PERCEPTION AND USE OF FEMALE CONDOMS AMONG STUDENTS AT A TERTIARY EDUCATION INSTITUTION IN SOUTH AFRICA.

By

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Date: 2018
Declaration

I, Chauke Rhulani Caswell, hereby declare that the work on which this dissertation titled >“Perception and use of female condoms among students at a tertiary education institution in South Africa” is my original work (except where acknowledgments indicate otherwise) and that neither the whole work nor any part of it has been, is being, or shall be submitted for another degree at this or any other university, institution for tertiary education or examining body.

_________________________  ______________________
Signature                    Date
Dedication

I express my deepest appreciation first and foremost to the Almighty God for the strength, guidance and courage to undertake this study.

I dedicate this work to my mother Rose Mphephu Chauke and my late father Mzamani Worried Chauke for establishing a strong foundation and conducive environment in my early days of life.
Acknowledgements
I extend my deepest gratitude and many thanks to the supervisor (Professor S Madiba) from the department of public health for mentoring, coaching, caring, contributions and continues support during the period of this study. To Professor K Mokwena (HOD of the Department of Public Health), Sefako Makgatho Health Sciences University I am very grateful for affording me the opportunity to do the MPH in your department. Finally, grateful thanks are also extended to Mr. Kunene P and Mr. Vikilahle S assisting with data collection and capturing.
Abstract

Background
The promotion and free distribution of female condoms in institutions of higher learning is a national strategy aiming to reduce new HIV infections by 50% in South Africa. However, studies assessing awareness and use of female condoms among university students are limited.

The study objectives
The study aimed to examine the perceptions and use of female condoms among university students.

Methodology
The study was a descriptive cross-sectional survey involving 379 male and female students selected through systematic random sampling using structured self-administered questionnaires. Data were analyzed using Stata version 13.

Results
The sample consisted of 379 students from the five schools of the university. Over two thirds (n=88, 64%) of the students used condoms the last time they had sex. Less than half (n=129, 46%) of the students used condoms consistently. A third 32% (n=93, 32%) would feel embarrassed to collect condoms in public places. Only 28 (8%) of the students ever used a female condom and 123 (35%) would feel confident to suggest to use a female condom with a new partner. Almost all reported that female condoms were not easily available in the university and lacked knowledge on how to use the female condom.

Conclusion
The study found that the percentage of male condom use at last sex was relatively high while the female condom use has remained very low among students, despite the HEIDS programme’s distribution of female condom. This suggests that these students find it difficult to access condoms unless they are provided in private place, hence the inconsistent use of condoms.
Recommendations
It recommended that the distribution of female condom key point areas is done such as hostel entrance, bathrooms, student cafeteria to address the issue of privacy.

Keywords: Female condoms, Risk sexual behaviour, Perception use.
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<tr>
<td>NSP</td>
<td>National Strategic Plan</td>
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<tr>
<td>STIs</td>
<td>Sexually transmitted infections</td>
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<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV and AIDS</td>
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<tr>
<td>SSA</td>
<td>Sub Saharan Africa</td>
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<td>SA</td>
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<td>SMU</td>
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Chapter 1 Introduction

1.1. Background

HIV prevalence by sex is most pronounced among young adults, and among 20 to 24-year-olds HIV prevalence is three times higher among females at 15.6% and males 4.8% (HSRC, 2017). By this year's young people in South Africa would be pursuing academic careers at higher institutions of educations such as universities. The National Strategic Plan (NSP 2007-2011) of South Africa aimed to reduce the rate of new HIV infections by 50% by 2011. NSP is the strategic guide for the national response to HIV, STIs, and TB. One of its objectives was to promote female condom by making sure that they are available in areas where there is high demand such as the higher institution of learning such Universities. The NSP also planned to encourage the distribution of female condoms in institutions of higher learning such as universities and further education and training colleges (TVET) (Beksinska et al, 2013). Despite the promotion of both male and female condoms amongst students through the distribution of the device free of charge, the use and awareness of female condoms in higher education facilities by national department of health in South Africa remain low (Jackalas et al, 2010; Mantell et al, 2011; Beksinska et al, 2012; Naidu, 2013). The South Africa higher education sector is reported to have a prevalence of 3.8% of sexually active students living with HIV, making this population group to be considered as high risk (Mantell et al, 2011). Females are said to be the highest people with HIV infection and account for 60% of people living with HIV (PLHA) in Sub Saharan Africa and condom use remain low, resulting in increased HIV/AIDS and STI infection (Maticka-Tyndale, 2012). Female condoms are said not to be adequately promoted and accessible amongst HIV high-risk populations, including tertiary students (Beksinska et al, 2013). The use of a female condom is one of the national strategies to prevent pregnancy and HIV/STI infection (Protogerou et al, 2014). However, unavailability, partner objection, stigmatization, insertion difficulties and lack of awareness are some of the mentioned barriers to consistent use of a female condom (Mahlalela and Maharaj, 2015).
A negative perception of condom use amongst Students at TVET colleges is reported to be high despite knowledge that the HIV virus is transmitted by having unprotected sex. The reason for some of the negative perceptions of condom use is that it feels unnatural and reduce a feeling of pleasure. South Africa higher education institutions have responded slowly to awareness and usage of female condom compare to a male condom (HEAIDS, 2016). It is reported that female students perceived asking men to use a condom as degrading and humiliating on their side, while majority male students perceived the use of condom be of importance if having sex with a person who is not the main partner (Mbelle et al, 2014).

The high prevalence and incidence of women living with HIV/Aids, and with new HIV infections are said to be associated with gender inequalities, differential access to health services, sexual violence and biologically orientation of females as factors making women more susceptible to HIV/STIs infection (UNAIDS, 2015). This is despite the existence of female condom as a proven alternative device that protects against STIs infection that includes HIV infection. A female condom is also assumed as a tool to empower woman and assist with negotiating, and practice of safe sex as it is something that woman can use to protect themselves against pregnancy and STI/HIV infections (Magu et al, 2013).

New HIV infections amongst 15-24 years old population are high in the sub-Saharan region, despite the existence of both male and female condom as devices that can prevent STI/HIV infections. The study on perception and use of a female condom is significant as it strengthens the fight against HIV/Aids and zeroing of new infection.

1.2. Problem statement

Ideally, female condom offers an option that enables women to protect themselves from HIV, STIs, unwanted pregnancies and it gives them control over their own sexual health (Kaelo and Malema, 2014). Although female students perceived the development of female condoms to be for empowering women, they do not have the power to initiate their use with their male partner (Mahlalela and Maharaj, 2015). Several barriers such as inadequate availability, inaccessibility, scarcity are reported to inhibit the consistent use of female condoms compared with male condoms (Mavhandu-Mudzusi and Netshandama, 2011; Charbel et al, 2013). On the other
hand, men are reported to be reluctant to use and do not approve female condoms (Mahlalela and Maharaj, 2015).

1.3. The aim of the study
To assess sexual behaviours, perceptions, and use of female condoms amongst students at a tertiary institution in Gauteng, South Africa.

