



University of Fort Hare  
*Together in Excellence*

**FACTORS AFFECTING FEMALE CONDOM USE IN BUFFALO CITY  
METROPOLITAN, EASTERN CAPE, SOUTH AFRICA**

**BY**

**NOSIPHO BUNU**

**A DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS OF THE  
DEGREE MASTERS OF NURSING SCIENCE (MAGISTER CURATIONIS) COMMUNITY  
HEALTH NURSING**

University of Fort Hare  
*Together in Excellence*

**UNIVERSITY OF FORT HARE  
FACULTY OF HEALTH SCIENCES**

**SUPERVISOR: DR N.M. VELLEEM**

**MAY2019**

## DECLARATION

I, Nosipho Bunu the undersigned, declare that this dissertation entitled “Factors affecting female condom use in Buffalo City Metropolitan, Eastern Cape, and South Africa” is my original work with exemption to the citations, which have been duly acknowledged through complete references. The undersigned further declare that this work has not been submitted to any other University in partial or entirely for the award of any degree.

**Name:** Nosipho Bunu

**Signature:**



University of Fort Hare  
*Together in Excellence*

**Date:** 08 April 2019

## DECLARATION ON PLAGIARISM

I, Nosipho Bunu student number 201516859, hereby declare that I am fully aware of the University of Fort Hare's policy on plagiarism and I have taken every precaution to comply with the regulations.



**Signature**

**Date 08 April 2019 .....**



University of Fort Hare  
*Together in Excellence*

## CERTIFICATION

This dissertation titled “Factors affecting female condom use in Buffalo City Metropolitan Eastern Cape, South Africa” meets the regulation governing the award of the degree in Magister curationis of the University of Fort Hare and is approved for its contribution to scientific knowledge and literary presentation.

Supervisor: Dr N.M. Vellem

08 April 2019

Signature: \_\_\_\_\_



University of Fort Hare  
*Together in Excellence*

## DEDICATION

I humbly dedicate this study to my Lord and my Saviour Jesus Christ who has provided strength and guidance graciously throughout the study period. Without His guidance and support, I would have not made it. I also dedicate this work too my supervisor Dr Nonceba Vellem, my husband, Macebo Bunu, my sister Ntombi Nkohla , my niece Dudu Gushu, my colleagues Boniswa Gcina and Zukiswa Dasheka and friends. May God shower you with His abundant blessings.



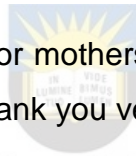
University of Fort Hare  
*Together in Excellence*

## ACKNOWLEDGEMENTS

The completion of this study took the support and guidance of many people whom I would like to acknowledge. Words cannot express my sincere gratitude to the tireless and warm-hearted supervisor Dr Nonceba Vellem. As your name means “Mercy”, you have been merciful and kind to me throughout the period of my study. What God has given you, let no one take it from you. I will always remember your teachings. Without your guidance and motivation, I would have not completed this work. Thank you again Dr Vellem for the guidance and financial assistance through the Supervisor linked bursary under the University of Fort Hare GMRC funding, to cover all my financial needs during the study.

I would also like to say thank you very much to my husband Macebo Bunu for the sacrifice you made to ensure that I achieve my goal. You have kept your vows. Words cannot explain my appreciation for all what you have done for me throughout this journey, thank you once more.

Finally, I acknowledge my previous mentor mothers who helped me during the data collection process especially Ms Mandisa Mbali. Thank you very much for your tireless assistance during the data collection exercise. Mandy, you were so amazing, energetic, professional, and dedicated throughout this process.



University of Fort Hare  
*Together in Excellence*

## LIST OF ACRONYMS

|        |   |
|--------|---|
| AIDS   | : Acquired Immuno-Deficiency Syndrome       |
| BCMM   | : Buffalo City Municipality Metropolitan    |
| CDC    | : Centre for Disease Prevention and Control |
| DHIS   | : District Health Information System        |
| DMSA   | : District Multi-Sectoral AIDs Committee    |
| DoH    | : Department of Health                      |
| EC     | : Eastern Cape                              |
| HBM    | : Health Belief Model                       |
| HIV    | : Human Immune Virus                        |
| HPV    | : Human Papilloma Virus                     |
| HSRC   | : Human Sciences Research Council           |
| NDoH   | : National Department of Health             |
| NGOs   | : Non-Governmental Organisations            |
| NIH    | : National Institutes of Health             |
| UNAIDS | : United Nations Programme on HIV/AIDS      |
| UNDP   | : United Nations Development Programme      |



University of Fort Hare  
*Together in Excellence*

## ABSTRACT

**Introduction:** The female condom was introduced so many years after the male condom was introduced as an additional intervention to prevent sexually transmitted diseases and HIV/AIDS. The purpose of the study was to explore and describe the factors affecting female condom use in Buffalo City Metropolitan, Eastern Cape.

**Method:** Quantitative descriptive and contextual research designs were used to enable the researcher to gain knowledge and insights on female condom use. The population of the study was sexually active women between ages of 15-49 years, living in Reeston community of Buffalo City Municipality in the Eastern Cape Province. Convenient sampling was used to recruit the respondents with 599-sample size and data was collected using questionnaires. Ethical considerations were considered throughout the study. Data was analysed using Statistical Package for the Social Sciences (SPSS version 22) and summarised using tables, graphs and descriptive statistics.

