD clinic patients (El-Bassel et al., 1998). The findings of the study done by Marseille et al. (2001) revealed that programs promoting female condom use were found to be cost effective interventions for women with multiple sexual partners especially sex workers. In most settings, the use of the device is largely associated with having many partners hence facilitating the extensive promotion of the device among female commercial sex workers (Deniaud, 1997; Holmes et al., 2008; Macaluso et al., 2000). Nevertheless, the attempt of female condom programs to create demand among the general public is hampered by such misconceptions. Centres (2008) states that promoting the device only among people who are high susceptible to infections in particular sex workers will contribute to the low acceptability of the female condom by the general public. Despite the wide acceptability of the device in many countries, at the same time there have been disappointments in other countries in its uptake. For instance, the uptake of the female condom has been lower than its initial anticipation in many countries of the developing world and in Western countries, demonstrating that successful introduction of the female condom will not be as straight forward as was initially hoped.

## **2.5 Factors hindering acceptability of female condoms**

### **2.5.1 Lack of support from donors**

Despite evidence of its effectiveness in providing protection against STIs and pregnancy, Seedat (2011) asserts that there is a wide gap in the distribution of female condoms because of insufficient support and programming of female condom introduction policy. Seedat (2011) further states that there have been insufficient investments on female condoms from donors, policy makers as well as the official providers of the device which on the other hand impact significantly on the wide distribution of female condoms. The Executive Director of the joint United Nations Programme on HIV/AIDS (UNAIDS) argues that “the female condom needs more financial and programme support from donors, non-governmental organizations and international community to ensure that women who would benefit most have access” (UNAIDS, 2009: 53). However, decision makers are concerned mainly by two challenges; the product high cost and whether its introduction will be effectively in receiving contexts (Seedat, 2011). According to Hoffman et al. (2004) UNAIDS has discussed a public sector price of US\$ 0.57 per condom with a manufacturer of the first generation FC female condom. However, this price is 11 times more than the unit price of the male condom, which sells at US\$ 0.05 which also creates a problem to the supply and distribution of female condoms. Thus, the lack of investment from donors, program implementers and governments to the female condom could be linked to the high price of the device.

### **2.5.2 Provider perceptions**

Seedat (2011) argues that another challenge inhibiting female condom use falls on the quasi-demand and demand side of the equation. For example, Seedat (2011) states that both the distribution of and access of female condoms have been shown to be influenced by negative perceptions from the providers, in addition to misconceptions on the part of the users and local communities. Hoffman et al. (2004) state that the provider’s negative perceptions toward the device are widely acknowledged by researchers, government officials, and advocates as a serious obstruction to increase access and use. A study conducted in Kenya found that female condoms did not contribute to any additional effects on disease prevalence relative to male condoms, because reported female condom usage was not sufficiently enough to make a difference (FHI, 2001). Further analysis indicated that this effect must have been caused by provider behaviour. For example, the providers found the female condom to be more suitable for sex workers and single women and not for those in stable relationships (FHI, 2001). Others have found that



providers claimed that the device is too complicated or awkward to use and thus did not offer it to clients, as they did not have the time to counsel the clients (FHI, 2001). Yet, others felt that women are not willing to learn, which is necessary for insertion, such as touching their genitals (PATH and UNFPA, 2006). Therefore, this indicates that provider's attitudes toward the device remains one of the most significant factors inhibiting female condom use and resulting in lack of interest from the funders invest in the device and low acceptability from clients.

### **2.5.3 Social norms**

Sarkar (2008) asserts that social norms that exist in every society remain one of the major barriers to consistent use of the female condom including confidence in using the device which adversely impact on the acceptability of the device. Sarkar (2008) further argues that the psychosocial environment of the individual is influenced by various belief systems that exist in every society. For instance, the denial of moral norms when promoting condom use among drug users in Houston, Texas, led to avoidance of condom use during sexual intercourse and its acceptability in general (Sarkar, 2008). Seedat (2011) also articulates that the uptake of the device can be limited by the existing social norms and community member's preferences. For instance, a negative reaction to the device has been evidenced by providers from certain women. FHI (2001) reported that most women are hesitant to speak about the device to their partners, which on the other hand is not surprising as partner objection has been reported as one of the main reasons for abandoning female condom use. Sarkar (2008) states that in most African cultures women engage in unsafe sexual behaviour due to their lack of power to negotiate use of female condoms and this is also facilitated by the existing societal belief systems which forbid women to take any proactive role in sexual discussions. Coinciding with this is the belief held by the community that the device will allow women to have freedom whereas a true understanding of female condoms is hampered by misconception and myths (Seedat, 2011). Therefore, this shows that existing societal norms create an environment where women do not have power to initiate female condom use which also impedes on the acceptability of this dual protection method.

### **2.6 Protection against STIs and pregnancy**

The condom, which exists at both male and female brands, offers a dual function. According to Sarkar (2008) the condom is one of the most significant tools providing a strong protection against infections and conception. Literature indicates that among married couples the consistent

use of the device is associated with the desire to prevent pregnancy (Spizzichino et al., 2007). This suggests that among female condom users in marital unions, the device is largely used as a mechanism for pregnancy prevention, which is consistent with the way in which the product has been marketed (Meekers and Richter, 2005). Lotfi et al. (2012) argues that the consistent use of the device among people who are not married is facilitated by the perceived efficacy of the device in providing protection against STIs and unwanted pregnancy. This suggests that in non-marital relationships the device is used for both protection against infections and unwanted pregnancy. Female condom use for protection against infections and conception was also the most common theme found in the study conducted by Peters, Jansen and Van Driel (2010).

A study conducted by Valens and Joseph (2013) found that more respondents had favorable attitudes towards the device efficacy in providing protection against infections and conception. Napierala et al. (2008) and Spizzichino et al. (2007) state that similar results were obtained in research done in Zimbabwe and Italy where female condom was considered effective in STIs and pregnancy prevention. Seedat (2011) argues that through the correct and consistent use of the condom the risk of infections can be reduced by more than 90%. Although the male condom has been found to be 90% effective in providing protection against infections, nevertheless the effectiveness of the female condom has been rated by the United States Food and Drugs Administration (US FDA) to be 94% to 97% (Hoffman et al., 2004). Thus, due to their effectiveness, both male and female condoms have received considerable attention in the fight against AIDS pandemic. A number of countries including sub-Saharan African have taken an initiative to embark on strategies to fight HIV/AIDS through the promotion and the use of condoms.

Seedat (2011) asserts that evidence from both laboratory and population-based studies indicate that the device provides a strong protection barrier against infections as the male condom. For instance, demonstrations from many laboratory studies suggest that female condoms made of polyurethane are resistant to HIV providing an exceedingly protective barrier (Drew et al., 1990). Another estimate for the effectiveness of female condoms in preventing HIV has been obtained from its ability to reduce per-act probability of HIV transmission and other STIs (Seedat, 2011). For example, one study indicated that perfect use of female condoms for a woman having sexual intercourse with a HIV infected partner could reduce the risk of her acquiring HIV by more than 90% (Trussell, 1994). In addition, Seedat (2011) also asserts that if the female condom is used

half of the time, the risk of infection will still be reduced by 46%. Other studies, including randomized controlled trials indicate that female condoms do indeed reduce the prevalence of STI in populations (Seedat, 2011). For example, it was found that in Kenya baseline, STI rates declined from 24% to 18% at intervention sites by the distribution of both male and female condoms (Feldblum et al., 2001).

## **2.7 Increased number of protected sex acts**

Female condoms offer women and men a range of benefits. Among these benefits, evidence suggests that when promoted and programmed alongside the male condom, female condoms significantly increase the total number of protected sex acts (Hoffman et al., 2004; Witte et al., 1999). Literature indicates that when there are more alternatives available that enable changes, couples are more likely to use protection, suggesting that having two types of condoms probably increase the number of protected sexual intercourse (Kalckmann et al., 2009). With promotion and provision of female condoms, studies that have examined female condom use have shown an increase in the proportion of protected sex acts (Napierala et al., 2008). A study conducted in Alabama among STIs clinic attendees indicated that with the introduction of the female condom, the rate of protected sex acts increased from 40% to 50% over a 6 month period (Artz et al., 2000). Nevertheless, there was no decrease in the male condom use and majority of women who use the female condom continue to use the male condom. Another study conducted in Zambia found that over a one year period, approximately 25% of all sex acts were protected by the female condom (Musaba et al., 1998). Studies from Madagascar, Kenya, India, Brazil, and the United States also found that female condom promotion and use increases the total number of protected sex acts, which helps reduce rates of STIs and the risk of HIV infection and unwanted pregnancy (Gollub, 2006).

## **2.8 Empowerment**

Gollub and Stein (1993) articulate that the female condom has been marketed as a method of protection that will give women power to negotiate protection in relationships. According to WHO (1997) female condom especially if supported by education and information activities has been shown to contribute to women's sense of empowerment. Gollub (2000) articulates that experience with the female condom has shown that the device empowers diverse populations of women, helping them to negotiate protection with their partners, promoting healthy behaviors, and increasing self-efficacy and sexual confidence. Findings from a four-country female condom

study revealed that the female condom may be used as a tool in the development of women's sexual confidence and autonomy that may in a small way open up the possibility of greater equality in sexual relations between men and women (Rivers et al., 1998). Thus, Rivers et al. (1998) assert that the introduction of the device further increase women's sense of self-efficacy and self-worth in ways that have effects beyond the immediate issue of condom use. Several in-depth qualitative studies documented that the female condom enhances women's sense of empowerment, and this in turn facilitates its use (Gollub and Stein, 1993; Cecil et al., 1998; Witte et al., 1999). According to Ankrah and Attika (1997) women in Kenya and Brazil reported that the device opened doors for them to talk openly about issues of sexuality that were formerly cultural taboos outside the bedroom. For instance, women articulated that with the availability of the female condom they were free to discuss about sex enjoyment, claiming more pleasurable sex with the device, therefore, the device improved women sense of control over their sexual health (Ankrah and Attika, 1997).

Other evidence for instance, indicates the special freedom women feel with the female condom. For instance, one woman put this feeling bluntly "once I put the female condom in me, what can he do?" (Gollub, 1998: 43). In a study done by Gollub (1998) women reported their ability to finally "master" their own protection in a community survey conducted in Southern France. Therefore, women felt more comfortable about their own bodies with the use of the device (Gollub, 1998). Qualitative studies have shown that women view the female condom as a way for enhancing their ability to negotiate conditions for safer sex within the relationship (Hoffman et al., 2004). Acceptability studies have also shown that the female condom contributes to women's empowerment (Ankrah and Attika, 1997; Gollub, 2000; Kerrigan et al., 2000; Welbourn, 2006). Kaler (2004) argues that the female condom is part of a long tradition of empowering women which has animated women's health movements for decades. Studies have further shown that women like the female condom better than the male condom because it gives them control over their sexual lives (Ankrah and Attika 1997; Dias et al., 2006; Kerrigan et al., 2000; Welbourne, 2006).

## **2.9 Barriers to female condom use**

### **2.9.1 Cost**

The high cost of the device perhaps remains one of the most important factors hindering the wide distribution of the female condom. According to Pettifor et al. (2001) the female condom was

found to cost around 20 times more to produce than the male condom. Cecil et al. (1998) assert that the high cost of the device compared to the male condom was cited as the most important barrier to consistent female condom use in previous acceptability research. Hoffman et al. (2004) assert that the uptake of female condoms is unlikely to increase without a continuous supply of free or affordable female condoms, which can be purchased and distributed by national and international organizations or which can be purchased directly by consumers. Hoffman et al. (2004) state that the device high cost may underpin many challenges in promoting the device. Latka, Joanis and Glover (2001) assert that female condoms made of latex are currently under development and testing which are cheaper than polyurethane, such as the FC2 which is already available at low cost, the Cupid female condom and other new development such as the Belgian, Silk Parasol female panty condom, etc. These new developments will address the cost and the acceptability issues.

The most interesting fact about the female condom is that after each use it may be possible to reuse the device if it is well cleaned and re-lubricated. Kerrigan et al. (2000) state that the high price of the device has resulted in the reuse of the device by some women. In Zimbabwe, there is evidence of reuse of the device among women particularly commercial sex workers. Pettifor et al. (2001) point out that in countries where the reuse of the device is acceptable; the reuse of the device will be one of the strategies to address the challenge of high cost. A number of studies were conducted to examine whether repeated washing and drying affects the structural qualities of the female condom. The data suggests that after a single use and cleaning the structural integrity of the female condom remains intact (Pettifor et al., 2001). While laboratory tests in South Africa indicated that washing, drying and re-lubricating the female condom up to 10 times led to decline in its structural integrity (Beksinska et al., 2000). In another study done in South Africa there was no deterioration detected after eight uses when evaluated against the U.S Food and Drug Administration's minimum standards for new female condoms (Beksinska et al., 2000). Nevertheless, the World Health Organization (WHO) does not support the reuse of the female condom but recommends single use. However, in the interest of risk reduction for women the organization has produced a draft protocol for safe handling and preparation of the device for reuse (WHO, 2002).