1.4. Research questions
1. What are the sexual practices among student at tertiary institutions in Gauteng, South Africa?
2. What are the perceptions of the female condom among students at tertiary institutions in South Africa?
3. What is the proportion of female condom use among students at tertiary institutions in South Africa?

1.5. Objectives
1. To determine the sexual practices among student at tertiary institutions in Gauteng, South Africa?
2. To assess perceptions of female condom use among students at tertiary institutions in South Africa.
3. To measure the proportion of students who use a female condom at tertiary institutions in South Africa.
Chapter 2. Literature review

2.1. Introduction
Sub-Saharan Africa (SSA) is considered as the region in the world with the highest rates of HIV and other sexual health burdens such as sexually transmissible infections (STIs), which could be reduced by correct and consistent use of both male and female condoms.

2.2. HIV prevalence amongst youth age 15 - 24 years
HIV/AIDS remains a threat to all ages of the population and it continues to strain the struggling healthcare systems in developing countries’ (Osonwa et al, 2013). More than half of people infected with HIV in the world are said to be women. While Sub-Saharan Africa is the region with the majority of women being HIV positive, account for 76% and the prevalence of HIV infected women aged 15 - 24 years is estimated at 3.3%, which is double the prevalence rates for men at 1.4% (Peters et al, 2014; Mugadza et al, 2016). The above differences are said to have originated from factors such as biological, sociocultural, economic and political, making women have a higher percentage to men (Peters et al, 2014). This situation makes female condoms to appear more important than male condoms, as it gives women the right to exercise method of contraception that provides dual protection from HIV infection and unwanted pregnancy.

The use of female condoms is seen as a way of protecting women against sexually transmitted diseases and unwanted pregnancies (Mbarishumana, Ntaganira 2013). Consistent and appropriate use of condoms is the most effective way of preventing HIV/AIDS transmission and other sexually transmitted infections (STIs), as well as unwanted pregnancies. Women are more likely to get infected with sexually transmitted diseases than men and they are the ones to bear the consequences of unwanted pregnancies.

Over 50% of all young people living with HIV worldwide are said to be women. Therefore, there is a need for female preventative initiatives to empower women to protect themselves from the risk of HIV infection, thus female condom use.
It is said that the correct use of a female condom is effective as much as the male condom in the prevention of transmission of HIV and other STIs (Tarkang and Bain, 2015). In the same study by Tarkang and Bain (2015), it is stated that the use of the female condoms can be initiated by women in order to protect themselves from STIs, including HIV infection and it has become widely used for HIV prevention in several developing countries with high HIV incidence.

2.3. Condoms access and use for HIV prevention
The high rate of HIV and STIs infection in Sub-Saharan Africa (SSA) is mostly in the youth and this suggests pressing the need for more understanding on condom access and use as it relates to sexual practices and behaviour (Maticka-Tyndale, 2012). In the study conducted by Beksinska et al (2013), it was found that women with higher education had an increase in condom uptake in the last sex encounter compare with women without education. The South African government is said to have responded to high HIV rates in the country by distributing condoms free of charge and by ensuring easily accessible in high-risk places that include a tertiary institution of education, such as universities. This, despite the effort, is estimated that between 57% to 59% of young men and approximately 48% of young women aged 15 to 24 have never used a condom at their last sexual encounter (Protogerou et al, 2014).

Condom access in South Africa is said to be hindered by several factors such as acceptability by society, cost of a condom, distance to the site of condom distribution, closed facilities at the time of need, availability, and distribution in the service providers. However, the male condom is highly accessible and acceptable compared to a female condom (Beksinska et al, 2013). The use of a female condom can offer the same benefits as of the use of a male condom, but in addition, female condom gives women the right and control to exercise their choice of sexual practice in heterosexual relationships.

2.4. History of female condom development
The idea behind the development of female condom was to offer protection and power to women on sexual practices as the female condom is designed to go into the female body (Naidu, 2013). This was envisaged to balance the power of decision when it comes to sexual health practices as more power was concentrated in men. Literature
shows that female condoms are to make it possible for women to exercise control over their bodies and sexuality as opposed to the existence of male condoms. This came about due to widespread demand to have female-controlled methods of protection against STIs such as HIV and unwanted pregnancy amongst women (Pool et al, 2000a). However, this method is not only dependent on acceptance by women but their male partners as well. Studies conducted in Uganda have revealed that although men want women to be protected against STIs and unwanted pregnancy, there is a high level of anxiety and ambiguity amongst men on the female-controlled methods of protection against STIs (Pool et al, 2000a). This confirms that the power and decision-making are concentrated on men when it comes to sexual practices amongst heterosexual partner.

2.5. A condom as an intervention strategy for HIV prevention
Multiple interventions which target condom use in communities, schools, and universities in diverse countries of SSA is said to have produced disappointing results, the intervention only increased knowledge and attitudes related to the condom use, but did not translate to increased and sustained use (Maticka-Tyndale, 2012). This finding is an indication of the need to better understand how condoms fit within sexual practices in universities.

The SA higher education and training department has brought up national intervention programme, seeking to reduce the HIV epidemic and its impact on society by developing and supporting programmes at public universities and technical and vocational education and training (TVET) colleges. One of the intervention strategies of the Higher Education and Training HIV/AIDS (HEAIDS) programme is the distribution of female condoms along the male condoms (HEAIDS, 2016).
In pursuit of effective prevention strategies and in order to reduce new HIV infection, it is reported that almost 25 million male condoms and 42 000 female condoms were distributed in the higher education sector by the Department of Health (HEAIDS, 2016). However, studies show that the majority of young people with more burden of HIV/AIDS are females than males (Charbel et al, 2013).

To increase access, demand, and utilization of the female condom, the government plans to provide information about both male and female condoms. Some of the efforts
include advertisements posted worldwide through a partnership between the public and private sectors (Mbarishumana, 2013). Despite the knowledge on the effectiveness and acceptability, the female condom remains underutilised amongst students and communities because of various barriers to accessing and using female condoms. The most common barriers include; cost and investment, lack of adequate awareness campaigns, lack of promotion of the use of female condoms, culture and personal beliefs, knowledge, attitudes towards female condoms.

2.6. Perceived risky sexual behaviour among young people

Another pressing issues in the fight of HIV/AIDS in order to achieve “zero new infection amongst young people in tertiary institution” is risky sexual behaviour such as inconsistence use of condom, multiple partner relationships, substance use and substance abuse amongst student groups (Mavhandu-Mudzusi and Netshandama, 2011; Charbel et al, 2013). These risky behaviours result in high rates of unwanted pregnancies and sexually transmitted infections due to unprotected sexual activities (Mugadza et al, 2016). Risky sexual behaviour is facilitated by the environment at universities which offer a great opportunity for most students that are young to test the limits of their new found freedom through sexual experimentation as there is lack of parental or guardian supervision (Shiferaw et al, 2014).