**Results:** The findings of the study were minimal use of female condom because of poor marketing strategies towards female condoms despite the government intervention. The attitude of sexually active women towards female condom was positive, but minimal knowledge, inaccessibility and unavailability of female condoms hinder its use.

**Conclusion and Recommendation:** The study recommended health education through campaigns and counselling about female condom use and their benefits to all age groups of women who are sexually active. The government and stakeholders should promote the condom uptake, accessibility and availability in every public place. Department of Health, Education should have empowered the community at large on how to promote female condom use and improve the distribution of both male/ female condoms to schools and public place.

**Keywords:** Condom, female condom, male condom



## TABLE OF CONTENTS

|  |      |
|--|------|
| <a href="#">DECLARATION</a> .....                                  | i    |
| <a href="#">DECLARATION ON PLAGIARISM</a> .....                    | ii   |
| <a href="#">CERTIFICATION</a> .....                                | iii  |
| <a href="#">DEDICATION</a> .....                                   | iv   |
| <a href="#">ACKNOWLEDGEMENTS</a> .....                             | v    |
| <a href="#">LIST OF ACRONYMS</a> .....                             | vi   |
| <a href="#">ABSTRACT</a> .....                                     | vii  |
| <a href="#">TABLE OF CONTENTS</a> .....                            | viii |
| <a href="#">LIST OF TABLES</a> .....                               | xii  |
| <a href="#">LIST OF FIGURES</a> .....                              | xiii |
| <a href="#">APPENDIXES</a> .....                                   | xiv  |
| <a href="#">CHAPTER 1</a> .....                                    | 15   |
| <a href="#">INTRODUCTION AND BACKGROUND</a> .....                  | 15   |
| <a href="#">1.1 Introduction</a> .....                             | 15   |
| <a href="#">1.2 Problem Statement</a> .....                        | 19   |
| <a href="#">1.3 Aim of the Study</a> .....                         | 19   |
| <a href="#">1.4 Main Research Question</a> .....                   | 19   |
| <a href="#">1.4.1 Sub questions</a> .....                          | 20   |
| <a href="#">1.5 Research Objectives</a> .....                      | 20   |
| <a href="#">1.6 Significance of the Study</a> .....                | 20   |
| <a href="#">1.7 Definitions of terms</a> .....                     | 21   |
| <a href="#">1.8 Theoretical framework</a> .....                    | 22   |
| <a href="#">1.9 Chapter Outline</a> .....                          | 23   |
| <a href="#">Chapter 1:Introduction and background</a> .....        | 23   |
| <a href="#">1.10 Conclusion</a> .....                              | 24   |
| <a href="#">LITERATURE REVIEW</a> .....                            | 26   |
| <a href="#">2.1 Introduction</a> .....                             | 26   |
| <a href="#">2.2 Male and Female Condom</a> .....                   | 26   |
| <a href="#">2.3 Benefits of Condom Use</a> .....                   | 27   |
| <a href="#">2.4 Challenges/Barriers to Female Condom Use</a> ..... | 28   |

|  |    |
|--|----|
| <u>2.4.1 Knowledge of female condom use</u> .....                  | 28 |
| <u>2.4.2 Attitude and behavior</u> .....                           | 32 |
| <u>2.4.3 Availability and accessibility of female condom</u> ..... | 34 |
| <u>2.5 Condom Uptake</u> .....                                     | 36 |
| <u>2.6 Conclusion</u> .....  | 38 |
| <u>CHAPTER 3</u> .....   | 39 |
| <u>RESEARCH METHODOLOGY</u> .....                                  | 39 |
| <u>3.1 Introduction</u> .....                                      | 39 |
| <u>3.2 Research Approach and Research Design</u> .....             | 39 |
| <u>3.2.2 Descriptive design</u> .....                              | 40 |
| <u>3.2.3 Contextual design</u> .....                               | 40 |
| <u>3.3 Research Setting</u> .....                                  | 40 |
| <u>3.4 Population</u> .....  | 42 |
| <u>3.4.1 Inclusion criteria</u> .....                              | 42 |
| <u>3.4.2 Exclusion criteria</u> .....                              | 42 |
| <u>3.5 Sampling and Sampling Method</u> .....                      | 42 |
| <u>3.5.1 Sample size</u> .....                                     | 43 |
| <u>3.6 Data Collection Instrument</u> .....                        | 43 |
| <u>3.6.1 Data collection procedure</u> .....                       | 43 |
| <u>3.7 Validity</u> .....  | 44 |
| <u>3.7.1 Content validity</u> .....                                | 44 |
| <u>3.8 Reliability</u> .....                                       | 44 |
| <u>3.9 Data Analysis</u> .....                                     | 45 |
| <u>3.10 Ethical Consideration</u> .....                            | 45 |
| <u>3.10.1 Respecting and protecting human rights</u> .....         | 45 |
| <u>3.10.2 Right to privacy</u> .....                               | 45 |
| <u>3.10.3 Anonymity</u> .....                                      | 46 |
| <u>3.10.4 Confidentiality</u> .....                                | 29 |
| <u>3.10.5 Right to protection from discomfort and harm</u> .....   | 46 |
| <u>3.11 Limitation of the Study</u> .....                          | 46 |
| <u>3.12 Conclusion</u> .....                                       | 46 |
| <u>CHAPTER 4</u> .....   | 47 |
| <u>PRESENTATION OF FINDINGS</u> .....                              | 47 |
| <u>4.1 Introduction</u> .....                                      | 47 |