### **2.9.2 Male partner objection**

Male involvement is one of the most important determinants of female condom use. Hoffman et al. (2004) assert that although the female condom was developed to empower women in sexual relationships to be in charge of their protection however, the support of the male partner remains very important to ensure its successful use. This suggests that the device which remains the merely tool designed for women to initiate cannot be used without the male partner's cooperation (Mathews & Harrison, 2006). A series of studies conducted in South West Uganda found that although women like vaginal products because they feel they have greater control over their sexual and reproductive health, however, their use often involves some negotiation with male partners (Pool et al., 2000). Thus, this indicates that male partner's response to female condom use is a significant determinant of the use of this device (Welsh et al., 2001). Beksinska et al. (2001) state that the female condom in South Africa has been integrated into National Family Planning Programme and partner objection was found to be one of the most significant factors causing most women to avoid the use of the device. The male partner's negative attitude towards condom use in general creates a non-conducive atmosphere for females to introduce a female condom (Mack et al., 2010). Pool et al. (2000) state that sometimes men think that the device and other various methods developed for women to initiate allow women to have much power when it comes to sexual intercourse.

As a result refusal of a female condom by the male partner leads to women being reluctant to initiate condom use. Such a prophylactic method is hardly brought up since women fear rejection and losing a partner (Mash, Mash & de Villiers, 2010; Mack et al., 2010). For instance, Sarkar (2008) articulates that fear of being suspected with infidelity which might result to couple separation was one of the significant factors that prevented women and men in steady relationships from using condoms in various communities including Brazil and South Africa. In many contexts unprotected sex implies loyalty in a woman within a relationship; however, increasing the risk of infections at the same time. In addition, Hoffman et al. (2004) state that men's positive attitudes and willingness to use the device can enhance the acceptability of the female condom to women. Hoffman et al. (2004) state that as a result the device is now referred to as "female-initiated" rather than "female-controlled" to reflect that its use is not fully in the hands of women. Studies have demonstrated that partner objection remains a significant factor inhibiting female condom use (Choi and Catania, 1996). Therefore, communicating about the use of the device among partners remains an important strategy in facilitating successful use of the

device. Various studies on the use of the device have acknowledged the importance of taking the male partner into consideration to promote successful use of the tool (Bogart, Cecil, and Pinkerton, 2000; Cecil et al., 1998). Therefore, to ensure successful female condom use, marketing strategies aimed at promoting the use of the device should focus on both men and women because although the device was developed for women to use, men's role remains crucial to the successful use of the device.

### **2.9.3 Availability**

The high price of the device poses serious challenges toward the accessibility of this dual protection device. Hoffman et al. (2004) assert that the wide accessibility of the device is hampered by the lack of investment from donors, program implementers and governments due to the high cost of the device. Another concern is that the female condom continues to be underfunded at the global level. This undermines the device's full potential in the fight against HIV/AIDS (Mathenjwa and Maharaj, 2012). Kalckmann et al. (2009) highlighted that the distribution of this tool remains low, nevertheless various initiatives are being developed to increase its wide availability and to ensure that it becomes more accessible at a lower cost. Fernandez et al. (2006) articulate that in comparison to the male condom; the female condom is unpopular, which signifies the public's lack of confidence in the product and initial unwillingness to use the device. In addition, findings from a study done by Kulcrycki (2004) revealed that the device remains unpopular among some women. Findings of a study carried out among African American and Puerto Rican women revealed that consistent female condom use was influenced by the availability of female condoms (Gollub, 2000).

According to Seedat (2011) for over a decade now female condoms have already been distributed in 40 HIV epidemic countries, however, their supply and utilization remains insufficient. For instance, only 18.2 million female condoms were supplied by donor countries as compared to 2.4 billion male condoms in 2008 (UNAIDS, 2009). Nakari and Huurne (2010) assert that female condoms remain available at a rate of one for every 300 women per year in sub-Saharan Africa. This suggests that although the device has been available for nearly ten years, it remains hard to find and underutilized by target populations (Nakari and Huurne, 2010). In addition, Seedat (2011) argues that "while research and policy efforts to introduce the female condom into various populations have increased in recent years, only few countries have

programmes that are well established and well documented, holding a valuable lesson for future action” (p.112) .

#### **2.9.4 Promotion of the female condom**

According to Agha (2003) social marketing is thought to increase awareness about the use of female condoms as indicated in other studies. For instance, support from peers including other social support appears to facilitate the use of female condoms (Agha, 2003). Ray et al. (1995) state that positive promotion of the device including support from the health care workers is believed to improve correct use and facilitate female condom use. The role of media is also highlighted as the main source of information on female condoms. Nevertheless, lack of female condom promotion remains a challenge and often considered a significant barrier hindering the use of this device (Sarkar, 2008). In addition, Weeks et al. (2010) argue that the low uptake of the device also results from the lack of female condom promotion and support at the community level. Literature reveals that compared to the male condom, female condoms are hardly promoted, distributed, advertised or demonstrated. For instance, the device is reported to be not available in pharmacies and other public places (Mathenjwa and Maharaj, 2012). In the findings from a study done by Fernandez et al. (2006) respondents highlighted that, information about the female condom is limited and in all the publications and advertisements concerning sexually transmitted infections, the male condom remains the mostly talked about method of protection against infections. They further mentioned that female condoms are never distributed in promotional campaigns and only male condoms are distributed (Fernandez et al., 2006). Hoffman et al. (2004) argue that the high price of the device in many countries is largely associated with such a lack of promotion.

#### **2.9.5 Cumbersome Design**

The female condom is a fairly unique contraceptive method in terms of its double protection function against STIs including HIV and unwanted pregnancy. However, the device is not without challenges like any other contraceptive methods. A number of studies have revealed that in initial experiences 35% to 50% of the female condom users have encountered problems in inserting the device (Hoffman et al., 2004; Kalckmann et al., 2009; Meekers and Richter, 2005; Ray et al., 1995; Farr et al., 1994). In a study conducted in Zimbabwe by Ray et al. (1995) participants reported problems associated with the initial use of the device in particular due to the uncomfortable nature of the inside ring which a number of participants articulated as being sore



sometimes. Major concerns including difficulty of inserting the device into the vagina and lack of sexual satisfaction were reported by female Nigerian undergraduates (Okunlola et al., 2006). In a study conducted by Sarkar (2008) discomfort of the female condom including tight fitting of the condom as well as vaginal irritation were reported by young women who also mentioned loss of sensation, and frequent condom slippage during sexual intercourse. Discomfort was also associated with less motivation to use the female condom (Crosby et al., 2004; Crosby et al., 2005). Thus, such findings underscore the need that users are provided with support in health care services to overcome these initial difficulties. Studies conducted in South Africa, Zambia and China revealed that users of the device often overcame initial problems with the female condom after several uses (Seedat, 2011). Van Devanter et al. (2002) argue that women who receive instructions in female condom use along with opportunities to practice method related skills on pelvic model have an increased likelihood of using the method, of using it correctly and of viewing it in a favorable light.

The design of the female condom has impacted on misconceptions about its ability to enable sexual pleasure. For instance, a common stereotype about the device is that an object so large cannot enable sexual pleasure (Hoffman et al., 2004). A study conducted by Beksinska et al. (2001) found that in South Africa there was some resistance to the use of the device for a variety of reasons, including appearance, difficulties concerning its use, over-lubrication and messiness, concern that the device is too large and reduced sensation. An acceptability study conducted in Brazil found that although some participants believed that the female condom offers advantages over the male condom, however, the nature of the product including its size and appearance served as a barrier to near universal use (Galvao et al., 2005). In contrast, women in Kenya and both men and women in China found that the device made sexual intercourse pleasurable (Xu et al., 1998; Ruminjo et al., 1996). Another study conducted by Choi et al. (2002) found that the device appearance and insertion presented less concern for the participants and that the device increased sexual pleasure. In addition, a number of benefits with female condom use were highlighted, including the ability to have sex in any position without the device breaking or slipping, greater lubrication than the male condom, ability to use it during menstruation and when the man's penis is not fully erect (Galvao et al., 2005).

### **2.9.6 Gender power dynamics**

According to WHO (2014) gender roles refers to the roles that are socially constructed by the society including the way in which people should behave and qualities that are considered as appropriate for both men and women in a given society. Power refers to the ability to influence the behaviour of other people (Kotter, 1985). The dominance of men is one of the key features of men's position in virtually every aspect of modern life. Many ways and various perspectives can be used to explain this culturally-installed male dominance. Robinson et al. (2003) argue that a strictly evolutionary approach might suggest that the gender roles have evolved over large expanses of time in a way that naturally selected men and women into the roles and social statuses they hold today. UNFPA (2004) states that address the existing gender roles and power dynamics between men and women is one of the most significant strategies in the fight against HIV/AIDS.

Gender inequality in sexual relationships plays a huge influence on the acceptability and consistent use of the female condom. For instance, in many traditional societies' the different roles that are ascribed to both males and females including the low position of women adversely influence the health of women in many ways. The subordinate position that women hold in the society adds to a situation where females are unable to take active role in sexual decisions negotiation. This also interferes with women's autonomy, limiting their decision making power to initiate female condom use (Mash, Mash and de Villiers, 2010). For instance, research which analyzed why females do not use female condoms, revealed that while women are at the receiving end of most of the educational messages about condom use, however, they first have to negotiate condom use with their male partners (Mash, Mash and de Villiers, 2010). Therefore, this emphasizes the extent of the unequal power in sexual decision making, where the female is disempowered in sexual decision making. This is also a worrying pattern, where the segment of the population which is most educated about the use and benefits of condoms specifically female condoms has a diminished role in decision making when it comes to female condom use in sexual relationship (Mash, Mash and de Villiers, 2010).

Jama et al. (2010) argue that more recent views of the literature on female condom use have shown that gender equity, monogamy and harmonious relationships play a positive role in enabling young women to use female condoms. For example, a study conducted in South Africa by Jama et al. (2010) revealed that consistent female condom use among young women was

associated with having had just one partner, less relationship conflict and higher gender equity in relationships with a male partner. WHO (2009) points out that a number of studies have shown the importance of enhanced partner communication skills in increasing consistent female condom use. This finding collaborates with those of Seutlwadi (2012) who also note that communicating with the partner about condom use was also a significant factor facilitating contraceptive use among South African youth. Reddy et al. (2000) also reported that communication with one's partner about STIs risk and condom use has been found to be correlated with willingness to use condoms and self-reported use. This indicates that the relationship between partners is imperative in facilitating female condom use. However, Reddy and Meyer-Weitz (1997) acknowledge that negotiating condom use remains a difficult task and in most instances the negotiations favors men and become something uncomfortable to talk about especially for women. For instance, introducing condoms into a sexual encounter is perceived to break the intimacy and romance of the moment (Meyer-Weitz et al., 1998; Van Dyk, 1994; Wood and Foster, 1995). As both men and women perceive condoms to be associated with promiscuity, STDs and AIDS, so that suggesting condom use implies either that one has a sexually transmitted disease, or that one mistrusts one's partner (Meyer-Weitz et al., 1998; Richter, 1996; Van Dyk, 1994).

Essien et al. (2010) also argue that in many situations women are unable to negotiate the use of protection because of the existing gender dynamics. A study conducted by Hebling and Guimaraes (2004) found that due to lack of sexual power that women have in relationships women did not use protection despite being informed about AIDS. Hoffman et al. (2004) assert that unequal distribution of power in sexual relationships plays a key role in women's susceptibilities to infections and their ability to protect themselves and negotiate safer sex. For example, UNAIDS (2004) asserts that negotiating condom use remains a difficult task especially for African women due to gender inequalities. Musoni (2007) argues that in most instances, introducing the female condom to male partners it also becomes difficult because most women especially African women do not even know how to negotiate female condom use with their partners. Among teenagers and especially young girls who lack capacity and power to negotiate condom use, vulnerability may be increased due to unequal power dynamics in sexual relationships (Parker et al., 2007). Men's perception that the female condom gives women more control and power over sex also continues to be a challenge in the use of female condoms. According to Arendse (2008) the widespread adoption of female-initiated methods becomes

limited by this belief. Such an assumption could be said to reveal the inadequacy of HIV prevention efforts. However, Van Der Schaff (2008) points out that limited access to, and availability of the female condom could be associated with women's gendered position of less power when it comes to sexual decision making process.