In order to fight against HIV, studies on health-related behaviour support that perceptions are necessary subjects for behavioral change (Maticka-Tyndale, 2012). There is a wide acknowledgement that the perception of risk and susceptible to HIV infection and other STIs can motivate for preventative actions. However, studies in SSA found that perceptions of susceptibility to HIV infection produced mixed and what appear to be contradictory, influences on condom use (Maticka-Tyndale, 2012). The self-perception of HIV risk is reported to be low amongst student and this has a consequence of students not to take any preventive measures such as condom use at the time of exposure to risky sexual behaviours (Shiferaw et al, 2014).

2.7. Perception of female condoms amongst tertiary students

According to a study by Tarkang and Bain (2015), 64.1% of the students perceived that the use of female condoms would make sex less enjoyable, 68.1% believed that
lack of knowledge on the correct use of female condoms, and 52.5% believed that distance to the nearest point to fetch female condoms were reasons for low use of female condoms. Perception leads to risky sexual behaviour that may result in STIs infection such as HIV and unwanted pregnancies amongst tertiary students. A study conducted by Masoda and Govender (2012), found that students at universities had a negative attitude towards using condoms for contraception. Some of the perceptions are that female condom can burst inside the vagina, while others perceive that female condom could be retained within the vagina, therefore making it uncomfortable to use. Another perception that students reported is that using female condoms reduces sexual pleasure; it is uncomfortable and is expensive making their usage limited due to the high prices (Masoda and Govender, 2012).

2.8. Barriers of female condoms use

2.8.1. Accessibility as a barrier to female condom use

The first female condom was developed in 1942, but it reached the market in 1993 in the SSA region that includes South Africa. However, the potential users of these devices especially women were not in a position to access it due to inability to buy it (Peters et al, 2014). Access to female condom device can be considered as the number one barrier to its use. The rationale behind this is that failure to access the female condom can directly lead to none usage despite a willingness to use the device.

Several strategies were conducted worldwide to increase access to a female condom. The strategies include awareness campaigns, advertisement, a partnership between public and private sectors, and free distribution of the female condom. However, the uptake remains low. According to the International Council of AIDS Service Organization, condom use is one of the least expensive and cost-effective methods for preventing STIs, HIV infections and unwanted pregnancies (ICASO, 2006). However, the high cost of female condoms continues to be one of the major barriers to accessing the device. Despite current high rates of sexually transmitted infections and unwanted pregnancies, female condoms among young people are not popular. Female condoms are ten times high in price compared to male condoms, which makes the former not to be accessible (Tarkang and Bain, 2015).
2.8.2. Partner refusal to female condom use

According to Mugadza et al (2015), most students are not free to negotiate for female condom use with their partners, while others confirmed that they had already used the male condom during intercourse with their partners and therefore they do not feel the need of initiating the use of female condoms with their partners. Some other respondents mentioned that they are not familiar with the female condom because they have never used it before. However, with regard to which type of condom the participants had used, 76% had used the male condom and 4% had used a female condom (Mugadza et al, 2015). A study done by Mtayangulwa and Kayombo (2016) revealed the 96.6% of the students have heard about female condoms but throughout the study, it was found that most students have never seen the female condom and had a difficulty on figuring out how it looked like and how it's supposed to be used. This affected the uptake and use of female condoms.

2.8.3. Acceptability of female condom

Acceptability of female condom should relate to women who are willing to use the female condoms or who have already used it and those that are in a position to give their experiences as being satisfactory or unsatisfactory (Peters et al, 2014). However, the description does not talk or give an option to men as to their willingness or preparedness to use a female condom or to give an option to men who have used it with their partners to give their experiences. Thus the exclusion of men in testing the acceptability of female condom as potentially a device that women can use with their male partners may increase the unlikelihood of it being used. It can be predicted that acceptability is a potential factor that can help to increase the use of female condoms by women and men.

Despite the potential female condom carries, studies have revealed that it is impossible to start measuring the acceptability of female condom when potential users are not even familiar or have no information about the female condom device (Peters et al, 2014). A study conducted in Zimbabwe reported that female condom was introduced in 1997. However, it was not immediately acceptable to adult males and females resulting in poor usage. One of the highlighted reasons behind poor usage is inaccessibility of the female condoms, religious beliefs, and partners refusal to use the
condom (Mugadza et al, 2016). Other studies show that intervention to use a female condom was done amongst sex workers and women who went to seek family planning, with 50% to 98% of satisfactory use of female condom reported amongst sex worker (Peters et al, 2014). This leaves a gap to test female condom amongst other population groups, especially young women aged 15 to 24 years as they are faced with a double problem of high rate of HIV new infection and unwanted pregnancy.

The usage rates of female condoms are said to be low throughout SSA, including South Africa (Mugadza et al, 2016). Increase in access to female condom is envisaged as a means to empower women in terms of choice of contraceptive methods and protection against STI/HIV infection. The low acceptability, accessibility and low usage rates of the female condom remain remarkable. However, ambition to curb the AIDS epidemic and reduce high fertility rates still remain in the current agenda both local and international making female condom promotion to be an obvious tool in the current context (Peters, et al, 2014).

A study conducted in Ghana on knowledge, acceptance, and utilization of the female condom among women of reproductive age found that there is a low level of female condom acceptance and use (Ananga et al, 2017). In the same study, it was observed that there is the unavailability of the female condom in shops or pharmacies and as well as health centers. Studies conducted in South Africa and other countries in SSA on the use of contraception and condoms by young women is said to be discouraging as parents forbid the use of both the methods to prevent unplanned pregnancy and STIs. It is reported that the use of contraception by females or the presence of condoms lead to punishment (Maticka-Tyndale, 2012).

This kind of perception can be the barrier to the use of female condoms as there is no support from parents. It is further said that the use of female condoms during sexual intercourse is associated with promiscuity; unfaithfulness, and distrust (Maticka-Tyndale, 2012). This leaves the young people only with the options to engage in sexual activities without protection.
2.9. Conclusion

Efforts have been made to raise populations’ awareness of existence and use of female condoms amongst high-risk population such as sex workers, but little is known about female condom use amongst universities students. It is therefore important to examine the perception and use of female condoms amongst university students as one of the HIV high-risk population. The findings of this study may assistance to inform HIV prevention programmes and intervention strategies in the fight of HIV/AIDS amongst students, as there is increased new HIV infections in this population group.
Chapter 3 Methods and materials

3.1. Study design
The study design employed was a cross-sectional descriptive survey, where a self-administered questionnaire was used to collect data on the perceptions and use of female condoms among students.

3.2. Study setting
The study setting comprised eleven campus residences at SMU, which accommodate a mixed gender of students enrolled in different programmes and in different levels of their studies. Sefako Makgatho Health Sciences University is newly established tertiary institution with the purpose of teaching, research and community engagement and is located in Ga-Rankuwa at the then Medunsa Campus, of the University of Limpopo. Previously known as the Medical University of South Africa (Medunsa).

3.3. Study population
The study population consisted of both male and female students who were 18 years old and above. Students housed on campus residences enrolled in various programmes in the school of medicine, school of healthcare sciences, school of oral health, school of pharmacy, and school of technology and clinical science participated in the study.