|   |    |
|---|----|
| <a href="#">4.2 Results on Demographic Characteristics of the Respondents</a>                           | 47 |
| <a href="#">4.3 Behaviour Characteristics of the Respondents</a>  | 48 |
| <a href="#">4.4 Awareness on Female condom Use</a>  | 49 |
| <a href="#">4.5 Socio-Economic Factors Associated with Female Condom Awareness</a>                      | 50 |
| <a href="#">4.6 The Determinants of Female Condom Use</a>   | 51 |
| <a href="#">4.7 Correctional Analysis of Determinants of Female Condom Use</a>                          | 54 |
| <a href="#">4.8 Attitudes towards Female Condom Use</a>   | 57 |
| <a href="#">4.9 Accessibility of Female Condoms</a>   | 57 |
| <a href="#">4.10 Determinants of Female Condom Self-efficacy</a>  | 58 |
| <b>CHAPTER 5</b>  | 61 |
| <b>DISCUSSION, IMPLICATIONS, LIMITATION AND RECOMMENDATIONS</b>   | 61 |
| <a href="#">5.1 Introduction</a>  | 61 |
| <a href="#">5.2 Demographic Data of the Respondents</a>   | 61 |
| <a href="#">5.2.1 Level of education of the respondents</a>   | 61 |
| <a href="#">5.2.2 Age of the respondents</a>  | 62 |
| <a href="#">5.2.3 Race of the Respondents</a>   | 63 |
| <a href="#">5.2.4 Religion of the respondents</a>   | 63 |
| <a href="#">5.2.5 Marital status</a>  | 64 |
| <a href="#">5.2.6 Occupation status</a>   | 65 |
| <a href="#">5.2.7 Place of residence</a>  | 66 |
| <a href="#">5.2 Knowledge Regarding Female Condom</a>   | 67 |
| <a href="#">5.3. Attitude Regarding Female Condom</a>   | 70 |
| <a href="#">5.4 Access to Male and Female Condoms</a>   | 73 |
| <a href="#">5.5 Poor Lifestyle (smoke and alcohol) and Sexual Behaviour Regarding Female Condom Use</a> | 74 |
| <a href="#">5.6 Female Condom Self - Efficacy</a>   | 75 |
| <a href="#">5.7 Summary of the Research Findings</a>  | 76 |
| <a href="#">5.8 Implications</a>  | 77 |
| <a href="#">5.8.1 Practice</a>  | 77 |
| <a href="#">5.8.2 Community</a>   | 77 |
| <a href="#">5.8.3 Future research</a>   | 77 |
| <a href="#">5.9 Limitations</a>   | 77 |
| <a href="#">5.10 Recommendations</a>  | 77 |
| <a href="#">5.11 Contributions of the Study</a>   | 78 |



University of Fort Hare  
Together in Excellence

[5.12 Conclusion](#)..... 78

[REFERENCE](#)..... 79



University of Fort Hare  
*Together in Excellence*

## LIST OF TABLES

|   |    |
|---|----|
| Table 4.1: Demographic characteristics of study participants.....                                     | 31 |
| Table 4.2: Smoking, Alcohol and sexual Behavioural characteristics of study participants....          | 32 |
| Table 4.3: Factors associated with awareness of female condom.....                                    | 34 |
| Table 4.4: Determinants of ever use of a female condom.....   | 36 |
| Table 4.5: Determinants of ever use of a male condom.....   | 37 |
| Table 4.6: Chi-square statistics showing the determinants of condom use frequency.....                | 39 |
| Table 4.7: Determinants of condom type preference: a chi-square analysis.....                         | 40 |
| Table 4.8: Attitude towards female condom.....  | 41 |
| Table 4.9: Access to male and female condoms.....   | 42 |
| Table 4.10: Determinant female condom self-efficacy.....  | 42 |
| Table 4.11: Ordinary least square regression showing determinants of female condom self-efficacy..... | 44 |



University of Fort Hare  
*Together in Excellence*

## LIST OF FIGURES

|  |    |
|--|----|
| Figure 1.1: Pender's Health promotion theory (adapted) ..... | 9  |
| Figure 4.1 Awareness of female condom .....                  | 33 |
| Figure 4.2: Women who have ever seen a female condom .....   | 34 |
| Figure 4.3: Women who have never used a female condom .....  | 35 |
| Figure 4.4: Women who have ever used a male condom .....     | 37 |
| Figure 4.5: Frequency of condom use .....                    | 38 |
| Figure 4.6: Most preferred type of condom .....              | 40 |



University of Fort Hare  
*Together in Excellence*

## APPENDIXES

|  |    |
|--|----|
| Appendix A: Ethical Clearance from the University of Fort Hare.....                  | 74 |
| Appendix B: Letter of permission from the Department of Health Eastern Cape Province | 76 |
| Appendix C: Participant Informed Consent Form.....                                   | 78 |
| Appendix D: Data collection Instrument (Questionnaire).....                          | 79 |
| Appendix E: Letter from Statistician.....  | 83 |
| Appendix F: Letter from language editor .....  | 82 |
| Appendix G: Turnitin Report.....   | 85 |



University of Fort Hare  
*Together in Excellence*

## CHAPTER 1

### INTRODUCTION AND BACKGROUND

#### 1.1 Introduction

The prevalence and the cost associated with sexually transmitted diseases, has led to the invention of both preventive and curative measures. From the preventive point of view, condoms are used for the protection of sexually transmitted diseases, and this intervention has been vigorously implemented with discovery of HIV epidemic. During the HIV/AIDs struggle, more emphasis put on condom use as a prevention strategy. The aim was to reduce the number of infected and affected people by HIV including other negative results associated with sexual activity such as unwanted teenage pregnancies and Sexually Transmitted Infections (STIs). However, the battle for male condom uptake is still on irrespective of the government efforts, which led to the introduction of female condom use to ameliorate the prevalence of STIs.