Notwithstanding the role of culture, it has been shown that culture has a huge influence on female condom use and further creates grounds for women's subordination. Airhihenbuwa (1995) states that many cultures especially traditional African cultures which are most patriarchal are repressive to women and further increase the subordination of women when it comes to sexual decisions. Furthermore, several writers on HIV/AIDS prevention have noted the pervasive influence of culturally entrenched gender discrimination in increasing women's susceptibility to infections in Africa (Ng'weshemi, Boerma, Bennett, and Schapink, 1997; Webb, 1997). Thus, cultural norms perpetuate the subordination of women in relationships to negotiate female condom use.

### **2.9.7 Social stigma**

Sarkar (2008) argues that the stigma associated with the use of condoms in any given society has a large influence on people and it will take time to have it wiped out. Therefore, the fact that condoms are stigmatized and are also associated with infidelity, this presents a major challenge in negotiating female condom use. Marston and King (2007) assert that stigma remains one of the factors that contribute towards unsafe sex practices. Garland (2003) argues that in fact the condom is thought to be suitable for use among casual partnerships and not for married couples and or other sexual partners in long term relationship. In turn this makes it fairly difficult for married women to negotiate female condom use when it is crowded by such perceptions. Maharaj (2001) revealed that despite frequency of sex being higher among married couples, paradoxically; condom usage is lower in this group than among non-married couples. Most important women's lack of power in sexual relationships further encourages women to give priority to the wishes and need of their male partners (Hoffman et al., 2004).

In many societies due to the extensive advertising of condoms in AIDS educational programmes in the media particularly, condoms are probably associated with promiscuity (Sarkar, 2008). For instance, negative perceptions are linked to a woman carrying a condom, implying that she is promiscuous. Thus, in this case it would be difficult for many women especially in marital

relationships to introduce the use of the female condom (Sarkar, 2008). A study conducted by Kulcryncki (2004) revealed that despite the extensive knowledge on HIV/AIDS including STIs female condom use in the Middle East was less frequent because of social stigma attached to the condom. Peters, Jansen and Van Driel (2010) also argue that there is lack of acceptability of the female condom use by health care providers as suggested by several studies in South Africa, USA and Kenya. Spizzichino et al. (2007) highlight the importance of taking into account the opinions and values of health care workers when designing and planning female condom promotional activities. A study conducted by FHI (2001) on a female condom promotion campaign in Kenya found that women who were using hormonal contraceptives were discouraged to use the female condom by health care workers telling them that the device was suitable for sex workers. As a result the health care workers did not recommend female condom use to women (FHI, 2001).

### **2.9.8 Religion**

According to Sarkar (2008) religious ideologies play a huge influence in the use of both male and female condoms. Religious behaviour is one of the most significant predictors of sexual behaviour (Sarkar, 2008). Lefkowitz, Gillen, Shearer and Boone (2004) assert that several religious convictions provide rules on how people should behave in sexual relationships. The introduction and usage of barrier methods for protection against HIV infections can be largely impacted by the overlapping religious norms (Sarkar, 2008). In many instances women are given less control over their sexual health and their bodies as well as condom use, which provide men with more power to have more direct control over women's sexuality (Amien, 2008). For example, a qualitative study conducted among young people in Zimbabwe indicated that religious beliefs had a large influence on the adoption of barrier methods (Marindo et al., 2003).

The Roman Catholic Church ever since its very beginning has prohibited the use of contraceptive methods based on its belief that it was against the will of God (Sarkar, 2008). In addition, in the encyclical of Pius XI and that of Paul VI birth control methods were prohibited, and only the natural methods were allowed (Sarkar, 2008). In whatever situation the use of condoms was forbidden. However, not only the use of condom was prohibited but this also applied to the use of condoms in a situation where one wants to use the device for protection against infections including HIV/AIDS (Sarkar, 2008). Within marital relationships, the use of a condom even in a situation where one partner is infected with the HIV virus was regarded as morally wrong

(Schenker and Rabenou, 1993). One study conducted in a largely Roman Catholic area located in the Philippines, found that married respondents indicated that church teachings against female condom use led to them avoiding condoms (Lucea et al., 2010). Thus, this clearly indicates that religious beliefs remain one of the most significant factors inhibiting female condom use.

## **2.10 Summary**

In this chapter the researcher presented a literature review on female condom use. It is evidenced from the literature that the device is one of the most effective means that provide dual protection for women against infections and conception. Lack of support from donors which contribute to the unavailability of the device is seen as a huge barrier to the use of the device. Increasing the availability of the device remains imperative to enable women to have power over their own sexual health. But most importantly, to ensure successful use of the device it is imperative to consider male's involvement when developing interventions promoting the use of the device.

## **CHAPTER 3: METHODOLOGY**

### **3.1 Introduction**

The methodology used to conduct this study will be outlined in this chapter. The aim of this study was to understand the factors facilitating and inhibiting use of female condoms among female university students. The study was purely qualitative and facilitated by qualitative data obtained from individual in-depth interviews with female condom users. Female condom users in this study refer to ever users of the female condom, which include current and former users. This chapter will provide details of the context where the study was undertaken; furthermore, it will also give a motivation for using university students and then provide information regarding methods used. Last but not least it will then provide a discussion of ethical concerns and the study limitations.

### **3.2 Study context**

This research was undertaken in Durban, KwaZulu Natal. Durban is under the eThekweni municipality and remains one of the heavily populated cities in the country. Durban remains well-known as one of the bustling ports in the African continent. According to Community Health Survey (2007), approximately 3 million people were residing in this city and the majority of the population was Africans followed by Indians, Whites and Coloreds forming the smaller portion of the population. KwaZulu Natal remains the most famous tourist destinations in South Africa and is a neighboring country to Mozambique and Swaziland. It is the third smallest province in South Africa, the second heavily populated province, and approximately 10.5 million people were reported to be residing in this province (Statistics South Africa, 2013). IsiZulu remains the primary spoken language in this province. More fascinating is the fact that this province still remains the only province in South Africa that has a monarchy that is provided for by the country's constitution. KwaZulu Natal bears the heaviest burden of Tuberculosis (TB) and HIV/AIDS in South Africa (Statistics South Africa, 2013). Susceptibility to infections is facilitated by various socio-economic conditions and these include high unemployment rate and poverty as well as the increasing urbanization (Maharaj, 2006). Improved access to basic services had a major influence in the improvement of life for the people in KwaZulu Natal.

This study was conducted in the University of KwaZulu Natal situated in Durban in the province of KwaZulu Natal. The university was established as a result of an amalgamation between the

former University of Natal and Durban-Westville in 2004. It has a proud and a famous tradition of producing high quality education and remains the leading universities in Africa. Being the largest public institution, the university receives many students each year which includes both local and international students. According to the Health Systems Trust (2009c) KwaZulu Natal had the highest prevalence rate of HIV/AIDS compared to other provinces in the country and faced major sexual and reproductive health challenges. University students were chosen for this study because they make up the bulk of young people, a population that is particularly vulnerable to infections and unwanted pregnancies. Therefore, it is of critical importance to understand factors that shape their sexual behaviour dynamics. Shiferaw et al. (2014) state that the university setting provides a great opportunity for unsafe sex practices including transactional sex. In addition, Young and De klerk (2008) argue that being away from parental monitoring for the first time and with increasing autonomy create situations that facilitate risky behaviours. Mantell et al. (2011) argue that students are more susceptible to infections despite the general low prevalence rate of HIV in the higher education sector. However, despite being at risk, students are also perceived as agents for change in society and as a result, are likely to be using female condoms (Seutlwadi, 2012). Thus, all the arguments provided above support the importance of using university students in this study. Mantell et al. (2011) articulate that interventions targeting students at higher institutions are imperative as students remain potential agents of change. Thus, focusing on students was imperative for this study to obtain information on factors facilitating and inhibiting the use of female condoms in this high risk population, which might also create a room for changing behaviours. For the purpose of this study, it was not imperative to use a sample of non-university students because they might not be unaware of the existence of the female condom in particular those in rural areas, as there have been concerns above the availability of the device. Furthermore, using non-users of female condom was also not ideal because it would have been impossible to get the extensive information required for this study, especially on factors facilitating the use of the device, which can be obtained from the person who has used the device.

### **3.3 Research Design**

This study adopted a qualitative research design. The aim of this study was to elicit female condom users' experiences with regards to factors facilitating and inhibiting female condom use. Therefore, qualitative research methodology was more suitable for the study. Qualitative research is a systematic subjective approach that is used to describe life experiences and provide



meaning. It aims to gain insight, explore the depth, richness and complexity inherent in the phenomenon. Qualitative studies seek to understand the participant in his or her own natural setting, adding authenticity to the research (Creswell, 2007). Qualitative implies a direct connection with experience i.e. 'lived' or 'felt'. It focuses on exploring in as much detail as possible, aiming for understanding rather than scope, involving consideration of size and magnitude and is usually perceived as being more analytical (Punch, 1988). Qualitative methods rely on open-ended questions which help respondents to avoid predetermined set of answers; this then gives respondents much more freedom to respond in their own words (Whittemore and Grey, 2006). This also allows the researcher to be flexible in probing questions, especially when some issues arise during the interviews. Qualitative research is more useful because it produces more in-depth and comprehensive information and seeks wide understanding of the entire situation that is being studied. However, qualitative research is not without its limitations, the scope of qualitative research is very limited due to the in-depth, comprehensive data gathering approaches, suggesting that it will be difficult to make generalizations. In addition, it is subjective which makes it difficult to establish reliability and validity of the information and approaches used, and it is also difficult to prevent the researchers induced bias.

A qualitative approach was selected because it allowed for a more in-depth understanding of reasons for female condoms. Due to the complex and sensitive nature of sexual behaviour and the stigma associated with condoms in general, qualitative methods were used to gather information on various factors that shape sexual behaviour for female university students. A qualitative method helped to humanize the participants in a way that gave a voice to the respondents who participated in the study; an opportunity that is sometimes silenced in research. All of these elements were emphatically employed in this study and they adequately demonstrate why a qualitative method was the most appropriate for this research.

### **3.4 Population and Sampling**

Polit and Beck (2006) define the target population as the aggregate of cases about which the researcher would like to draw conclusions. The target population of this study included full time female university students aged 18 and older who are users of the female condom. The sample of this study consisted of 15 female condom users. The study focused on female students because this is a female initiated device. So, in order to assess the viability of female condoms, female students remained potential clients and their opinions were the main focus of the study. Female

students 18 years and older were chosen for this study because this is the legal age in South African law where a person is considered an adult and is fully capable of acting independently and having sex at this age is not illegal (Strode, Slack and Essack, 2010).

### **3.4.1 Sampling procedure**

For the purpose of this study, female condom users were sampled using a mix of purposive sampling also known as (typical case sampling) and snowball sampling also known as (chain referral) which both represent a non-probability sampling technique. Terre Blanche and Kelly (1999) assert that in non-probability sampling, elements selection is not influenced by randomness of the statistical principle. In purposive sampling selection of cases depend on the characteristics of the sample (Terre Blanche and Kelly, 1999). The main objective of this research was to understand factors facilitating and inhibiting the use of the female condom. The researcher wanted specifically female condom users for this study. The most appropriate method to supply the researcher with these subjects was purposive sampling. In order to recruit participants, contact was made with the university student clinic to help identify potential participants, because they have the records of all the students who come to request for the female condom at the clinic. The student clinic nurses made contact with the students whom they know use the female condom and informed them about the study. Interested female condom users were then followed up by the researcher to arrange an interview. In addition, snowball sampling use existing subjects to recruit additional subjects from among their acquaintances, and in this study female condom users were used for the recruitment of other female condom users. Snowball sampling technique in this study was found to be a reliable method of identifying other female condom users because all the female condom users and the clinic nurses referred people that they know are using the female condom.

### **3.4.2 Sample size**

One of the most crucial parts in research is obtaining an adequate sample (Parahoo, 2006). In any research whether qualitative or quantitative, ensuring that there is enough data is very important to credible analysis and reporting. Polit and Beck (2006) argue that the sample size is relatively small in qualitative studies and most important the size of the sample is largely dependent on the information needed. In most cases the sample size in qualitative studies range from 8 to 15 participants however, there is always a variation (Whitehead and Annells, 2007). Nevertheless, due to the richness of information needed in qualitative studies thus, these make relatively small

samples suitable to use. For the purpose of this study, 15 participants were chosen because there was no more new information or insights that could be generated from the participants' responses.

### **3.4.3 Selection criteria**

Selection of the participants was made based on the experience with the female condom. The researcher felt it would be necessary to use female students who are users of the female condom because they will give meaningful data on factors facilitating and inhibiting the use of this device. The criteria for selecting the study participants were that they were ever users (current and former) of the female condom when the study was conducted. Information concerning previous experience with the device was required from the participants. If the answer was yes that she had previous experience in using the female condom, then she was eligible to participate in this research. Furthermore, female students were also chosen based on their registration status in the university and their age. Only full-time registered and 18 years and older female students qualified to take part in this research because it was highly convenient for the researcher to reach the participants who are full time students on campus.