3.4. Inclusion and exclusion criteria
The study included students who were residing on campus residences, aged 18 years and above, and who were willing to participate in the study. Students residing off campus and less than 18 years and above and were not willing to participate in the study were excluded from the study.

3.5. Sampling
As the residences were used for recruitment of student, the student rooms were used as the unit for sampling. A representative sample was selected through the process of probability sampling technique in which a systematic random sampling and simple random sampling were carried out. A list of rooms from each residence was generated.
to develop a sampling frame. The first room from the list was selected by using a simple random sample, and systematic random sampling was used to select subsequent rooms using a sampling interval of 3 until the sample size was reached. In the case of a selected room is empty, the next room was selected.

3.5.1. Sample size
The sample size was calculated using online Raosoft © 2004. From the formula, a minimum 345 sample for a participant was needed with a confidence level of 95% and non-respondents rate of 50%. However, a total of 379 sampled participants was included in the study with enlargement of the sample by 10% to accommodate non-response.

3.5.2. Recruitment
The researcher recruited students from various residences through posters, residence visits, and community radio. Prior to distribution of poster and residence visits, permission was obtained from both the director of the student affair and chairperson of student housing council.

3.5.3. Instruments
The data was collected using a self-administered questionnaire, which was designed by the researcher after reviewing several studies with similar aim and objectives (Shiferaw et al, 2014; Protogerou et al, 2014). The questionnaire was developed in English, which is the medium of instruction at SMU. The questionnaire consisted of three sections; Section A asks about the socio-demographic variables and sexual behavior variables such as age, gender, level of study, sexual activity, the number of partners, etc. Section B asks questions about the student’s perceptions about the female condom while section C ask questions on the use and perceptions of female condoms.

3.6. Data collection and management
The researcher and two trained research assistants visited seven-student residences in the late afternoon after classes for data collection. This was the most convenient time for participants as they were coming from attending classes; therefore, they had time to participate in the study freely.
From each selected room, the researcher or research assistant explained the purpose of the study to the occupant of the room and asked them to participate in the study. Those who volunteered to participate, informed consent was obtained, and the student was asked to complete the self-administered questionnaire. Since the estimated time to complete the questionnaire was about 20 minutes, the researcher or research assistant gave the student time to complete the questionnaire while they selected the next room and repeated the process. The researcher or research assistant collected the completed questionnaire from the rooms of the students who participated at the end of data collection and checked the completeness of the questionnaire. The completed questionnaire and signed informed consent were immediately separated and kept in a safe box.

During data capturing the researchers and trained research assistants double checked data for correctness, validated and coded into Microsoft Excel software for storage and management. The captured questionnaire was immediately locked in a safe box.

3.7. Data analysis
Data were captured into Microsoft Excel spreadsheet, cleaned, and imported to STATA statistical computer software for analysis. Descriptive statistics were used to calculate and interpret the mean, the median of continuous variables and to obtain frequency tables for categorical variables like gender, age, year of study, and sexual behavior variables such as the number of sexual partners, and use of a female condom. The Student's t-tests were used to test for continuous variables such as the means of students who use and those who did not use female condoms. Statistical significance will be set at 95% confidence level with \( p < 0.05 \). Data will be presented using frequency distributions tables, graphs, and charts.

3.8. Reliability and validity
To ensure reliability, the researcher and research assistants underwent training on the protocol and tools for standardization of data collection. A pilot study was conducted to pre-test the questionnaire to clarify questions, modify ambiguous questions, and assessing the feasibility of the data collection in term of access, and time to complete the questionnaire. The pilot study was conducted with about 5% of the study sample, the sampled rooms from the students' residence and the results of the pilot will be excluded from the main sample.
Bias
The study was subject to socially desirable responses, where the students might over-report condom use because they thought that it was acceptable to the researcher. To mitigate this bias, the study was anonymous and the students' personal identification was not captured in the questionnaire. The students were assured of confidentiality and that their responses will be kept anonymous. To minimize selection bias, the study used systematic random sampling, which ensured that every student in the residences had an equal chance to be selected.

3.10. Ethical consideration
The study protocol was presented in the department of public health, then later it was submitted to both school of health sciences research ethics committee and Research and Ethics Committee of the Sefako Makgatho Health Science University (SMUREC) for ethical approval. Permission was also sought from the executive dean of academics, director student affairs and chairperson of student housing council of Sefako Makgatho health Sciences University.

Participants were given information leaflet detailing the purpose of the study and their rights to withdraw from the study at any time during recruitment. Signed Informed consent form was obtained from all participants before completing the self-administered questionnaire.

All information between the researchers and the participant was kept confidential. During data collection, privacy and anonymity of participants were maintained at the highest possible standard. There was no name or identification number or student number of participants written in the questionnaire forms. Questionnaires were immediately separated from the consent forms and locked in a safe box all the times.
Chapter 4: Results

4.1. Introduction
In this chapter, the researcher, presents the findings of the collected data. The purpose of this cross-sectional study was to assess perceptions of and use of female condom amongst students at tertiary institutions in Gauteng.

4.2. Section A: Socio-demographic of study participants
The participants provided information about their ages that is presented in the figure below.

![Age distribution chart](image)

**Figure 4.1. Participants' age distribution**

Figure 4.1 shows the age distribution of participants, the majority, 63% (n=241) of participants were aged between 20-25 years.
Figure 4.2. Gender distribution of participants

Figure 4.2 shows that more than half, 61% (n=231) of the participants were females compared to 39% (n=148) males.

Figure 4.3. Participant’s distribution per schools

Figure 4.3 shows that majority of the participants in the study were from school of medicine 37% (n=135), followed by those from school of Science and Technology 25% (n=90), 22% (n=80) school of health sciences, 10% (n=37) from school of pharmacy, while 6% (n=22) from school of oral health sciences.
4.3. Section B: Participants' sexual behaviours

The study also collected data on the participant's sexual behaviours.

Figure 4.4. Participant’s levels of study

Figure 4.4 shows that majority participants were on level three, 27% (n=379) of their studies, followed by 24% (n=379) were on level four and with minority 6% (n=379) participants were post-graduates.

Figure 4.5. Number of participants who ever had sex

Figure 4.5 shows that the majority of participants, 77% (n=377) were sexually active compared to 23% (n=377) who were not sexually active.
Figure 4.6. Participants’ age at sexual debut

Figure 4.6 shows that majority of the participants, 63% (n=171) started to have sex between 16 to 19 years old, followed by 25% (n=69) participants, who started to have sex between age 20 to 24 years old, while 12% (n=32) of participants started to have sex between the ages of 12 to 15 years old.

Figure 4.7. Participant's condom use on the first sex

Figure 4.7 shows that most, 74% (n=286) of the participants used condoms the first time they had sex, while 26% (n=286) did not use condoms.
Figure 4.8. Participant’s current relationship status

Figure 4.8 shows that more than half of the participants 55% (n=291) have steady partners followed by 25% (n=291) participants who stated that they were single.