In the fight against HIV and AIDs, one of the government's interventions was condom use, started as early as 1992 when the South African Department of Health offered the national male condom programme (Beksinska, Smit & Mantell, 2013). Male condoms aimed at preventing unintended pregnancies and linked with a lower rate of cervical cancer, a Human Papilloma Virus (HPV) associated disease and HIV (Lam, Rebolj, Dugue', Bonde, von Euler-Chelpin, Lynge, Malungo, Lince-Deroche & Pleaner, 2016). However, the high prevalence of HIV continued to occur despite the implementation of the national male condom programme, which suggested a need for female condoms.

In the United State, McLaurin-Jones, Lashley and Marshall, (2016), were troubled by high cases of STIs with the prevalence of 110 million and 20 million new incidences yearly. Youth of 20 – 24 years old were the most vulnerable group and 50% of youth were affected. Above all, the incidence was two times greater in females than males as females are the recipients due to their physiological make-up. Tobin-west, Maduka, Onyekwere & Tella (2014) supported the statement that women were unreasonably affected by the epidemic. According to these researchers, of the 31% new infections, the percentage was three times higher for women than in men. Wallace, Li, & McDaid (2014) supported the above by stating that many sources have revealed that females



were more infected than males with an estimation of 60%. Also, United Nations Programme of HIV/AIDS (UNAIDS, 2013) reported the high HIV prevalence among women between 15-24 years doubling that of men of the same age throughout sub-Saharan. This high prevalence was due to inaccessibility and minimal usage of both male and female condoms, which could otherwise provide dual protection for these women (Nkosi, 2013). Out of 195 million women, only 47 million were able to access either male or female condoms (Peters, van Driel & Jansen, 2014). Furthermore, condom usage has gradually declined in South Africa (Nkosi, 2013). In addition, the survey results released by the Human Sciences Research Council (2014), reported that 399 million condoms both male and female were distributed against a target of one billion. Consequently, the South African National HIV Prevalence, Incidence and Behaviour Survey, (2012) reported an increase of 1.2 million people living with HIV in South Africa. The number increased from 5 253, 493 in 2009 to 6 422, 179 in 2012 with the exclusion of children below the age of 2 years. The survey results showed that 29.1% HIV prevalence rate in Eastern Cape and 13.6% HIV prevalence rate in Buffalo City Municipality Metro (BCMM) where the study was conducted, followed by eThekweni Metro and Ekurhuleni Metro, which were ranging between 14.3% and 14.5%. Judging from the information above, it was clear that women were in a serious problem and a considerate intervention of female condom use emphasis needed to be done.

The prevalence rate in South Africa in 2014, was estimated at about 6.4 million people living with HIV, at a prevalence rate of 18, 9% of adults aged 15 to 49 years, women aged 15 years and above living with HIV was put at 4.3 million, children aged 0 to 14 years and living with HIV was 340 000. Additionally, orphans due to AIDS aged 0 to 7 years was put at 2.3 million and death due to AIDS was put at 140 000 (UNAIDS, 2014 & Human Sciences Research Council (HSRC), 2014). It was imperative therefore to introduce female condoms as another intervention for prevention of sexually related infections.

The South African government is trying to reduce prevalence rate of HIV/AIDS in South Africa, with the assistance of many Non-Governmental Organizations (NGOs) to educate and distribute condoms both female and male condoms to citizens (Vu, Lung et al., 2013). Department of Health (2014) introduced a new type of flavoured

and coloured condom for both females and males to bring excitement into sexual activities (Kahn, 2014). However, the development encouraged female condom use in South Africa, particularly in the townships, where socio-cultural and economic status dominated sexual activities.

The use of condom was an important intervention in preventing HIV transmission and was a major strategy to reach 80% protection against HIV, compared with non-use, if used consistently (UNAIDS, 2013). The government also made a provision of free condoms for females and males to sexually active citizens contracting sexually transmitted infections including HIV (Human Sciences Research Council (HSRC), 2014; South African National AIDS Council 2011). Beksinska et al., (2013) also stated that condoms were provided free of charge in the public sector through expanded access to social marketing and the private sector. Use of female condoms could be advantageous to both males and female in reducing STIs and HIV.

Women bears the heaviest burden of HIV infection, unwanted/teenage pregnancies and STIs complications, hence female condom was the answer. However, the national condom distribution was silent on a female condom in the beginning but since 1998, the National Department of Health also has been focusing on the distribution of female condoms throughout all provinces and has grown from 19 to 300 nationwide (Beksinska et al., 2013). Some women were aware of and wanted to use a condom but due to circumstances that included culture, gender inequality and sexual violence, they could not.

Some cultures especially in Southern Africa, men were brought up to believe that they were superior to women and therefore women should be respectful and be obedient to men. The issue of superiority and inferiority has hugely affected sexual relationships negatively. Men were the ones to decide when, how and where to have sex without negotiating with the female partner. This was regardless of the woman knowing that her partner was unfaithful or has more than one wife (m.health24.com>medical, HIV and AIDS, 2014). Also asking your male partner to use a condom was a sign of disrespect and labelled as accusing your partner of having multiple partners. Hence, it was crucial to use a female condom because of its importance in assisting and educating African women who seem to be the most vulnerable. Education about female condom use was the only method that can be used for women to take control of their reproductive health

and prevent unnecessary complications and deaths, and need to be emphasised in all spheres.