### **3.5 Data collection procedures**

The collection of data remains the fundamental part of research and its objective is to provide information that is of good quality. In qualitative studies the methods of data collection that will enable the researchers to get deep insights from the personal lives of the study respondents are imperative. Parahoo (2006) argues that flexible and diverse approaches including action research, interviews, focus group discussion and many more are essential to enable this process. In qualitative studies the most common method used to collect data is interviews. Nevertheless, Whittemore and Grey (2006) argue that in qualitative research the questions forming part of the interview schedule should be unambiguous to the research participants and most important emphasizes the use of correct syntax. According to Polit and Beck (2006) in qualitative research open-ended questions are asked to enable participants to share their personal experiences or stories and as a result semi-structured interviews are thus found to be useful in such cases. In cases where the researcher wants to get personal information from the study participants face to face interviews are thus considered imperative. Whittemore and Grey (2006) assert that in qualitative research where the main objective is to collect data that is richer in details; open-ended questions are often used to allow participants to express themselves in their own words.

The data of this research was collected through 15 open-ended semi-structured in-depth interviews with female condom users. As stated previously individual interviews were used as the main research tool for data collection purposes to understand the multiple levels factors influencing opinions, perspectives and experiences in using the device. The instrument of this research was designed to understand the personal, proximal, and distal factors that shape female university student's reproductive decision-making, specifically looking at factors facilitating and inhibiting the use of female condom. Each participant signed the informed consent form prior to the interview to assure confidentiality, and was provided with a general overview of the study (See Appendix 2). Each interview began by assessing the demographic profile of each participant. These demographic questions covered age, level of education and language. Potential questions of the interview covered knowledge of the female condom, motives for using the device, perceived outcomes for using the device, barriers to using the device use etc. The interviews were undertaken in the private homes of participants because of the sensitive nature of the study. They were conducted inside the rooms of the students at the university residences at the request of participants. Davies (2007) suggests that in qualitative studies researchers are encouraged to listen carefully to the research participants and to note manifestations of any non-verbal behaviour and as a result interviews are recorded to facilitate this process. Meadows (2003) assert that the purpose of recording interviews in qualitative research allows the researcher to have detailed information of responses provided by the study participants and also enables a verbatim transcript for analysis. Consequently, this will allow the researcher to minimize bias that could results from poor notes taking or when the memory lapses. For this reason the researcher recorded all the individual interviews with the permission from the participants. For this study the duration of each interview ranged from 45 minutes to one hour. The data was collected over a 2 weeks period in March 2014.

### **3.6 Data management storage and process**

In this study, the researcher adhered to the Data Protection Acts of 1988 and 2003 principles. To minimize the risk of losing participants information each participant in the study was given a pseudonym. Participants were being referred to as p1, p2, p3 etc. until p15. A locked safe was used to store all the information which only the researcher and her supervisor can have access to. In adhering to the Data Protection Acts recommendations the data will be kept in this locked safe for five years. All the manual data will be shredded and all the electronic data will be overwritten after such time.

### **3.7 Data analysis**

Providing meaning to data is important to the process of data analysis. Polite and Beck (2006) assert that maintaining the quality of data and being concise remains imperative for researchers undertaking the qualitative approach. Several computer programs exist that facilitate analysis of qualitative data. However, for this study data was analyzed through the use of thematic analysis. Thematic analysis was useful because it provided the descriptive presentation of qualitative data. The researcher started the analysis process by first producing verbatim transcriptions of all the individual interviews which were entered into Microsoft word. Main themes were then identified and categorized according to sub-headings by the researcher to enable easy comparisons. Parts of the transcribed interviews from each participant that substantiated the theme were highlighted in terms of direct quotes. The interpretation of the results by the researcher was kept to a minimum and the feelings and thoughts of the researcher made little differences in thematic analysis.

### **3.8 Reliability, Validity and Rigour**

Parahoo (2006) asserts that rigour is the degree to which researchers strive for quality in their research and how to provide quality information. Parahoo (2006) further states that in qualitative studies identifying rigour is challenging however researchers always want their research results to remain reflective of the processes they are studying to provide meaningful information. Therefore, for this study the researcher used a framework by Guba (1981) to enhance the study trustworthiness. The framework has four criteria to evaluate the worth of qualitative studies which include credibility, dependability, conformability and transferability. According to Guba (1981) credibility involves the interpretation of results in a way that is consistent to the data collected and comprehensible to the research participants. In qualitative research, participants remain the most important people that can assess the credibility of the study findings and this is further emphasized by the credibility criteria. Guba (1981) states that dependability is the degree to which qualitative research findings can be replicated in the future. All records from the study were kept in a locked press to enhance the dependability of the study. Guba (1981) further asserts that confirmability is the extent to which the results of the study represent the experiences and ideas of the participants. According to Polit and Beck (2006) in interpreting the findings of qualitative studies subjectivity should be minimize, thus the results of the study should correspond to the main ideas of the respondents. In this study information about the study findings were clarified with the respondents to ensure adherence to this principle. Parahoo (2006) articulates that transferability is the degree to which results of qualitative studies can be

transferrable to other situations. The researcher indicated clearly that the findings of this study cannot be generalizable to other context where the study was not conducted.

### **3.9 Ethics**

A proposal was written and passed through the School of Built Environment and Development Studies, and Higher Degrees Committee, and the Ethics Committee at the University of KwaZulu-Natal before the commencement of this research. All measures were taken recognizing the sensitive nature of the topic, to ensure that the interactions between the researcher and participants were respectful, always ensuring that the autonomy of participants was upheld. All interactions were voluntary on the part of the participants, with only those willing to participate recruited. Each participant was informed about the objective of this study, what is expected of her, how confidentiality will be ensured, and contact details of the researcher and the supporting institution (**See Appendix 2**). Each female student was then able to decide whether she wants to participate. Each participant was required to sign an informed consent letter, which was written to ensure that participants understand what it means to partake in this study.

Confidentiality was maintained in the private interview settings, and each interview was transcribed with no names cited to ensure that individuals were not exposed, and confidentiality was not breached. No names were recorded anywhere throughout the transcriptions or write up. Nevertheless, throughout the study pseudonyms were used. An identification number was given to research participants and no data that could possibly identify participants were entered onto computer files. Digital recordings will be destroyed after the research has been completed in order to ensure the lasting protection of confidentiality of each participant.

### **3.10 Limitations**

The main objective of this research was to gather exploratory information on female condom use among users of the device in an academic setting. Given this, the findings of this research would not be generalized to the rural setting populations, mostly with low levels of education and with different environmental characteristics. Furthermore, the small sample size of this research also suggests that it is not possible to make generalizations of the study findings to the entire population. This suggests the need for a nationwide research on female condom use. Female condom use is influenced by various factors and using only women to understand factors facilitating and inhibiting its use create some bias within the study. Although this is a female

initiated method men have a major influence on the successful use of the device. Hence, this creates a room for the inclusion of men in future research when exploring female condom use. In thematic analysis approach the interpretation of results depend on the researcher and this process could create biases and this remains an important limitation of using this method of analysis. Nevertheless, a systematic coding approach was used in this study to create main themes that emerged in this research and use them in the context that they were given.

### **3.11 Summary**

This study was purely qualitative and used individual in-depth interviews. This chapter explained the researcher's rationale for the methodology used in this study. The different procedures that were employed to conduct this research were outlined. The main ethical issues concerning the confidentiality of the participant's information and informed consent were discussed. The chapter also provided a discussion on possible limitations of this research.

## CHAPTER 4: RESULTS

### 4.1 Introduction

This chapter outlines the main findings from the semi-structured interviews carried out with 15 female condom users. The chapter seeks to provide explanations on potential factors facilitating and inhibiting female condom use among this group of students. The method used to analyze the data collected was thematic analysis. Themes that emerged from the data collected were identified through the use of thematic analysis.

#### *Sample Characteristics*

In total, 15 interviews were conducted with female university students. Participant's ages ranged from 22 to 27 years old. The average respondent was 23 years old. IsiZulu was the widely spoken language by the study participants. Two of the participants reported IsiXhosa as their first language and one reported Isipedi as her first language. Levels of education were relatively high among this group of female students interviewed; eight of the participants were postgraduate students and seven were undergraduate students. All participants were current sexually active and ever users of the female condom. Ever users of the female condom included current and former users of the female condom. Current users were defined as those who reported using the female condom and they had used it at least in the last sexual intercourse and former users were defined as those who reported using the female condom but they were no longer using it at the time of the study.

Different types of female condoms are available in South Africa including the second-generation female condom (FC2), Cupid female condom, and the VA female condom. However, the first type of female condom to be available in South Africa was the first-generation female condom (FC1) made of relatively expensive material polyurethane. The FC1 is discontinued because of various concerns including cost and acceptability. Several new condoms have been developed and others are still under development that addresses these concerns of the FC1. At the time of this study participants reported using the FC2 female condom which was developed after the first type of female condom. This type of female condom as discussed previously is made of synthetic latex, and is widely available in the public sector in South Africa. The FC2 is similar in specification and appearance to the FC1 but differ in the material used. The FC2 is made of cheaper material and is less costly than the FC1.



**Table 1. Frequency distribution table of the study sample**

<b>Characteristic</b>	<b>Number</b>
<i>Age (in years)</i>	
22-23	7
24-25	4
26-27	4
<i>Language</i>	
IsiZulu	12
IsiXhosa	2
IsiPedi	1
<i>Educational Level</i>	
Postgraduate	8
Undergraduate	7
<i>Usage of female condom</i>	
Current	13
Past	2
<i>Type of condom used</i>	
FC2	15
<b>Total</b>	<b>15</b>

#### **4.2 Source of information**

All the participants interviewed in the study had knowledge of the device and they had use the device before and some of them were still using it. Participants were asked about the source of information about female condoms. Participants reported various sources that provide information on female condoms. The availability of the female condom remains a significant factor inhibiting the consistent use of the device. The high price of this device has posed challenges to the accessibility of this dual method of protection. Furthermore, lack of female condom promotion poses a challenge and is often cited as a significant contributing factor to the non-use of this device. For instance, compared with male condoms, female condoms are hardly promoted, distributed, advertised or demonstrated. Consequently, the high price of the device in many countries has been largely associated with such a lack of promotion. Therefore, knowing where students obtain information about female condoms is imperative because it provides an indication on the availability and accessibility of the device to this group of students.

More than half of the participants articulated that they found out about the female condom on campus. Some mentioned that they discovered the device when they went for HIV testing at the student HIV Centre. They also reported that they found about the device during a promotion campaign on female condoms where they were given samples and this was facilitated by the nurses from the university clinic on campus. Other participants mentioned that they heard about the device during a mentorship training programme they attended at the University.

*“I regularly check my HIV status now and then as I am a very responsible young lady. I found out about the female condom at the student HIV centre on campus during testing” (P1).*

*“I found about the female condom on campus. Some nurses from the clinic came to campus to promote the female condom and they gave us samples and that is when I found out about this product and I actually took one home” (P3).*

*“I first heard about the female condom in the training for the mentorship programme that I had to go to at UKZN PMB campus” (P4).*

Participants also mentioned that the first time they heard about this device was when they visited the clinic at the University. One of the participants mentioned that she read a pamphlet which dealt with the female condom, and then she decided to find out more about this device at the clinic, and after they provided her with the information about the device she then decided to try it for herself.

*“I found out about the female condom at the university clinic” (P9).*

*“Funny enough I was just walking when I saw a pamphlet on the side of the road. I just picked it up and I was just looking through it, so I discovered that there was something regarded as the female condom which is interesting as men do not like to use a condom, so I thought ok I should find out more about it, so then I went to the clinic. I found out more stuff about it so I gave it a try” (P10).*

Another participant mentioned that she found out about the female condom in class when she was doing an honours course. The participant mentioned that she did the HIV/AIDS service learning course and that is where she found out about the device.

*“I found out about the female condom in 2012 when I was doing my Honours. I used to do a course called HIV/AIDS service learning and that is where I learned about the female condom” (P13).*

Furthermore, two of the participants reported that they found out about the female condom through the mass media. They reported having first seen the female condom on television programs such as Soul Buddies and Soul City and also heard about the device on the local radio station.