Figure 4.9. Number of sexual partners in the last 12 months

Figure 4.9 shows that most of the participants, 70% (n=176) participants had only one sexual partner, 18% (n=45) participants had two sexual partners and 12% (n=31) had more than two sexual partners in last 12 months.
Figure 4.10. Participant’s condom usages last sex

Figure 4.10 shows that majority, 64% (n=188) of the participants used a condom the last time they had sex, while 36% (n=104) of the participants reported that they did not use a condom the last time they had sex.

Figure 4.11. Participants’ general reasons for not using condoms.

Figure 4.11 presents participants’ reasons for not using condoms. The results show that more than half, 58% (n=62) did not provide specific reasons why they did not use condoms, 19% (n=20) did not plan to have sex, 13% (n=14) said a condom was not available, 9% (n=10) use a condom with a casual partner.
Figure 4.12. Participants overall condom use

Figure 4.12 shows that 46% (n=129) of the participants always use condoms for sex, 44% (n=124) use condoms sometimes and only 10% (n=27) of the participants never use condoms.

Figure 4.13. Participants’ reasons for not consistently using condoms.

Figure 4.13 shows that 45% (n=56) of the participants did not use condoms because they trusted their partners, 18% (n=24) do not like condoms, 8% (n=11) did not use condom because the partner did not like it, while 6% (n=8) did not use condoms because they were married.
Figure 4.14 Participants’ confidence to collect condoms

Figure 4.14 shows that 68% (n=201) participants are confident to collect condoms in public places without feeling embarrassed, while 32% (n=93) participants are not confident to collect condoms in public places without feeling embarrassed.

Figure 4.15. Participants carrying condom

Figure 4.15 shows that 29% (n=85) participants always carry a condom with them should they need one. While 71% (n=208) participants did not always carry a condom with them should they need one.
Figure 4.16. Chances of refusing sex without the use of a condom.

Figure 4.16 shows that 71% (n=211) participants have likely chance of refusing sex if the partner does not want to use a condom, while 29% (n=85) participants have an unlikely chance of refusing sex if the partner does not want to use a condom.

4.4. Section C: Perceptions of female condom use

The participants were asked about their perceptions of a female condom and whether they ever use a female condom. The results are presented in the figure and table below.

Figure 4.17. Participant's female condom use
Figure 4.17 shows that 92% (n=328) participants reported not ever using a female condom compare to 8% (n=28) participants who ever used a female condom.

Table 1: Participants perceptions of female condom

<table>
<thead>
<tr>
<th>Perceptions of female condom</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female condom use makes sex less enjoyable for either partner</td>
<td>22(6%)</td>
<td>330(88%)</td>
<td>21(6%)</td>
</tr>
<tr>
<td>Female condoms cause itching during sexual intercourse</td>
<td>6(2%)</td>
<td>347(93%)</td>
<td>20(5%)</td>
</tr>
<tr>
<td>Female condoms are noisy during sexual intercourse</td>
<td>8(2%)</td>
<td>344(92%)</td>
<td>22(6%)</td>
</tr>
<tr>
<td>I lack knowledge of the correct use of the female condom</td>
<td>231(62%)</td>
<td>53(14%)</td>
<td>89(24%)</td>
</tr>
<tr>
<td>I feel confident that I can convince my partner to use the female condom during sexual intercourse</td>
<td>138(39%)</td>
<td>139(39)</td>
<td>76(22%)</td>
</tr>
<tr>
<td>I feel confident suggesting using a female condom with a new partner</td>
<td>123(35%)</td>
<td>135(38%)</td>
<td>96(27%)</td>
</tr>
<tr>
<td>Female condoms are easily available for students on campus</td>
<td>28(8%)</td>
<td>195(56%)</td>
<td>154(36%)</td>
</tr>
<tr>
<td>Female condoms are popular among students on campus</td>
<td>9(3%)</td>
<td>236(66%)</td>
<td>130(31%)</td>
</tr>
<tr>
<td>Female condoms are widely promoted on campus</td>
<td>30(9%)</td>
<td>210(60%)</td>
<td>138(31%)</td>
</tr>
<tr>
<td>Female condoms are acceptable to my partner</td>
<td>63(18%)</td>
<td>241(68%)</td>
<td>50(14%)</td>
</tr>
</tbody>
</table>

Table 1 presents participants’ perceptions toward female condom use, the results showed that the majority of participants selected the response not sure on almost all the questions. This is because only 8% had reported having used female condoms.
Chapter 5. Discussion

This chapter provides a discussion and conclusion of findings of the study which aim to assess perceptions and use of female condom amongst students at one of the tertiary institutions, South Africa.

5.1. Characteristic of participants

The sample consisted of 379 students from the five schools of the university. The majority (37%) of participants in the study were from the school of medicine. The study further revealed that the majority of participants were on level three 102 (27%) of their studies. The age of the students ranged from 18-30 years old, and over two-thirds were aged between 20-25 years old. The gender distribution of the students revealed that over two thirds (61%) were females compared to 39% males. This is in alignment with the national population of South Africa, which indicate more female than males when profiling the gender distribution (Reference??).

5.2. The sexual behaviour of participants

The study reveals that more than three quarters (77%) of the students were sexually active at the time of collecting data. The study indicated that more than half (55%) of the students had steady partners, 15% had casual partners, 5% were married, and 25% were not in a sexual relationship at the time of data collection. The study further revealed that most of the students, 70% of participants, had only one sexual partner and 30% had had more than one sexual partners. The study further revealed that most of the students (70%) had only one sexual partner while 30% had more than one sexual partner. Of concern is that about 12% of the students had more than two sexual partners in the last 12 months. Meaning that risky sexual behavior pattern is observed amongst student.

The majority (90%) of those who reported that they ever had sex, started to engage in sexual activities from age 15 to 25 years old. The age of sexual debut was 18 years old. The findings of this study correspond with a study that was conducted in Dar es Salaam, which found that 70% of the student population in the university has ever had sex, and the age at sexual debut was 20 years old (Somba et al, 2014). This age was higher than the reported age of sexual debut in the current study. Similar findings were
reported in a study conducted in Uganda, which found that almost 70% of the students were sexually active, however, the mean age of sexual debut for these students was 21 years old (Nsubung’a et al, 2016). Both studies show a higher age of sexual debut compared to that of the students in the current study. There is a need to also encourage delaying sexual debut as a strategy to prevent both unplanned teen pregnancy and sexually transmitted infections including HIV.

5.3 Condom use

In addition to providing the age of sexual debut, the students were asked about condom use with their first sexual act. The study reveals that three quarters (74%) of the students used a condom the first time they had sex. Nevertheless, in this study, the percentage of condom use was relatively higher than that reported in the South African National HIV Survey of 68.1% among young people aged 15-24 years old (HSRC,2017). The high condom use might be attributed to the HEAIDS programme that distributes and promote new colored and scented male condoms in institutions of higher learning such as universities and TVET colleges. However, a caution should be considered to the high rate of reported condom use as it is found that participants may respond for the socially desirable outcome (Beksinska et al, 2012).