Beksinska et al., (2013) stated that male condoms were provided free of charge in the public and private sector through expanded access of social marketing and female condom programme. Furthermore, the successive national surveys showed continuous use of male condom at last sex, although there was inconsistent and improper use of a condom than female condom use that was noted by (Beksinska et al., 2013). However, the discontinuation of condom use as the relationship grows older which hampered the effectiveness of condom programmes were reported. In Angola for instance, consistent condom use was for men with multiple partners and not for married or cohabiting partners (Masoda & Govender, 2013).

Literature reports declined condom use in South Africa Nkosi (2013), irrespective of the distributed free male and female condoms. Furthermore, South African District Health Information System (DHIS) (2014), in BCMM also indicated the free distribution of 10,180,318 condoms for 41.7% per male condoms and only 0.6% per female condom in 2014/15. Yet, the second quarter of 2015/16, 4,918,240 condoms were distributed, which was 80.2 condoms per male and 36,452 female condoms which was one condom per female. The information on female condom distribution raises serious concern. Female condom use is crucial and all health stakeholders should promote condom use at all cost.

Female condom use would benefit women because female condom reduces teenage and unwanted pregnancies, HIV transmission and new STI infections (Valens & Joseph 2013). Moreover, there are other benefits of female condom use, which included the effectiveness of it if used correctly. Nevertheless, the Center for Disease Control (CDC) and the National Institute of Health (NIH) suggested that the female condom could substitute male condom, in a case where the male refuse to use the condom (Workowski & Bolan 2015). The female condom could also be used during menstruation without any side effects, unlike male condom that fits all and female condom does not constrain the penis (Miller et al., 2017). Therefore, the female condom is apparently the answer to the shortfalls of the male condom.

Hoffman, Mabude, Ngoloyi & Stein, (2015) further argued that heterosexual intercourse put women at high risk and therefore heterosexuals may benefit from using a female

condom. In South Africa, female condom was offered as part of the national family planning. The evidence showed that there were still some shortfalls with female condom use such as unavailability, inaccessibility and lack of knowledge (Ananga, Kugbey, Akporlu & Asante, 2017). Beksinska et al., (2013) highlighted these challenges and required an urgent intervention of condom distribution, enhanced accessibility and campaigns for education.

The researcher in this study is interested in the factors that are the basis of minimal usage of female condom and causes of inaccessibility, unavailability and lack of knowledge about the female condom.

### **1.2 Problem Statement**

Minimal usage of female condom, unavailability and inaccessibility to all the women who are sexually active in Reeston, Buffalo City Municipality is of great challenge. The evidence of minimal usage of female condom was revealed by new incidents of sexual related infections especially STI's and HIV irrespective of the government and NGO's interventions thus causing a serious concern. The rising statistics of new HIV/AIDs and STI statistics provided for BCM have an average annual prevalence growth rate of 2.53% compared to Eastern Cape rate of 2.37% with alarming infections and unwanted pregnancies in BCMM. The high pregnancy rate in the school-going girls in East London in the BCM recorded the highest among many Eastern Cape schools, is another point of concern. Repeated incidence of STIs might lead to cervical cancer leading to increased mortality rate among the sexually active women. In this study, the researcher was interested in investigating factors affecting female condom use in order to enhance female condom uptake.

### **1.3 Aim of the Study**

The aim of the study was to investigate factors affecting female condom use in Reeston in Buffalo City Metropolitan Municipality in Eastern Cape Province.

### **1.4 Main Research Question**

What are the factors affecting female condom use in Reeston, East London in the Buffalo City Municipality in Eastern Cape, South Africa?

### **1.4.1 Sub questions**

- What knowledge, attitude and behaviour of women in Reeston community about the female condom use in the Buffalo City Municipality in Eastern Cape, South Africa?
- What are the barriers and benefits to the female condom use in the Buffalo City Municipality in Eastern Cape, South Africa?
- What are the solutions needed for cost-effective interventions to overcome the factors affecting female condom use in the Buffalo City Municipality in Eastern Cape, South Africa?

### **1.5 Research Objectives**

- To assess the knowledge, attitude and behaviour of women within the Reeston community about the female condom in the Buffalo City Municipality in Eastern Cape, South Africa.
- .To identify barriers and benefits that impact on the female condom use in the Buffalo City Municipality in Eastern Cape, South Africa.
- To recommend cost-effective solutions to overcome factors affecting female condom use in the Buffalo City Municipality in Eastern Cape, South Africa.

### **1.6 Significance of the Study**

According to Brink, Van der Walt & van Rensburg, (2018), research study should contribute meaningfully to the practice, government and health of the community at large. The study will assist women to be empowered and gain knowledge about female condom through development and strengthening of educational programs pertaining female condom use. These programs will enable women to take charge of their reproductive health thus reducing unwanted/teenage pregnancies, HIV and AIDS and STIs. The government will benefit from the expenditure of treating unsafe sex conditions and hospital admissions if the results of this study are considered. The study will also help the department to identify gaps regarding both female and male condoms and come up with strategies or new programs that will increase condom uptake and its consistent use. The study might give guide to policy makers when formulating and amend the existing policies and accommodating cultural, economic,

and educational and religions of the province. Through these new developed and amended policies, sexual partners may be able to negotiate safer sex. Lastly, the study was also interested in redirecting ordinary peoples' attention to be empowered through education about their sexual health.