*“I first saw the female condom on TV in Soul Buddies and Soul City” (P5).*

*“The first time I heard about this product, the female condom was on the radio” (P15)*

### **4.3 Reason for using female condom**

#### **4.3.1 Perceived risk**

Individual perception of risk has been identified to be a significant factor influencing adoption of safer sexual practices, such as the use of condoms. Literature shows that the probability of getting infections remains higher among women compared to men (UNAIDS, 2007). Participants were asked about reasons for initial using the device. It was evidenced from the study findings that this group of students perceived themselves to be highly at risk of infections and pregnancy. Therefore, the study participants felt motivated and acted to protect themselves from the dual risks of HIV/AIDS and unwanted pregnancies by using the device. The device offers women dual protection. For instance, this device provides protection against infections and pregnancy. Female condoms are designed from polyurethane and latex which creates a strong protective barrier against infections. Thus, protection from STIs including HIV and unwanted pregnancy was the initial reason for the majority of the participants in this study for using this device.

*“The main reason for using the female condom is for protection obviously, so that I would not have an unplanned pregnancy and I would not get sexually transmitted diseases” (P5).*

*“After hearing my lecturer speaks about the femidome and all the reasons she gave on the use of female condoms. I thought that it would be better for me to use it as well to protect myself against HIV infection and other infections that occur in sexual intercourse and to prevent pregnancy even though we know that it is not 100% protective but then it is something” (P13).*

*“I used the female condom mainly because I wanted to prevent myself from getting diseases like AIDS, STDs and also to prevent myself from getting pregnant” (P14).*

### **4.3.2 Sexual Experimentation**

For some participants sexual experimenting with the device was the initial reason for using this method. Respondents in the study mentioned that they first experimented with the female condom to see how this new device would work. Some of the participants emphasized that in most cases when people think of a condom usually what comes to mind is the male condom, so as a result they had no clue or idea on how this new device could work and then they wanted to try it out. They also mentioned that things in life are very fast and they want to protect themselves from the dual risks of infections and pregnancy, thus they felt it was important for them to try out the device.

*“To be honest the main reason why I used the female condom was to just try it out and see what this thing is about. When we think about condoms we only think about the male condom. I decided to try it out and see what it is all about” (P7).*

*“Ok of course in this life things are very fast and you want to have protection yourself. The way the lady has described the female condom to me, I felt the need to use the female condom because I wanted to try it up, so that was the reason” (P1).*

### **4.3.3 Power and Autonomy**

The participants in this study mentioned that the device offered them a unique opportunity to initiate safer sex with their partners and to be able take charge of the situation that could put themselves at high risk of infections and pregnancy. Participants viewed the device as a way of empowering them to facilitate sexual negotiations with their partners. From the interviews female students reported that this method provide them with greater autonomy and power to their sexual health. Participants also believed that with the availability of this method, they can

negotiate protection with their partners in the relationship to protect themselves if the partner is not willing to use protection. In a nutshell, the device improved women's ability to participate actively in sexual negotiations to initiate safer sex as women get to decide on female condom use. They further highlighted that the device gives power to young women like them regarding their sexual health. Meaning that, the device made participants to feel in control over their own bodies and sexual health. Furthermore, participants felt that with female condom availability they can provide their partners with an option to choose from either the male or the female condom. They can also use female condoms when the male partner uses an excuse not to use male condoms. Therefore, this results in an increased number of protected sexual acts because if the male partner is not willing to use protection then the woman will use the female condom.

*“As I just said that it is empowering to know that as a woman you get to decide to use the condom, like normally it is men that use the condom. For me personally, I also believe that the female condom gives power to young women like me regarding my sexual health. It gives control over my own body and a sense of control over my sexual life” (P2).*

*“I think the main reason for me was that sometimes my boyfriend does not want to use protection. So I just wanted to have that sense of control and power that I can do things to protect myself in the relationship. Also to have that sense of control that since he does not want to use the condom, I can do something about it, meaning that I can use the female condom and that was the main reason for using it” (P3).*

*“Like I said you know how men can be, you know how reluctant and careless they are when it comes to using a condom. so I thought it is going to give me power you know to have control over situations regarding safer sex and protecting myself” (P10).*

*“Because sometimes men usually they do not carry condoms around them. So in order to be on the safe side it is better if I carry my own, so whenever he uses an excuse that he does not have the condom so we will not have unprotected sex, I would just take my own from my bag” (P11).*

*“Well, I would think the reason for using a female condom is because as a lady you would like to be in charge of a situation that could put you or your health in danger. So I feel that as an independent woman you are just taking charge of the sexual situation” (P12).*

## **4.4 Female condom versus other methods**

### **4.4.1 Best option**

Participants in the study provided various reasons for choosing the female condom over other contraceptive methods that are available such as pills and injections. The device is imperative in providing protection against infections and pregnancy. Most participants found that the device remains an excellent option as compared to other contraceptive methods. This group of students mentioned that the female condom is one of the best options that provide double protection against infections and unwanted pregnancy. They further articulated that pills and injections are only used for contraceptive purposes and they are not as effective as the female condom in terms of pregnancy prevention. Furthermore, participants reported the common side effects associated with either taking pills or injections as contraceptive methods. These included weight gain, irregular bleeding, increase in acne, decrease in libido and many more. Participants also reported alternating between the two types of condoms as it expands the options for safer sexual behaviour. They further emphasized that alternating between the two types of condoms increases the probability of having protected sexual intercourse.

*“A condom protects women from STIs and other infections. Pills and injections do not” (P2).*

*“Well, you can use contraceptives like pills but they will never protect you from contracting HIV and other STIs. They do not work 100%, you find that there are people who use pills but they still get pregnant. It is rare but it happens. But with the female condom you are sure that there would not be any pregnancy and you would not contract any other STIs if it is used consistently and correctly” (P5).*

*“Well, pills and injections only prevent you from falling pregnant, and we are living in a country where STIs are everywhere and HIV as well. So definitely the condom was the one to give me protection from both infections and unwanted pregnancy” (P7).*

*“I chose the female condom because I think it is a safer option for me against HIV and unwanted pregnancy” (P15).*

However, other participants also emphasized the combination of both injections and female condoms. For instance, one participant mentioned that the device is not only the preventative

measure she is using; she is also using methods including injection which she believes provides double protection. The participant reported using the female condom and injection for different situations. For instance, she is using the injection for preventing pregnancy and also uses the device for dual protection against infections and pregnancy.

*“I do not use female condoms only. I also use other prevention measures like injection. It is “double protection” if I can say” (P8).*

#### **4.4.2 Change in Body image**

The device provides a dual protection for women against infections and pregnancy. More than half of the participants reported that they will not stand for the negative side reactions of hormonal preventative measures and this became an important facilitator of female condom use because the device does not contain any well-known negative side reactions. In all the interviews participants articulated that the female condom is made of polyurethane and latex, and thus they had never experienced any major side effects regarding its use. Nevertheless, respondents mentioned that the device might only cause allergic reactions such as irritation but the risk is not as great. They further articulated that they used the device for the reason that it provides them with a barrier method of protection against infections. They knew that hormonal contraception does not protect against the risk of HIV infection.

*“Injections have side effects; I have seen my friends gaining weight after using injections. It is a “no no” for me because my body is very sensitive. Of course like I have mentioned you cannot prevent HIV with the other contraceptive methods, so a condom is at least 99 percent guaranteed” (P1).*

*“I believe in natural things, so like for me using all this other measures for preventing pregnancy are not sufficient and are not healthy and they have side effects in the long run and so forth. But also I think the female condom is more safe and more protective because it helps you prevent HIV as well, unlike the other measures of contraception” (P10).*

*“With regard to injections and pills I have the fear about what they say about contraceptives; “they make you huge”. So there are many side effects and that is why I chose the femidome” (P13).*

#### 4.5 Frequency of female condom use

There was a wide variation in responses when participants were asked about the frequency of use of the device. However, despite the variation it is clear from the findings that the female condom is not used consistently. All of the participants reported using the device with their boyfriends or long-term partners. Knowing who participants practice safer sex with remains imperative to assess their susceptibility to infections and pregnancy. For instance, having multiple sexual relationships is linked with high risk of getting infections. Majority of the participants (n=8) mentioned that they do not use the device often and for some of them it was a once-off or twice-off thing, and they had never used it again. Some of the reasons provided by the participants for not using the female condom often were that, it is not very comfortable and difficult to insert. For instance, participants reported problems associated with the initial use of the device in particular due to the uncomfortable nature of the inside ring which a number of participants articulated as being sore sometimes.

Despite that, they acknowledged that the device becomes easier to use with practice. Participants further raised concerns about tight fitting of the female condom and vaginal irritation. In addition, they do not use the female condom every time because the device is hard to access. For instance, participants reported that compared to the male condoms, female condoms are hardly promoted, distributed, advertised or demonstrated. Furthermore, they reported that the device is not available in most public places where you likely to find the male condom. Participants in the study highlighted that, information about the female condom is limited and in all the publications and advertisements concerning sexually transmitted infections, the male condom remains the most promoted method to prevent infections compared to the female condom. In addition, participants also reported alternating between male and female condoms because their partners sometimes insist on using the male condom. This remains an imperative strategy in the fight against HIV/AIDS pandemic.

*“Well honestly I used the female condom twice and that was it. I could not use it again. I guess it is one of those things that are not for me. I was not very comfortable with it. I used it with my only one boyfriend that I have; I do not have many sexual partners” (P1).*

*“Normally the female condom is not used often by me, but usually once a week and I use it with my long term boyfriend” (P2).*



*“To be honest not everytime, because my boyfriend always insists on using the male condom and I actually use the female condom with my boyfriend” (P3).*

*“It was only at that one time when I actually tried the female condom. Otherwise I would not say it is something I use often. At that time I tried it with my boyfriend” (P7).*

*“Not always because is very hard to get the female condom and even the insertion is so hard. I use the female condom with my boyfriend” (P8).*

*“To be honest with you it is a bit uncomfortable so I do not use it that often. Luckily for me my partner is very understanding so most of the time we use the male condom. So I would say maybe twice a month. I use the female condom with my partner of course” (P10).*

Despite the majority of the participants reported less frequently female condom use, however, four participants asserted consistent use of the device almost every time they have sex with their partners.

*“I use the female condom every time I have sex. I use the female condom with my boyfriend” (P6).*

*“I use the female condom almost all the time I have sex. I use the female condom with my boyfriend” (P11).*

*“Every time I have sex with my partner” (P15).*

*“I use it almost every time I have sex. I use it with my fiancée” (P14).*

Three of the participants highlighted that they have sex every time they see their partners because of the nature of their relationships. For instance, they mentioned that they are in a long distance relationship. They reported that they use the female condom two to three times a week depending on how often they see their partner.

*“Ok on a scale of 1-10 I would say five times. I often use the female condom with my boyfriend” (P13).*

*“Maybe I can say two to three times a week depending on if I see my boyfriend because it is a long distance relationship. As I have mentioned I use the female condom obviously with my boyfriend” (P9).*

*“About five times a week and with my boyfriend obviously” (P5).*

#### **4.6 Reason for using FC with partners**

As discussed previously, respondents felt that they were more susceptible to infections and pregnancy. Thus, female condom use remained an imperative strategy to address such risks. Participants were asked the importance of female condom use with their partners. More than half of the participants articulated female condom use with their partners because they wanted to practice safe sex. Participants emphasized that it is not that they do not trust their male partners, but since both of them are still young and studying, thus it was of benefit for both of them to use protection as they do not want to give themselves responsibilities of looking after children while they are not ready for it. Participants further highlighted that even though they are in a committed relationship, it is not easy to trust someone, thus it was important for them to always protect themselves. They also reported that it was important for them to be always on the safe side because in as much as they love their partners they could not be sure of what their partners are doing with their lives outside the relationship.

*“Because we encourage safe sex and as we are both still at the university I think it is just a benefit for both of us as we do not want children anytime soon” (P1).*

*“Not that I do not trust him. I am still in school and he is still in school as well, and we still have a lot of things to achieve while we are still young and we do not want to give ourselves the responsibility of looking after a baby while we are not ready for it. We want to further our studies and you know live life while we are still young without any responsibility, so it is important that we both use the condom” (P5).*

*“Even though you can be in a relationship or in a committed relationship but you can never be sure especially in this country, so it is important to protect yourself. If you are in a relationship where the partners say they love you, they should love you enough to protect you” (P7).*

*“Because as much as I love him I cannot write it in blood that I know what he is doing with his life. So it is just important for me to be on the safe side” (P12).*

Distrust between partners is common in relationships and is one of the significant factors facilitating the use of protection. For instance, in this study one of the participants mentioned that she uses the device with her partner because she does not trust her partner. She further highlighted that her partner is always out with other women, and this has forced her to have many female condoms in her room in order to protect herself.

*“I do not really trust my fiancée. You know he is always with girls and he is always busy so like I do not trust him. This gives me a reason to have lots of female condoms in my room” (P14).*

Participants further emphasized that the female condom gave them power and autonomy to negotiate safer sex. They articulated that they used the device with their partners so that they can have power over their bodies and their sexual lives. Participants further reported that it gave them strength to know that they can also use protection on their own rather than depending on their male partners. They also felt that they have power to protect themselves because of the fact women can use the device on their own.