A similar trend on condom use was reported in the South African National HIV Survey. Mantell et al (2014) reported that the national level of overall condom use at last sex decreased from 45.1% in 2008 to 36.2% in the year 2010. Mantell et al (2011) attribute this trend to a length of relationships. They argue in South Africa once a sexual relationship had run its course for a long period and trust had been secured, it is common that condom use is discontinued. This suggests that there is less likely to use condoms in a long relationship status with a steady partner. Similar findings were reported in a systematic review conducted by Beksinska et al (2012), where they reported that consistent condoms use among tertiary students decreased from 48.4% to 27.3% with a long relationship or steadier partner compared to a causal relationship or casual partner.

The students who were sexually active reported that a condom was not used the last time they had sex, cited that they did not plan to have sex (19%) and that a condom was not available during the time they had sex (13%). If 19% of sex is unplanned, it
should be emphasized to students and young people to always carry a condom. However, only 29% of the students reported that they always carry a condom with them. As mentioned one of the strategies to increase condom use is to promote carry a condom campaign. In the current study, the majority (71%) reported that they did not always carry a condom, despite both female condom and male condom being distributed freely in tertiary institutions in South Africa. Nevertheless, results from other studies that found that participants reported that the spontaneity of sex is a barrier for not negotiating condom use and the ultimate none use of a condom (Bcheraoui et al, 2013).

The study results indicated that more than half (55%) of the students did not provide specific reasons for not using condoms the last time they had sex. A common reason for not using a condom is that it creates promiscuity, use for casual sex and lack of trust in the relationship (Mahlalela and Maharaj, 2015). In the current study, 55% of the students were in a steady partnership, the belief that use of a condom suggest that there is lack of trust, may create stigma and make it difficult to use condoms amongst steady partner. About 10% reported that they only use a condom when they have sex with a casual partner, this suggest that the last sexual act was with their steady partners with whom they do not use a condom.

The issue of inconsistent condom use is a public health challenge particularly among young adults who are vulnerable to HIV infection and other sexually transmitted infections. It is a more complex phenomenon because the individuals perceive themselves as practicing safe sex albeit with only specific sexual partners. The study found that less than half (46%) of the students used condoms for sex consistently; almost the same proportion (44%) reported that they did not use a condom in a consistent manner.

A small proportion (10%) of the students did not use condoms at all; 45% trusted their partners, 18% do not like condoms, 8% said the partner did not like it, and 6% said they were married. The findings support the argument that condom use may be acceptable and high in the early stages of a relationship, its use could decline as the relationship stabilize (Beksinska et al, 2012).
The students responded to a question on their perceptions about the collection of condoms from public spaces. The findings revealed that almost three quarters (68%) of the students would collect condoms in public places without feeling embarrassed. This suggests that a third of the students find it difficult to access condoms unless they are provided in a private place. This has implications on the distribution of condoms in the university and other public settings and should be considered during planning for the distribution of condoms. Almost all (94%) of the students feel confident to suggest using condoms with a new partner. The findings of study concur with other studies that highlighted that the use of condoms in stable relationships was less acceptable than in casual or new relationships (Beksinska et al, 2012; Mantel et al, 2011).

Concerning their perceptions about refusing sex in the absence of a condom. The findings of the study reveal that 71% of the students would refuse sex if the partner does not want to use a condom. The perspectives of males and females towards condom use is complex, Mantell et al (2011) reported that females expect the males to be the ones to acquire, carry and use the male condom, and males expect females to refuse sex if a condom is not used. In a study by Mugadza et al (2016), it is found that 72% of sex practice decision was made by a male partner and that gender negatively impacted on the use of a female condom.

As mentioned 19% of the students who did not use a condom last time they had sex, said sex was not planned, suggesting that females did not have the confidence to say no to sex as expected by their male partners. The 19% could also be part of the 29% who would not refuse sex if the partner does not want to use a condom. As mentioned previously, what makes condom use a complex public health challenge, is inconsistent use where the individuals do not perceive themselves as practicing unsafe sex because they are also counted among those that use condoms.

### 5.3 Prevalence of female condoms use

The findings of the study reveal that only 8% of the students ever used a female condom compared to 92% who never used it. The finding of this study is consistent with the findings of another study conducted in South Africa, which reveal that 6% of male participants and 7% of females ever used a female condom. However, female condom usage was very low only 2(4%) of the respondents had used the condoms.
(Guerra and Simbayi, 2014). Another study in Zimbabwe found that only 4% of participants had used female condoms before (Mugadza et al, 2016). In a study by Obembe et al (2017) the general uptake and use of female condom were reported to be inadequate, as both males and females have mixed reactions about its use. In this study, the use of female condom was very low despite the HEAIDS programme that distributes and promote more female condoms along the new colored and scented male condoms.

5.4. Perceptions towards the use of female condoms

The students were asked several questions about the perceptions of female condoms. The results showed that the majority of participants selected the response not sure on almost all the questions. This is because only 8% had reported having used female condoms and most of the questions were only relevant to those who had used a female condom. Mantell et al (2011) reported that female condom perceptions were gauged by the experience of male condom use.

The findings of the study reveal that 6% of the participants perceive female condom use to makes sex less enjoyable for either partner. Although the percentage is low, the findings are in line with a study that found that most concerns regarding female use were issues to do with discomfort, size, and loss of pleasure (Mantell et al, 2011). Another study found that women avoid using female condoms due to a misperception that it makes noise as it is bigger than male condom (Naidu, 2013).

Guerra and Simbayi (2014) reported that awareness of the female condom was 72% among males and 78% for female youths 15 years and older. However, this study found that 62% of the students reported to lack knowledge of the correct use of a female condom. This is contrary to the national prevalence of the knowledge of female condom use in South Africa (Guerra and Simbayi, 2014). However, similar findings were reported in a study by Naidu (2013) which highlighted that lack of knowledge on the correct usage of female condoms was a concern in South Africa. A study done in Zimbabwe found that all the participants had heard of the female condom existence and 70% felt that female condom was useful (Mugadza et al, 2016).
5.3.1. Perceived confidence to use a female condom

The findings of the study reveal that only 35% of the students feel confident suggesting using a female condom with a new partner. The finding concurs with that of a study conducted in Nigeria among students in tertiary institutions, which found that 35% of students could negotiate with sexual partners on the use of a female condom (Obembe et al, 2017). As mentioned, males believed that female condom use should be initiated by females, as it is assumed that it female must insert it (Mantell et al, 2011). However, being female is not the only factor in the use of a female condom, a study conducted in Cameroon found that female condom use during sexual intercourse was higher among female student who perceived that they were at high risk of HIV infection (Tarkang and Bain, 2013). Although the majority of students had not used a female condom and most lacked knowledge on how to use it, 39% were confident that they could convince their partner to use a female condom during sexual intercourse if it is available. A study in Nigeria reported that 52% of young adults in a tertiary institution had good perception and confidence to use a female condom (Obembe et al, 2017).