## **1.7 Definitions of terms**

### **Condom**

A condom “is a sheath-shaped barrier device that may be used during sexual intercourse to reduce the probability of pregnancy and sexually transmitted infections”. Either males or females (Korte, 2015) can use condom.

### **Female condom**

A female condom is a polyurethane sheath with a flexible ring at either end. One end is open while the other end is closed. The female condom is used as a sole female-initiated preventative measure for both sexually transmitted infections and unintended pregnancies Junqing Wu et al., (2016)

### **Male condom**

A male condom is a thin sheath usually made of latex used to cover a man’s erect penis in order to physically block ejaculatory fluids, sperm cells, and infectious agent during sexual intercourse (Korte, 2015).

### **Condom use**

Condom use in this study is the consistent use of condom every time a person engages in sexual activity.

### **Sexually active women**

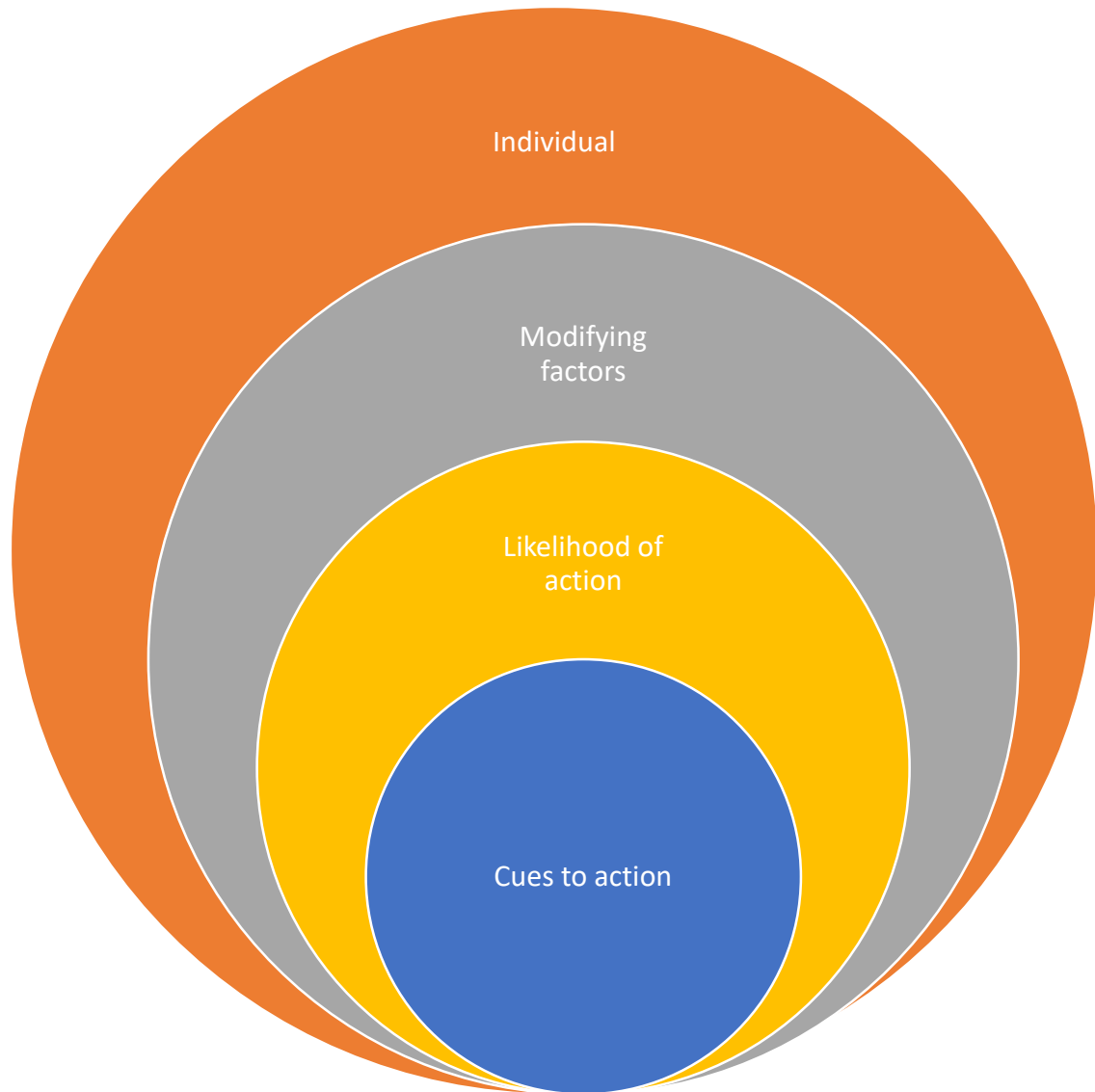
In this study, sexually active women are women between 15-49 years, involved in a sexual relationship during the past year.

## 1.8 Theoretical framework

The study was guided by the theory of the Health Belief Model framework. Health Belief Model (HBM) explains an activity by a person who believes to himself/herself to be healthy for preventing a disease in an asymptomatic stage (Becker, 1974). HBM was appropriate to this study as the key aim of the study was to understand women attitudes, knowledge and perceptions to the use of female condoms (Becker, 1974). The (HBM) guided this study in discovering related factors that affected female condom use amongst the women. According to the theory, "a person will take health-related actions, that is, use of condoms if that person/ individual feels that an outcome of a negative health condition may occur. In this study, sexual activity related conditions and unwanted pregnancy could be avoided if participants are using the female condom.