*“So that I also have power over my life, my body, and my sex life” (P4).*

*“I think it gives me the strength that I can also use protection on my own rather than him using the condom. Because what I have noticed is that it is like this male condom is the only thing for protection but then I can use it on my own. I feel that I have power to protect myself” (P8).*

#### **4.7 Peer influence to FC use**

Peer pressure has been regarded as one of the factors that create barriers to safer practices (Eaton et al., 2003). Nevertheless, peer influence does not always have negative effects. Perkel (1991) asserts that safer sexual behaviour can be facilitated by peers who act as positive role models.

The study indicated that more than half of the respondents (n=13) mentioned that female condom use was a personal decision and they were not influenced by their peers to use it. Participants further mentioned that they rarely talk about sex with friends and what they know about female condoms they learned about it in school and TV. They also reported that after learning about the female condom they became interested in using the device and actually they ended up influencing their friends to use it.

*“We do not talk about sex with my friends, a lot of what I know is what I learned at school and life orientation and what I saw in Soul Buddies and Soul City” (P5).*

*“Not really because I just learned about the female condom at school then I decided to use it. So it was my personal decision” (P8).*

*“Well they did not influence me to use the female condom. As I have said before I learned about the femidome when I was doing Honours and I was quite interested in seeing how it works and then it worked for me. So actually I am the one who is influencing my friends to use the femidome” (P13).*

Participants further highlighted that they discovered that most of their friends were not using the female condom. They also mentioned that they researched the device which also made them to be quite interested in using it, further suggesting that it was their personal decision to use the device.

*“Not really, because most of the time when I had discussed it with them, I discovered that most of them are not even using it. So, basically it was a personal decision to use and research the female condom and that made me to be interested in using it” (P6).*

Participants mentioned that they spoke about the device to their friends only after using it and they believed that they were the first ones to use the tool. They also reported that they find it interesting and they needed to find out more about it at the clinic.

*“No they did not because I have never spoken to my friends before using it. So I used it before and then we spoke about it like later on. I think I was the first one to use it among my friends. So yes, it was my personal decision” (P9).*

*“Not really, it was my personal choice as I mentioned before I found it interesting and then I needed to find out more about it at the clinic” (P10).*

*“No they did not, as I said I was at the clinic and this other Nurse explained it to me and I liked it, I thought it was good idea and I thought I should try it. I took the decision by myself so it was my personal decision” (P11).*

However, two of the participants mentioned that their decision for using the device was a result of discussions with friends. One of the participants emphasized that the friend who suggested the female condom use was not very confident and comfortable with the female condom.

*“Well I have a friend who has used it. I spoke about it with her before using it, she was not very confident with it, and she was not comfortable as well. She sort of did encourage me to use it because she knows of the type of person I am. So yes that is how she did it. You know us girls we talk” (P1).*

*“Yes, my friend actually did influence me to use the female condom as she was the one who suggested it to me” (P14).*

#### **4.8 Experiences of using female condoms**

The female condom is a fairly unique contraceptive method in terms of its double protection function against STIs including HIV and unwanted pregnancy. However, the device is not without challenges like any other contraceptive methods. The study findings revealed that more than half of the participants articulated problems with female condom use. The majority of participants (n=14) mentioned that first time female condom insertion was a difficult procedure. Most of the participants reported that when they started using the device they experienced difficulties in inserting and properly positioning the female condom. Participants mentioned that they were really not sure how to insert it properly for example, how much you need at the bottom and how far to push it up because no one educated them about the device. Participants pointed

out that even though the female condom comes with instructions, they are not easy to follow and the fact that the device is not well advertised also creates difficulties. For instance, the device remains unpopular compared to male condoms. This method is hardly promoted and available, and it is very rare to find pamphlets promoting the device. Participants noted that they experienced difficulties inserting the device the first time they used it. One participant stated that inserting the device was a “nightmare”.

*“It is weird inserting it. It is like you are putting on a tampon and if you are not a person who uses a tampon it is very difficult to insert the female condom when you are the first time user” (P2).*

*“The major problem was actually at the beginning when I first started to use the female condom. I had a bad experience at first when I tried to insert it, I read the instructions but it was not easy. The practical part of actual applying it was a “nightmare” I had to do it over and over again” (P6).*

*“The only problem I had was that I was not really sure how to use it properly, even though it comes with instructions at the back but, because unlike the male condom the female condom is not advertised and nobody educated us about exactly how to insert it properly, and how much do you need at the bottom and how far to push it up” (P7).*

One of the challenges associated with using the device is that tool needs to be inserted properly and tight and if it is not inserted properly it may fall off. The female condom needs to be positioned properly and ensure that the inside ring of the device is attached tight to the cervix. Two of the participants mentioned instances where the female condom actually slipped out of their bodies.

*“The female condom usually slips out of my vagina” (P14).*

*“Ok, sometimes it falls off. It does this if it is not inserted properly. The other day it fell off. (P11).*

Participants further emphasized that the device itself is not comfortable and the fact that the device has to be inserted just before sexual intercourse makes it a very uncomfortable procedure. Participants emphasized problems associated with putting in the female condom in particular the uncomfortable nature of the inside ring which a number of participants articulated as being sore sometimes. They also mentioned that the device insertion was very uncomfortable due to tight fitting of the device. Participants pointed out that when you are about to have unplanned sex with a person inserting the device prior to the intercourse is not comfortable and it seems like you have actually planned the whole process and it does not happen naturally. Thus, some of the participants reported that putting the device before sexual intercourse takes away the sexual drive and the romance.

*“Ok firstly the fact that you have to insert it before intercourse is a bit uncomfortable. Two, the female condom itself is not comfortable like how do you insert it. It is not a very comfortable procedure” (P1).*

*“Because you need to insert it before you actually have intercourse, you know that you are about to have sex. It is not comfortable because sometimes when you are about to have sex with a person and it is unplanned, it just “kills the vibe” and “kills the romance” because it is like you actually planned the whole process, it does not happen naturally” (P11).*

## **4.9 Barriers against Female condom use**

### **4.9.1 Availability of the FC**

One of the significant factors hindering female condom use condom is inadequate access. Participants emphasized concerns about the distribution of this device reporting insufficient supply of the device compared to male condoms. In comparison with male condoms this device remains unpopular. Participants mentioned that female condoms are not easily accessible; they are very rare and hard to get. They further emphasized that compared to male condoms, the device is not available in stores, hospitals and clinics, and if it happened you will find one or two in display for people to know that it exists. However, with the male condom you are more likely to find boxes of them in public places such as in toilets, clinics and in stores.

*“I think the supply of the female condom is not as much as male condoms so they are very rare and hard to get” (P1).*

*“Well first of all I do not think the female condom is much this days like the male condom. You find that in the clinic, like in the university clinic for instance, I assure you that you will find a male condom not just one or two you will find boxes of male condoms, but rarely will you find a female condom if you do maybe you will find one or two on display, just so that women will know that it exists. In stores they only have the male condom and they do not have the female condom” (P5).*

*“You cannot even find them like in toilets. Yes even here in the University you can only find the male condom but not the female condom. I think also maybe it is because it is expensive. Maybe this is the reason that you cannot access the female condom easily” (p8).*

#### **4.9.2 Lack of awareness**

Lack of awareness is another major barrier to female condom use. Literature reveals that in comparison with male condoms, female condoms are hardly promoted, distributed, advertised or demonstrated. For instance, the device is reported to be not available in public places where one is likely to find the male condom. The high cost of the female condom in many countries has been largely associated with such a lack of promotion. This group of female students raised concerns regarding the awareness of the device and they cited that awareness is not sufficient. Participants mentioned that in most cases the majority of women are not aware about the availability of this device. Media plays a huge role and is highlighted as the main source of information on female condoms. However, participants reported that there is lack of sufficient communication about the female condom from the media. Participants further mentioned that the male condom is widely advertised and likely to be found in public toilets while on the other hand it is hard to come across pamphlets advertising the female condom and hard to find in public toilets.

*“I think awareness is not high enough, because out of my five friends in the room only one has actually used it. So I feel like the awareness is not done enough, because many women are not aware of the female condom” (P1).*

*“I do not think there is much communication about the female condom from the media to the people” (P5).*



*“One of the reasons is because the majority of women are not well informed about the female condom; maybe one can say that this is with regard to the way it has been marketed. Because even if you can go to the nearest toilet you will find adverts or pamphlets on the male condom and you will find the male condom in the toilet. But talk of the female condom you will hardly find it in public toilets, you hardly come across pamphlets advertising it” (P6).*

### **4.9.3 Stigma**

The stigmatization of the device and the fact that condoms in general are associated with a lack of trust poses a huge challenge to female condom use. In most instances, condoms are thought to be suitable for use in casual partnerships (especially sex workers) and this in turn makes it fairly difficult for women especially in marital relationships to introduce the female condom when it is crowded by such perceptions. Due to the extensive advertising of condoms in HIV/AIDS awareness campaigns, therefore, condoms are probably associated with promiscuity and illicit sex. For instance, negative perceptions are linked to a woman carrying a female condom implying that she is promiscuous. Stigma remains one of the factors that contribute towards unsafe sex practices. One participant reported that the stigma attached to the use of condoms remains the most significant factor hindering female condom use. She highlighted that the device is associated with lots of stigma. For instance she reported that as a woman if you talk about the device you are perceived as forward when it comes to sex. Furthermore, women who tell other people that they are using the female condom are taken to be promiscuous.

*“There is the stigma that is attached to the female condom. As a woman if you talk about it or discuss it with your partner, that is with regard to the women I have spoken to, you will find that they are taken like they are a bit forward when it comes to sexual orientation you know. So some women are taken to be promiscuous if they tell other people that they are using the female condom. So basically there is still lot of stigma attached to the female condom” (P6).*

### **4.9.4 Long insertion time**

Participants in the study reported that the device needs to be inserted few hours before sexual intercourse, and having to insert the device prior to intercourse could pose some challenges to female condom use. However, this is not true because the female condom can be inserted just before the sexual intercourse like the male condom not few hours before. Consequently, participants found the female condom to be suitable with premeditated sex, which allows women

to have more time to place in the device in advance to adjust to body heat. On the other hand the study participants articulated that it was not easy to use the female condom with unplanned sexual intercourse because they cannot tell their male partners to wait for the female condom to adjust to the body heat before they can have sex. Participants suggested that the developers of the device should create a tool that will enable women to have freedom like the male condom.

*“I think the fact that you have to put it on before you can sleep with a person is a “turn off”. Maybe future developers of female condom should create something that you do not have to wait before you can use it like the male condom. That should give you the freedom to be spontaneous” (P2).*

#### **4.9.5 Pressure from partners**

Sometimes men believe that the female condom allows women to have more power when it comes to sex. Thus, female condom use refusal by the male partner puts pressure and leads to women being reluctant to initiate female condom use. Such a prophylactic method is therefore hardly brought up since women fear rejection and losing a partner. One of the participants mentioned that pressure from the male partner could be an important barrier to female condom use. The participant highlighted that sometimes male partners would think that they are no longer in charge of the sexual intercourse and that the female condom make sex unpleasant, thus they would disapprove of the use of the device.

*“I think it is sometimes the pressure from their partners, male partners who perhaps think that they are no longer in charge of the situation or sometimes they may complain that their sex is not as natural as they like it to be” (P12).*

#### **4.9.6 Partner objection**

Many studies have confirmed that for successful use of the female condom partner’s cooperation is essential (Hoffman et al., 2004). This suggests that the device cannot be used without the male partner involvement (Mathews and Harrison, 2006). Partner objection is one of the significant barriers inhibiting the use of the female condom. Thus, male partner’s response to female condom use is a significant determinant of the use of this device (Welsh et al., 2001). Participants in the study reported that men do not like using condoms and they do not approve the use of this device because they assume that it interferes with their own sexual pleasure. They

further mentioned that in as much as they want to protect themselves in the relationship but they first have to negotiate female condom use with their partners before they can use the device. This emphasizes the extent of the unequal power in sexual decision making, particularly the extent of women's disempowerment in sexual decision making. The subordinate position that women hold in the society adds to a situation where females are unable to take active role in sexual decisions negotiation. This also interferes with women's autonomy, limiting their decision making power to initiate female condom use. Negotiating the use of the device remains difficult especially for women due to gender inequalities. Furthermore, cultural norms perpetuate the sexual domination of women in relationships to negotiate female condom use.