5.3.2. Perceived availability of female condom

Almost all 93% of the students reported that female condom is not easily available in the university. This finding concurs with other studies that reported that inadequate availability is one of the common barrier negatively affecting the use of female condoms. Unavailability of a female condom is one of the facilitating factors that inhibit its use as a majority of participants reported that female condoms were rare and not easily accessible compared to male condoms that readily available in public places such as public toilets (Mahlalela and Maharaj, 2015).

The findings of the study reveal that 98% of participates disagreed with the statement that female condom is popular among university students. This finding is consistent with other findings that reported that the majority of participants lack awareness of the existence of female condoms (Mahlalela and Maharaj, 2015). It further said that female condoms are less advertised and visible in public places compared to male condoms. The finding means that female condoms are not sufficiently promoted, requiring equal advertisement and distribution of female condom as male condoms.
Almost all 97% of students disagree with the statement that female condom is widely distributed in the university. The finding concurs with other study results that indicate that female condom distribution is limited and lacking as a majority of potential users do not know where and how they can gain access to female condoms (Beksinska et al, 2012). It is noteworthy that in South Africa, condoms are a free distribution in institutions of higher learning and training. It was observed that students heard about the female condoms but they never saw it. In a study among Nigerian female undergraduate student, female condom awareness was found to be high at 94% (Oladeinde et al, 2011).

5.5. Conclusion
The study found that the percentage of condom use at last sex was relatively high and might be attributed to the HEAIDS programme that distributes and promote new colored and scented male condoms in institutions of higher learning. The study found that less than half of the students used condoms consistently and about tenth use condoms only with casual sexual partners. The findings revealed that a third of the students would feel embarrassed to collect condoms in public places. This suggests that these students find it difficult to access condoms unless they are provided in private place, hence the inconsistent use of condoms.

Concerning the use of female condoms, only 8% of the students ever used a female condom and only 35% would feel confident to suggest using a female condom with a new partner. Although they were all aware of female condoms, they reported that it was not easily available in the university. Unavailability of a female condom is one of the facilitating factors that inhibit its use as a majority of participants reported that female condoms. The findings further indicated that most of the students lacked knowledge on how to use the female condom. It can be concluded that female condom use has remained very low among students, despite the HEIDS programme’s distribution of female condom.

5.6. Recommendations
It is recommended that health promotion and education on female condom targeting both male and female student a tertiary institution be initiated on all study levels.
It is recommended that the distribution of female condom at key point areas, such as hostel entrance, bathrooms, student cafeteria, is done. Further, it is recommended that female and male condoms can be incorporated in teaching curriculum in all health-related programmes to improve knowledge on the use and advocacy of female condoms by all health professions.

5.7. Limitations of the study.

The limitation of this study is that it did not explore in depth reasons for not using female condom and perception of female condom use. However, it can be safely said that such explorations can be conducted in a combination of qualitative approach, to provide synergy to quantitate approach, which was used in this study. Although the study attempted to examine the relationship between several important variables, it is desirable that further studies explore these relationships.
References


Appendices

Appendix 1: questionnaire

Title: Perceptions of and use of female condoms amongst students at a tertiary institution in Gauteng, South Africa

Instructions to students:
This questionnaire is anonymous, and your responses will be treated with confidentiality. Your honest response to questions is appreciated. Please answer the following questions by indicating with an “X” response you agree with or think most appropriate. There is no wrong or right answer.

<table>
<thead>
<tr>
<th>A</th>
<th>This section asks you about yourself</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What is your age?</td>
</tr>
<tr>
<td>2.</td>
<td>Gender?</td>
</tr>
<tr>
<td>3.</td>
<td>What qualification are you studying for?</td>
</tr>
<tr>
<td>4.</td>
<td>In which year of study are you?</td>
</tr>
<tr>
<td>5.</td>
<td>What is your level of study?</td>
</tr>
<tr>
<td></td>
<td>1st level</td>
</tr>
<tr>
<td></td>
<td>2nd Level</td>
</tr>
<tr>
<td></td>
<td>3rd Level</td>
</tr>
<tr>
<td></td>
<td>4th Level</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
</tr>
<tr>
<td>6.</td>
<td>Have you ever had sex <em>if answered no SKIP to question 27</em></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>7.</td>
<td>Are you currently in a sexual relationship</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>8.</td>
<td>How old were you the first time you had sex?</td>
</tr>
<tr>
<td></td>
<td>Never had sex</td>
</tr>
<tr>
<td>9.</td>
<td>The first time you had sex, was a condom used?</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>10.</td>
<td>Which statement best describes your relationship status at present?</td>
</tr>
<tr>
<td></td>
<td>Steady partner</td>
</tr>
<tr>
<td></td>
<td>Casual partner</td>
</tr>
<tr>
<td></td>
<td>Single</td>
</tr>
<tr>
<td></td>
<td>Married</td>
</tr>
<tr>
<td>11.</td>
<td>How long have you been in the relationship with your current sexual partner? <em>(time in years and months)</em></td>
</tr>
<tr>
<td>12.</td>
<td>If you are in a relationship, how many sexual partners did you have in the past 12 months?</td>
</tr>
<tr>
<td></td>
<td>One partner</td>
</tr>
<tr>
<td></td>
<td>Two partners</td>
</tr>
<tr>
<td></td>
<td>More than two partners</td>
</tr>
<tr>
<td>13.</td>
<td>Was there a time when you had more than one sexual partner at a time? <em>(concurrent relationship)</em></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>14.</td>
<td>One partner</td>
</tr>
</tbody>
</table>
If yes, how many sexual partners did you have?  
(concurrently) Two partners  
More than two partners

15. In the past 12 months, did you ever have sex in exchange for money?  
Yes  
No

16. In the past six months, have you had a one-night stand?  
Yes  
No

B  This section asks questions about condom use in general and should be completed by students who are sexually active

17. Did you use a condom the last time you had sex?  
Yes  
No

18. If you did not use condoms the last time, what was your reason?  
A condom was not available  
Did not plan to have sex  
I only use a condom with a casual partner  
Other

19. How do you rate your overall condom use in the past six months?  
I never use condoms  
I always use condoms  
I sometimes use condoms

20. If you do not use condoms all the time, what are your reasons?  
I use a condom all the time  
I don’t like it  
I trust my partner  
My partner does not like it  
I am married  
Other