- **Modifying factors:** Modifying factors are anything that could influence the women in engaging in positive or negative actions. Modifying factors include age, ethnicity, personality, socio-economic and knowledge. These factors may assist the woman to realise the negative results of not using the condoms such as STIs, HIV and AIDs, unwanted pregnancies. If the woman has knowledge about benefits of using the female condom, there is a likelihood of using it. Has a positive expectation that by taking a recommended action (using a female condom), she will avoid a negative health condition and prevent sexual activity related diseases and unwanted pregnancy (Becker, 1974).
- **Likelihood of action:** Likelihood of action could be an action the women decided to take whether positive or negative. Any health risks that might be identified and associated with non-use of condom may lead to behavioural changes. Educating sexually active women would lead to be successfully recommending health action by using female condoms comfortably and with confidence (Becker, 1974).
- **Cues to action:** Cues to action may be internal or external. If person suffered from or sees another person with illness, the women could take precautionary measures to prevent recurrence/occurrence. In this study the sexual active woman suffered from any of the sexual activity condition, will then use condom.

The participants will later take health-related actions; in this study is the use of female condoms frequently when engaging in sexual activity (Becker, 1974).



**Figure 1.1 Becker's Health belief model (Becker: 1974)**

### **1.9 Chapter Outline**

#### **Chapter 1: Introduction and background**

This chapter discussed the introduction and background of the study. The introduction and background of this study focussed on female condom use challenges, barriers and the government initiatives in promoting the use of male and female condom for every female that was sexually active. The chapter also discussed the problem statement, research aim, objectives, research questions, the significance of the study,



definition of concepts, and the health belief on the Becker's Health belief model that guided the study.

### **Chapter 2: Literature review**

The chapter provides an overview of the literature review on factors affecting female condom use to the residents of Reeston Community in Buffalo City Metropolitan. The literature review of this study also focused on issues related to female condom, benefits of female condoms, attitudes of women regarding female condom use, knowledge of female condoms and accessibility or availability of female condoms.

### **Chapter 3: Research Methodology**

The chapter put emphasis on the processes of research methodology as follows, research approach, research design, study setting, population, sampling method, data collection, data analysis, ethical considerations and limitations of the study.

### **Chapter 4: Results**

This chapter presented the results on the factors affecting female condom use in the Buffalo City Metropolitan Municipality, Eastern Cape, South Africa. The findings were presented following all sections of the questionnaire, namely: section A – demographic data, section B – awareness, use and attitude to female condom and section C – female condom use efficacy.

### **Chapter 5:**

#### **Discussion Summary, justification, conclusion, limitations, contributions and recommendations**

The chapter presented the discussion on the results. The chapter also covered summary of findings, justification, limitations, implications contributions and recommendations for further research.

#### **1.10 Conclusion**

The decline in condom use had a negative impact on the health system which had the heaviest burden because on women. Hence, the government had to introduce female condom. However, it has been discovered that female condom also had and continues to have its challenges hence a need to identify factors affecting female condom use is critical.



University of Fort Hare  
*Together in Excellence*

## CHAPTER 2

# LITERATURE REVIEW

## 2.1 Introduction

The first chapter of this study introduced the topic and established the scientific foundation of the study. The literature review chapter focuses on a discussion of the literature related to factors affecting female condom use. The literature search used sources such as Ebsco, Google Scholar, Scopus and PubMed. The keywords used in the search for articles were 'female condom, benefits of female condoms, attitude of women regarding female condom use, knowledge of female condoms and accessibility or availability of female condoms. Other keywords used were challenges for condom use, barriers for female condom use and importance of the female condom use.

The themes discussed in this chapter are; benefits of female condom use, challenges and barriers to female condom use which include; knowledge of female condom use, attitude and behaviour to female condom use, availability/accessibility of female condom and condom uptake. The literature review focused on studies and reports spanning from 2013 to 2018 and to papers published in English.

## 2.2 Male and Female Condom

A male condom is a thin sheath-shaped barrier device worn by males during sexual intercourse to block the sperm from going to the uterus to fertilise the egg. It also blocks other infectious agents (Korte, 2015). On the other hand, female condom is polyurethane sheath worn by females, with a flexible ring that prevents the sperm cell from entering the womb (Junqing Wu et al., 2016). The only difference is that male condom is inserted when the penis is erected, whereas the female condom might be inserted up to eight hours' prior to the sexual intercourse. In this case, the researcher strongly believed that female condoms are effective if used correctly. This is because they are easily accessible, safe, effective and appropriate. This is a result of its characteristics, which make it strong, durable and usable for people allergic to latex. There is no need for a special storage as well.

### **2.3 Benefits of Condom Use**

Women should be aware of the benefits of female condom use to increase female condom uptake. These benefits include the fact that condoms can play an important role for male and females in promoting better and healthy sexual lifestyles, enhanced pleasure and lack of side effects (Koster, Bruinderink & Janssens, 2015). Moreover, condoms are an essential preventive measure for sexual diseases and unwanted pregnancy (Yam, Mnisi, Sithole, Kennedy, Kerrigan, Tsui & Baral 2013) Research found that condoms are usually available and accessible but the shortfalls of the health care system were the failure to educate people about benefits of condom use (Ezire, Oluigbo, Archibong, Ifeanyi & Anyanti, 2013). The shortfall in educating the community had negative outcomes leading to non-condom use. For example, the female condom can be inserted several hours prior to sexual activity; therefore, the woman need not be aroused before inserting the female condom unlike with the male condom. Furthermore, the female condom is safe, effective and appropriate for female protection. Finally, female condom promotes women's control over their reproductive health (Koster et al., 2015). Therefore, women that are empowered and educated on the benefits of female condom use will promote the female condom uptake.