*“Most men do not like using condoms and they will never approve the use of the female condom. They believe that it interferes with sexual pleasure” (P15).*

*“In as much as you want to protect yourself but you cannot use the female condom without your partner. He needs to agree” (P7).*

#### **4.10 Recommend use**

The study respondents appreciated the availability of the device and this was reflected in their responses. More than half of the participants like the device and even reported great satisfaction in recommending this female-initiated device to other women. Participants also emphasized that this device provides them with the power to initiate safer sex in sexual relationships with their spouses. Thus, more than half of the respondents in the study (n=13) mentioned that definitely they would advise the use of the device to other women. Participants articulated that they would advise the use of the device because women need to protect themselves and it is very important for women to take charge of their own sexual health, thus to have a sense of ownership over their own bodies within a relationship. Participants highlighted that, as women they need to take an active role in negotiating protection within the relationship and not to leave discussions on sexual matters only in the hands of men.

Most importantly, participants emphasized that with the advent of this device they now have the same power as their male counterparts to protect themselves. In all the interviews they argued that they would recommend the device because the female condoms give women power to facilitate sexual negotiations and to have control over their sexual health. Thus, they will

recommend it so that as women they can be empowered, so that men cannot make decisions for them when it comes to sex. Participants further highlighted that they would recommend the device for protection against STIs and HIV. Furthermore, they do not like it when women go for abortion because of unwanted pregnancy, therefore they would recommend it for prevention of unwanted pregnancy.

*“Yes I would recommend it to other women, because we all need to protect ourselves. I think it is very important for a women to be in control of their health and body and especially their sexually relationships. As a woman you need to be in control of every aspect of it and not leaving everything in the hands of men. As women we do not need to depend on men as people always have perceptions that men are the ones who always have to put on the condom, while as women we have that same power to protect ourselves. So these are the reasons I would recommend the female condom” (P3).*

*“Yes I would, so that as women we can be empowered and empower ourselves and not think that our partners are the ones who have to make the decisions for us. So yes, I would recommend the female condom” (P4).*

*“Yes I would recommend the female condom to other women for some few reasons. Firstly, I would recommend it because it gives women power to negotiate safe sex and be in control of their sexual health. Secondly, I hate women going for abortion because of unwanted pregnancy, so I would recommend it for the prevention of unwanted pregnancy. Lastly, I would recommend it for protection from diseases like HIV and STIs, yes that’s all” (P5).*

*“I would definitely recommend the female condom because I believe it gives women power to initiate safer sex and you know how men are; they are very stubborn, inconsiderate, and selfish when it comes to male condom use. So I will definitely recommend it in that sense” (P10).*

Nevertheless, some of the participants felt a bit uncertain and reported that they will not advise other women to use the device; with reasons being that it is not comfortable, not convenient for use and they thought that it is not very practical to use. However, they mentioned specific conditions where they would recommend the device. They argued that they would not recommend it unless the female condom is the only option available for protection during the

time of the sexual intercourse. Furthermore, participants mentioned that they would give recommendation of the device to women who have planned sex with their partners; these would be women who know when they will have sex with their partners.

*“I would recommend it to all the ladies, but actually no I would not recommend the female condom. It is not comfortable, not convenient, and I do not think it is very practical. I would only recommend it if there is no other form of protection at that time and the female condom is the only option available” (P1).*

*“I do not know. I would recommend it for women that know when they will have sexual intercourse with their partners. It would probably work better” (P2).*

#### **4.11 Summary**

The study findings have indicated that female condoms provide a unique opportunity for women to have control over their own bodies and power to negotiate sexual decisions in relationships. This method provides greater autonomy and a sense of power and control for women to take charge of the situation. With the availability of the female condom women can now protect themselves in the relationship if the partner does not want to use protection. Despite that, female condoms are not without challenges. For instance the use of the device comes with its own problems, including difficulty inserting it and feelings of discomfort. However, female condoms have been deemed to be effective and a highly desired dual protection method which can be associated with great improvement in women’s health especially their sexual and reproductive health.

## **CHAPTER 5: DISCUSSION AND CONCLUSION**

### **5.1 Introduction**

More than ten years have lapsed since the female condom has been introduced around the world. The most interesting fact is that this device is still the only available female tool that provides double protection method for women. The device is a preventative measure against infections and pregnancy. Therefore, by giving women power to initiate safer sex the device allows women to take charge of sexual decision negotiations. The female condom improves women's capabilities to initiate safer sex with their partners and this has been evidenced from previous qualitative research (Gollub, 2000). Mathenjwa and Maharaj (2012) also assert that the female condom gives power to women to participate actively in sexual decision making despite the existing inequalities and women's lack of power in sexual relationships. This was also evidenced from the study findings; participants reported that the availability of the female condom provides them with the much needed control and power to initiate safer sex even in the situation where their partners are not willing to use protection. Participants emphasized that the device allowed them to take charge and to be in control of the situation that could increase their risk of infections and unwanted pregnancy. However, few limitations must be acknowledged in analyzing the study findings. The study findings will be not generalizable to the total population of female university students due to the relatively small sample size. Furthermore, this research was carried out among female university students which are deemed to have higher levels of knowledge, thus, the study findings will not be generalizable to the entire population mostly with low levels of education. Therefore, this underscores the need for nationwide studies on female condom use. Despite that, the study does provide insights on female condom use in particular factors facilitating and inhibiting the use of the device.

### **5.2 Discussion of findings**

Study participants reported various sources that provide information on female condoms. However, more than half of the study respondents articulated that they found out about the device on campus at the University. For instance, some of the participants mentioned that they found out about the device when they went for HIV testing at the student HIV center. Others reported that they found out about the female condom during the female condom promotion campaign held on campus where they were given samples. Participants further mentioned that they heard about the device during a mentorship training programme they attended on campus.

Thus, the study finding suggests the significance of providing information on the device at educational institutions. Additionally, other participants reported that they found out about the female condom when they visited the clinic at the University. Furthermore, few of the participants said that they hardly ever talk about sex with friends and what they know about female condoms they learned about it from media messages on Television and Radio. This finding is evidenced from previous research found that respondents first found out about the device from media messages on television and radio (Kerrigan et al. (2000). One of the most interesting facts is that the device gives women dual protection for which the other contraceptive methods cannot offer. The study findings revealed that most of the participants preferred the female condom over other methods of contraception such as pills and injections because it provides them with protection against infections which other methods of contraception do not provide. Seedat (2011) articulates that through the correct and consistent use of condoms infections could be decreased by more than 90%. Although male condoms have been indicated to be 90% effective in providing protection from infections, nevertheless the effectiveness of the female condom has been rated by the United States Food and Drugs Administration (US FDA) to be 94% to 97%.

Demonstrations from many laboratory studies suggest that polyurethane and latex female condoms remain resistant to infections, making it difficult for infectious viruses to pass on (Drew et al., 1990). For example, one study conducted by Trussell (1994) indicated that the risk of infections transmission for a person engaging in sexual intercourse with a HIV sero-positive person could be decreased by 90% through the correct use of the device. The reduction of transmission of infections has also been evidenced from previous random trial research (Gollub, 2006; Minnis and Padian, 2005; Hoffman, 2004; Seedat, 2011). The study participants noted that pills and injections only act as barrier methods against pregnancy and as a result they are not as effective as the female condom. For instance, participants in this study reported that they have witnessed people or some of their friends whom have fallen pregnant while on contraceptive pills and injection. As a result participants found the female condom to be a best option to use as it provides them with 99% dual protection against infections and pregnancy.

Participants reported that they felt protected with the female condom. This continued feeling of being protected is also evidenced from other research on female condom use. For instance, various studies have emphasized that women feel safer and protected when using the female

condom (Dias et al., 2006; Hoffman et al., 2004; Kerrigan et al., 2000). Furthermore, the change in the body image that is associated with either taking pills or injections was highlighted in the study findings as a barrier to the uptake of these contraceptive methods. In general, using injections as a contraceptive method is associated with major side effects such as weight gain, increase in acne, irregular bleeding etc. Across all the interviews the respondents reported that they will not stand for the negative side reactions of hormonal preventative measures and this became an important facilitator of female condom use because the device does not contain any well-known negative side reactions. Therefore, the female condom was found to be a best option to hormonal contraceptives by the participants and this was emphasized by almost all the participants who had either experienced the side effects or fearful of the side effects.

Individual perception of risk has been identified as a significant factor influencing the adoption of safer sexual practices, such as using condoms. Eaton et al. (2003) articulate that low perception of one's personal risk remains a contributing risk factor because it decreases one's motivation from considering important safety measures. For instance, findings from a study conducted by Peltzer (2001) indicate that low perceived vulnerability to infections was the most reported reason for not using protection among university students in South Africa. A study conducted in New Zealand by Abel and Brunton (2005) found that low perception of risk to infections was a leading cause for teenagers to abandon female condom use with their partners. Eaton et al. (2003) assert that one's perception of risk and one's capability to deal with the risk remain imperative to facilitate health behaviour and this point is further highlighted by both the Health Belief Model (HBM) and Social Cognitive Learning Theory (SCLT). The idea that consistent female condom use is significant linked with one's perception of risk is supported by the findings of this study.

The study respondents felt more at risk of infections including unwanted pregnancy, therefore, they felt motivated and acted to protect themselves by using the female condom. This finding corresponds with findings from Strebel and Perkel (1991) which revealed that changes in sexual behaviour is associated with greater perception of risk. However, we also need to acknowledge the fact that perception of one's risk to a health threat is important but it is not sufficient enough to change behaviour. Therefore, this means that knowing one's vulnerability to infections does not automatically translate into the use of the female condom. For instance, a study conducted in Kenya by Thomsen, Stalker and Toroitich-Ruto (2004) found that the belief that the female



condom interferes with sexual pleasure prevented men from using the device especially those who engaged in sexual relationships with sex workers.

The female condom remains the only device that gives power to women to protect themselves against infections. According to Gollub (2000) the female condom provides women with an opportunity to discuss protection in sexual relationships with their partners, and enhancing their ability to facilitate health sexual behaviours. For instance, findings from a four-country female condom study revealed that the device remains imperative in improving women's self-efficacy and independence which on the other hand might open a room for equality in sexual relationships (Rivers et al., 1998). Feelings of greater control and sense of power came out as an important determinant facilitating the use of the device in this study. The device is a female-controlled tool which was developed to provide women with an independent opportunity to use it without reliance on their male partners. In this study female students accentuated that the device increased their independence and a sense of power and control. Participants reported that the female condom offered them a unique opportunity to initiate safer sex with their partners and to take charge of the situation that could increase their risks of becoming infected with sexually transmitted infections and getting unwanted pregnancy.

For instance, participants viewed the device as an opportunity to increase their sexual negotiation power in relationships. They also believed that with the availability of the device they can negotiate protection with their partners in the relationship to protect themselves if the partner does not want to use protection. Thus, the female condom provided them with an opportunity to participate actively in reinforcing safer sex in relationships as they get to decide on female condom use. They further highlighted that the device gives power to young women like them regarding their sexual health. Meaning that they felt they have control over their sexual health. Furthermore, participants felt that with the availability of the device they are able to give their partners an option between the female and the male condom whenever the male partner uses an excuse not to use protection.

The study findings indicated that participants were appreciative of the device and preferred it to other hormonal contraceptive methods because it provides dual protection against sexually transmitted infections as well as HIV and pregnancy. The device is a fairly unique method of contraception in terms of its double protection function; however, it is not without challenges

like any other methods of contraception. The device provides challenges when is used for the first time. All participants in the study reported that when using the device for the first time they experienced difficulties in inserting and properly positioning it. For instance, some mentioned that they were unsure how much to leave at the bottom and how far to push it up. Their major concern was that even though the female condom comes with all instructions however the practical part of inserting it for the first time is a “nightmare”. Other studies have found similar finding reporting first time use of the device as a difficult procedure for most women (Meekers and Richter, 2005; Ray et al., 1995; Farr et al., 1994; Hoffman et al., 2004). Nevertheless, participants in this study also acknowledged the fact that with practice the method becomes easier to use. Also the discomfort of the female condom such as vaginal irritation and slippage during the intercourse was reported by the participants in this study and it was linked with less motivation to use the device. This finding corresponds with findings from previous research (Crosby et al., 2004; Crosby et al., 2005; Sarkar, 2008) which revealed the discomfort of the device as an important barrier to its use. There were also misconceptions reported by the participants about the female condom, such that the female condom needs to be inserted couple of hours before sexual intercourse. However, this is not true because the device can be inserted just before sex like the male condom. It is important to address such misconceptions about the device because they perpetuate stereotypes which inhibit female condom use.