21. Male condoms are easily available for students on campus  
Agree  
Disagree  
Not sure

22. I could purchase male condoms without feeling embarrassed  
Yes  
No

23. I could go and get condoms from a public place without feeling embarrassed  
Yes  
No

24. I always carry a condom with me should I need one  
Yes  
No

25. I feel confident suggesting using condoms with a new partner  
Yes  
No

26. What are the chances of you refusing sex if your partner does not want to use a condom?  
Likely  
Unlikely

C  This section asks questions about female condom use and perceptions

27. Female condoms are easily available for students on campus  
Agree  
Not sure  
Disagree

28. Female condoms are popular among students on campus  
Disagree  
Not sure  
Agree

29. Female condoms are widely promoted on campus  
Agree  
Not sure
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30.</td>
<td>Female condom use makes sex less enjoyable for either partner</td>
<td>Agree</td>
<td>Disagree</td>
</tr>
<tr>
<td>31.</td>
<td>Female condoms cause itching during sexual intercourse</td>
<td>Agree</td>
<td>Not sure</td>
</tr>
<tr>
<td>32.</td>
<td>Female condoms are noisy during sexual intercourse</td>
<td>Disagree</td>
<td>Not sure</td>
</tr>
<tr>
<td>33.</td>
<td>I lack knowledge of the correct use of a female condom</td>
<td>Not sure</td>
<td>Agree</td>
</tr>
<tr>
<td>34.</td>
<td>Female condoms are acceptable to my partner</td>
<td>Agree</td>
<td>Not sure</td>
</tr>
<tr>
<td>35.</td>
<td>I feel confident that I can convince my partner to use the female condom during sexual intercourse</td>
<td>Agree</td>
<td>Not sure</td>
</tr>
<tr>
<td>36.</td>
<td>I feel confident suggesting using a female condom with a new partner</td>
<td>Agree</td>
<td>Not sure</td>
</tr>
<tr>
<td>37.</td>
<td>Have you ever used a female condom during sexual intercourse?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>38.</td>
<td>If no, what were your reasons for not using</td>
<td>Not easily available</td>
<td>Not easy to use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Never thought about it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prefer to use a male condom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Do not know how to use it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Thank you for your time
Appendix 2: Informative Letter

Participant’s Information Leaflet

Research project: perceptions of and use of female condoms amongst students at a tertiary institution in Gauteng, South Africa.

Introduction:
I invite you to volunteer to participate in a research study. This information sheet is to help you to decide if you would like to participate, but before you agree to take part in this study, you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, please ask the researcher.

The purpose of this study:
To assess the perceptions of and use of female condoms among students at Sefako Makgatho Health Sciences University.

Benefits of participating in this study
There is no payment for taking part in the study; the study is for completion of a degree for the researcher.

Protection of information
The following procedures will be used to protect the confidentiality of your information: Apart from the informed consent form, your name will not be captured on the questionnaire. Instead, each you will be given a unique identifying number for correct capturing of the data. All the questionnaires will be kept in a safe box, where only the researcher and supervisor have access.

Voluntary participation
You should know that participation in the study is voluntary if you decide not to participate it is ok too, there are no negative consequences of any kind if you decide that you do not want to participate. If you volunteer to be in the study, but later change your mind, you may withdraw at any time.
Thank you very much for taking the time to read this, you may sign the informed consent and then complete the questionnaire, which will take less than 20 minutes to complete.
Appendix 3: Informed Consent Letter.

Sefako Makgatho Health Sciences University- ENGLISH CONSENT FORM

Title: Perceptions of and use of female condoms amongst students at a tertiary institution in Gauteng, South Africa

I have read the information/heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way. I know that sound recordings will be taken of me. I am aware that this material may be used in scientific publications, which will be electronically available throughout the world. I consent to this provided that my name is not revealed.

I understand that participation in this study is voluntary and that I may withdraw from it at any time and without supplying reasons. I know that this study has been approved by the Sefako Makgatho Health Sciences University Research Ethics Committee (SMUREC). I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided my privacy is guaranteed.

I hereby give consent to participate in this study.

_________________________  ________________  ____________
Name of the Volunteer      Date               Place

_____________________________________________________________
Statement by the Researcher
I provided verbal and written information regarding this study
I agree to answer any future questions concerning the study as best as I am able.
I will adhere to the approved protocol.

_________________________  ___________________  ____________
Name of Researcher         Signature                Date
Research project:

Statement concerning participation in a research project:

I have heard the purpose of the proposed study and was provided the opportunity to ask questions and given adequate time to rethink the issue. The purpose of the study is sufficiently explained to me. I have not been pressurized to participate in any way. I understand that my participation in this study is voluntary and that I may withdraw from it at any time and without supplying any reasons.

I was informed that this study had been approved by the Sefako Makgatho University Research and Ethics Committee (SMUREC/H/284/2016: PG).

I am fully aware that the results of this study will be used for scientific purposes and may be published.

I hereby give consent to participate in this study.

Name…………………………………..Signature………………………Date………………
28 February 2017

Mr RC Chauke (210552643)
Department of Public Health
School of Health Care Sciences
SEFAKO MAKGIATHO HEALTH SCIENCE UNIVERSITY

Dear Mr Chauke

PERMISSION TO CONDUCT A STUDY TITLED: PERCEPTIONS OF AND USE OF FEMALE CONDOMS AMONGST STUDENTS AT A TERTIARY INSTITUTION IN GAUTENG, SOUTH AFRICA

Above matter refers.

This serves to confirm that permission is granted for you to conduct the above titled study at the School of Health Care Sciences as per the MREC approved protocol.

We would appreciate if you can make a copy of your study report available to this office.

We wish you all the best in your study.

Sincerely,

PROF OA AYO-YUSUF
INTERIM EXECUTIVE DEAN: FACULTY OF HEALTH SCIENCES

Members of the Interim Council:
Professor O Shisana (Chairperson), Mr Henri Angel Mebawa, Mr Paul Shack, Dr N Simelane, Professor A M Segomo
Appendix 5: SMU Ethical Clearance certificate

Sefako Makgatho Health Sciences University
Research & Postgraduate Studies Directorate
Sefako Makgatho University Research Ethics Committee
(SMUREC)

Molotlegi Street, Ga-Rankuwa 0208
Tel: (012) 521 5617/3698 | fax: (012) 521 3749
Email: lorato.phiri@smu.ac.za
P.O. Box 163 Medunsa 0204

03 November 2016

Mr M Chauke
Department of Public Health
P.O Box 215
Medunsa, 0204

MEETING: 09/2016
SMUREC Ethics Reference Number: SMUREC/H/284/2016: PG

The New Application received on 18 October 2016, was reviewed by members of Sefako Makgatho University Research Ethics Committee 03 November 2016 and was approved on 03 November 2016.

Title: Perceptions and use of female condoms among students at a tertiary institution in Gauteng, South Africa

Researcher: Mr M Chauke
Supervisor: Prof S Maduna
Department: Public Health
School: Health Care Sciences
Degree: MPH

Please note the following information about your approved research protocol:

Protocol Approval Period: 03 November 2016 – 03 November 2017

Please remember to use your protocol number (SMUREC/H/284/2016: PG) on any documents or correspondence with the REC concerning your research protocol.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modification, or monitor the conduct of your research and the consent process.

After Ethical Review: Please note a template of the progress report is obtainable in the Research Office and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit. Translation of the consent document in the language applicable to the study participants should be submitted.

International Organisation (IORG0008691), Institutional Review Board (IRB000010386) Expiry date: 09 December 2018, Federal Wide Assurance (FWA00022943) Expiry date: 31 August 2017 and NHREC No: REC 210408-003

Sincerely

PROF GA OGBUNUANJO
CHAIRPERSON SMUREC

Date: [Signature]

[Stamp]