Inadequate availability of the female condom remains an important barrier to female condom use. The study respondents reported inadequate distribution of the female condom in comparison to the male condom. They further highlighted that female condoms are not easily accessible, for instance, they are rare and hard to get. All the participants emphasized that the device is not available in stores, hospitals and clinics, and if it happened you will find only one or two on display just for people to know that it exists. For instance, participants mentioned that even in toilets the only condom you can get is the male condom but it is rare to find the female condom. This result corresponds with that of Seedat (2011) who argues that despite the introduction of the device over a decade ago, however its supply and utilization remains insufficient. UNAIDS (2009) reported that in 2008 2.4 billion male condoms were supplied by donor countries compared to 18.2 million of the female condoms. Nakari and Huurne (2010) assert that female condom distribution in sub-Saharan Africa is inadequate with one woman per 300 women have access to the device. Therefore, this shows that despite that the device has been in existence on the market for a long time however, its availability is inadequate and remains underutilized by

the target populations. Hoffman et al. (2004) asserts that inadequate investments from donors and the lack of confidence from the government's side hinder the widespread distribution of the device.

Another concern is that the female condom continues to be underfunded at the global level. Therefore, this undermines the device's full potential to the fight against HIV/AIDS (Mathenjwa and Maharaj, 2012). Also participants raised concerns about the awareness of the female condom and they reported that there is not sufficient awareness. For instance, they mentioned that women in most cases and especially those from rural areas do not have knowledge on the existence of the device. Their major concern is the insufficient communication about the device. Stigma associated with female condom use was also highlighted as the barrier to the use of the device. Participants mentioned that in general condoms are linked to lack of trust and in most cases are taught to be suitable for use in casual partners especially sex workers. Sarkar (2008) further asserts that due the way in which condoms are promoted in the media, condoms are further linked to promiscuity. Therefore, participants in the study find it fairly difficult for women to use female condoms when they are crowded by such negative perceptions. Such finding corresponds with results from other studies that found that residual social stigma attached to the condom was associated with less frequent use of condoms (Kulcrycki, 2004; Sarkar, 2008).

Mathenjwa and Maharaj (2012) argue that for the successful use of the female condom the male partner's involvement is essential, despite the fact that this method is a female-initiated device developed for women to initiate to have a safer sex. Many studies have confirmed that male involvement is essential for successful use of the device (Hoffman et al., 2004). This suggests that the device cannot be used successfully without the male partner's cooperation (Mathews and Harrison, 2006). Partner objection is one of the significant barriers to female condom use preventing women to use this tool. The male partner's response to female condom use is a significant barrier despite of the woman's interest in using the female condom (Welsh et al., 2001). Participants in the study reported that men do not like using condoms and they do not approve of the female condom use because they think that it interferes with their own sexual pleasure. They further mentioned that in as much as they want to protect themselves in the relationship but they first have to negotiate female condom use with their partners before they can use the device. This emphasizes the extent of the unequal power in sexual decision making, particularly the extent of women's disempowerment in sexual decision making. This also

interferes with women's autonomy, limiting their decision making power to initiate the female condom use. Negotiating use of the device remains a difficult task especially for women due to gender inequalities. Furthermore, cultural norms perpetuate the subordinate position of women in relationships to negotiate female condom use.

### **5.3 Implications and Recommendations**

In summary, the female condom was developed for women to initiate, however the successful use of the tool is influenced by various factors at different levels. Thus, this points out that the use of condoms is a complex process. Similar findings have been reported from other studies (Eaton et al., 2003; Ray et al., 1995; Sarkar, 2008; Kerrigan et al., 2000). The model of sexual behaviour developed by Eaton et al. (2003) also points to the complex nature of sexual behaviour. According to this model the factors that promote risk behaviors or that create barriers to safer practices are structured according to three domains of analysis: personal factors, the proximal environment including (interpersonal factors and the immediate living environment), and the broader social contexts including (structural and cultural factors) (Eaton et al., 2003). In explaining unsafe sexual behaviour in South Africa, the model highlights the powerful impact of the proximal and distal contexts, and especially the pervasive effect of poverty and social norms that perpetuate women's subordination within sexual relationships (Eaton et al., 2003). Eaton et al. (2003) argue that in the South African context, poverty as a structural factor exerts a pervasive influence on young people's behaviour and HIV risk. Furthermore, poverty may also be linked to the discourses that support an unequal distribution of sexual power between men and women (Eaton et al., 2003). Reddy et al. (2000) assert that communication about the risk of STIs and condom use with one's partners has been found to be strongly associated with willingness to use condoms and self-reported use. However, women's ability to practice safer sex in relationships with such an imbalance of power is constrained by their partner's demands. Meyer-Weitz et al. (1998) stipulate that women's ability to negotiate condom use is further hampered by factors such as self-esteem and self-efficacy and cultural taboos against frank sexual discussions between men and women. This shows that attitudes, norms and skills to use the female condom play a major role in the adoption of female condom use (Mathenjwa and Maharaj, 2012). Thus, this suggests that the social norms that exist at the societal level perpetuating the subordination of women in the broader society and within sexual relationships need to be addressed. However, in this study participants reported to negotiate the use of the female condom with their male partners. More fascinating is that more than half of the participants found it easier to negotiate

female condom use with their partners. However, some participants reported that their partners did not want to use the female condom; therefore they used eroticism to convince partners who were initially reluctant to use this female initiated device. Consequently, this underscores the need for negotiation skills as some participants reported that they faced difficulties in negotiating the use of the device. Thus, potential users have to be helped to develop effective negotiation strategies that are contextually appropriate such as how to introduce the female condom in relationships (Mathenjwa and Maharaj, 2012).

The unavailability of the device to the public at large remains the significant barrier to female condom use. Therefore, increasing access and availability of the device to the target populations is one of the key strategies to facilitate its use. Through this process continuous supply, free distribution and social marketing of the condom are to be reinforced with special emphasis on female condoms. The female condom should be made available in all public places like the male condom (Mathenjwa and Maharaj, 2012). The majority of the participants in this study reported lack of awareness as a barrier to the use of the device, the literature suggests the need to improve information and assertiveness towards the device (Bull et al., 2003). Providing knowledge and support on the correct use of the device to women is imperative for facilitating ease use of the device. Knowledge on how to use the device is also a key to facilitate the correct use of the device. For instance, the government of Rwanda is committed to provide its population with information on both types of condoms (male and female) (Rwanda National AIDS Control Commission, 2008). Barigye (2009) asserts that to this end, some of the efforts to promote the female condom include the advertisements posted nationwide through partnership between public and private sectors and other efforts are made by the Population Service International. Hoffman et al. (2004) argue that the high price of the device in many countries is largely associated with such a lack of promotion. Furthermore, the lack of investment from donors, program implementers and governments to the female condom could be linked to the high price of the device as compared to that of males.

Among the study participants, insertion problems which are associated with the initial use of the female condom were commonly reported. For instance, the study participants reported the discomfort of the female condom as the reason for the discontinuation of usage of the device. Therefore, this suggests the need for addressing these initial insertion problems of the device and its discomfort to facilitate the ease use of the female condom. As suggested by some of the study

participants, future developers of the device should also develop a user friendly device like the male condom that would allow spontaneity. The need for increasing female condom use is underscored by global estimates of HIV infections and other STIs among young women which are presently staggering (Oladeinde et al., 2011). The female condom was highly accepted by the study participants due to the prevention effectiveness against STIs and unwanted pregnancies. However, the findings of the study indicate that comprehensive sexual health programmes targeting female university students are necessary to facilitate female condom use. These programmes should include the distribution of the device, opportunities to “practice” correct female condom use and communication to address the misconceptions held towards the device. Furthermore, norms around gender and relationships that drive risky sexual behaviours need to be addressed. The elimination of stigma of associating condom use with prostitution and illicit sex through re-enforced community based female condom campaign programmes is strongly advocated.

#### **5.4 Conclusion**

While the study findings acknowledges the dual function that the female condom provides including prevention of sexual transmitted infections and unwanted pregnancy, however, findings also revealed the low consistent use of the device among the participants. Therefore, this suggests that ways need to be identified on how to facilitate the consistent use of the device. Such measures are necessary since the female-controlled HIV prevention device has great potential if better marketed and distributed. A more comprehensive approach would include male involvement as an approach to facilitate the negotiation of the female condom in sexual relationships. This female initiated device cannot work without men’s involvement since women cannot use it discreetly. Therefore, it is anticipated men’s involvement would increase uptake of the device, thus lowering HIV infection among women. The unavailability issue of the device should be addressed by the stakeholders involved in the supply and this will include increasing the supply of female condoms to the target populations. Due to the complex nature of using the female condom, thus, it is also important that the barriers to the female condom use are highlighted in order for people to overcome them. They say knowledge is power, thus educating female university students on how to use the female condom is necessary to facilitate the use of the device especially in this growing context of feminization of HIV/AIDS. Female condom education will play a significant role to facilitate the importance of using this device to prevent infections and pregnancy among female students.

## **Appendix 1: Interview Schedule**

### Section A: Biographical Data

1. What is your age?
2. What is your first language?
3. What is your highest level of educational qualification?

### Section B: Interview questions

1. How did you find out about the female condom?
2. What was the main reason for using the female condoms? Is there any other reason?
3. Why did you choose to use the female condom in the first place? Why did you not choose another method?
4. How often do you use the female condom? With whom do you often use the female condom with?
5. Why it is important for you to use the female condom with this partner?
6. Did your peers influence your decision to use female condoms? How?
7. Have you ever experience any problems with the female condoms?
8. What are some of the problems you have experienced with the female condoms?
9. What do you think prevent women from using female condoms?
10. How easy is it to use the female condom? Did you have any problems inserting it? What were these problems?
11. Would you recommend the female condom? If yes, why? If no, why?

**Appendix 2: Participant consent form (English)**

**A qualitative exploration of female condom use among female university students in Durban, South Africa**

School of Built Environment & Development Studies, University of KwaZulu-Natal, Durban

I, ..... (Full name of participant) hereby confirm that I have read and understood the information provided by Nomsa Brightness Mahlalela relating to the study being conducted. I have the opportunity to ask questions and I am satisfied with the responses provided.

- I am aware that I have the option of the interview recorded
- I am aware that I may withdraw from participation at any time
- I understand that there is no remuneration for my participation

I am over 18 years old and eligible to participate in this study

Yes No

I agree to participate in this study Yes No

I agree to have my interview being audio/video recorded

Yes No

Participant Name.....

Participant Signature.....

Date.....



### Appendix 3: Participant informed consent (IsiZulu)

#### Incwadi yesivulelwano socwaningo

**Ucwaningo ngokusebenziswa kwejazilomkhwenyane labesifazane kubafundi basenyuvesi, endaweni yaseThekwini eningizimu Africa.**

Isikole sakwa Built Environment and Development Studies, eNyuvesi yakwaZulu Natali, Howard College, eThekwini.

Mina ..... (Igama ngalokuphelele) ngiyakuqinikisekisa ukuthi ngifundile ngayiqondisisa imibandela ethulwa uNomsa Brightness Mahlalela mayelana nocwaningo. Nginalo ithuba lokubuza imibuzo futhi ngiyagculiseka ngezimpendulo ezibekiwe. Nginalo ulwazi lokukhetha ukuba inkulumo iqoshwe.

- Nginalo ulwazi ukuthi ngingahoxa noma inini
- Ngियाqonda ukuthi awukho umnikelo engizowuthola kulolu cwaningo
- Nginalo ulwazi ukuthi kungenzeka inkulumo engizoyithula iqoshwe

YEBO /CHA

Ngineminyaka engaphezulu kuka-18 futhi ngivumelekile

Ukuzibandakanya kulolu cwaningo

Ngiyavuma ukuzibandakanya kulolu cwaningo

Ngiyavuma ukuba inkulumo iqoshwe

Igama \_\_\_\_\_

Isiginesha \_\_\_\_\_

Usuku \_\_\_\_\_

#### **Appendix 4: Participants declaration form**

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I hereby consent/ do not consent to have this interview recorded.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT:

DATE:

**NOTE: Potential subjects should be given time to read, understand and question the information given before giving consent. This should include time out of the presence of the investigator and time to consult friends and/or family.**

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UNIVERSITY OF  
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5 December 2013

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Dear Ms Mahlalela

**RE: PERMISSION TO CONDUCT RESEARCH**

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

*"A qualitative exploration of female condom use among University students in contemporary Durban, South Africa"*.

It is noted that you will be constituting your sample by randomly interviewing female students who are 18 years and older from Howard College Campus.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

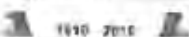
  
\_\_\_\_\_  
Professor J J Meyerowitz  
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29 January 2014

Ms Nomsa B Mahlalela (208506038)  
School of Built Environment & Development Studies  
Howard College Campus

Protocol reference number: HSS/1415/013M  
Project title: A qualitative exploration of female condom use among university students in contemporary Durban, South Africa

Dear Ms Mahlalela,

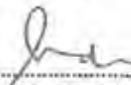
In response to your application dated 18 September 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL – Expedited**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor Pranitha Mahara  
cc Academic Leader Research: Professor PM Sithole  
cc School Administrator: Ms Meera Dalthaman

Humanities & Social Sciences Research Ethics Committee

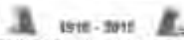
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