According to the CDC 2016, NIH and all of the leading medical associations in this country claimed that condoms are highly effective in averting HIV infection, decreasing the risk of pregnancy and a number of sexually transmitted infections. Nonetheless, all female condoms are a substitute if the partner is reluctant to use a male condom due to personal, cultural, or religious reasons. Therefore, female condom empowered women to have greater control to protect their bodies (Yam et al., 2013).

These researchers believed that this device offers double protection against sexually transmitted diseases such as HIV, STIs and unwanted pregnancies. Unplanned pregnancies might result in unsafe abortions, which are also costly to the nation. Some women feared contraceptives because of side effects such as excessive bleeding, permanent infertility, irregular menstrual cycle, and backache. Against these predicaments, the female condom is considered an answer for those women because it is a non-hormonal barrier contraceptive (Kiura, 2017). Naidu, (2013) supported the above standpoint by highlighting that studies have shown that women who

experienced negative side effects to hormonal contraceptives preferred female condom use. According to Naidu (2013), women expressed flexibility and long-lasting effect of the female condoms. Some women reported that the lubrication feels good and the husbands expressed the satisfaction stating that sex felt ordinary, desirable and enjoyable (Taiwo, et al., 2017 & Ezire et al., 2013).

## **2.4 Challenges/Barriers to Female Condom Use**

There is scanty information on female condom, which makes it a challenge in the uptake of a female condom. Lack of knowledge about female condom affects both women and health care workers. Phiri, Rhikhotso, Moagi, Bhana & Jiyane, (2015) highlighted the issue of inadequate knowledge among health care workers in relation to female condom. Some of the few identified challenges are within the following aspects: Knowledge about the female condom, attitude and behaviour, accessibility and acceptability of female condom and condom uptake. These are discussed below.

### **2.4.1 Knowledge of female condom use**

Knowledge is crucial at any stage of life. In this study, the researcher's emphasis was on the empowerment of women who were sexually active, as the researcher perceived that, there was minimal knowledge on usage of female condom. The empowerment should focus on the advantages of female condom such as prevention of unwanted pregnancies and sexually transmitted diseases, including HIV and AIDS. This is important because, various studies have discovered that people have minimal knowledge of female condom, which contributes to low female condom uptake. For instance, a study conducted in Botswana by Gungqisa, Schaan, Taylor & Marlink, (2016) discovered that not only the users had minimal knowledge, but also even the health care workers had inadequate knowledge regarding female condom. Phiri et al., (2015), who also stated that 53% of health care workers required the essential information regarding female condom use, supported the findings. This was a serious concern and very embarrassing to the nursing profession and government. This is because the question is; how did the health care workers promote and educate women about female condom use if they themselves lacked knowledge? This implies that the women who were sexually active had missed such opportunities and government had more burden to ensure the right information and training was done.

In Rwanda, about 79% of university students knew about female condom and its benefits but lacked the skill on how to use it (Valens & Joseph, 2013; Wang, Xi, Zhang, Jia, Wang, & Cheng, 2014), while it was only 24% who knew how to use it. This is an indication that female condom was not well promoted and marketed, probably due to lack of skills. The above finding therefore, reinforces the fact that there is inadequate knowledge in some communities, which need an urgent intervention. For example, the women in Uganda only knew about male condoms, the injection, pills, and abstinence as types of contraceptives (Nalwadda, Mirembe, Byamugisha, Nazarius, Tumwesigye & Faxelid, 2016). The results of a study conducted in Uganda showed that one in three adolescent males and one in two adolescent females did not know that a condom should only be used once (UNFPA, 2013). Nevertheless, the researcher was interested in understanding how much did the respondents know about female condoms' availability, accessibility and benefits thereof.

National Population Based Survey (2013), conducted in sub-Saharan Africa, reported lower levels of accurate and comprehensive knowledge about HIV among young women between 15–24 years of age than young men of the same age did (Shokoohi, Karamouzian, Mirzazadeh, Haghdoost, & Rafierad, 2016). Due to the lack of knowledge they were unlikely to report condom use during their last sexual activity (UNAIDS, 2013) resulting in unplanned pregnancies and unsafe abortion (Yazdkhasti et al., 2015). These resulted in an unmet need for contraceptive products, including the female condom. Information sharing and women empowerment seemed to be the key issue, hence the researcher wanted to identify factors affecting female condom use in order to come up with recommendations to close the gap.

Further, little knowledge was a problem depicted by Ezire et al., (2013), in a study conducted in Nigeria on barriers of female condom use, which had a negative impact on women who were sexually active. Furthermore, the Nigerian women and males showed poor knowledge of using a female condom during sexual activity (Ezire et al., 2013). Because of this inadequate information, there was negative perceptions and incorrect use of female condom. Some of the reported negative perceptions were fears that the condom might slip during a sexual activity.

Similarly, condom usage, especially by women in the rural areas of South Africa was reported to be low and more emphasis should be on education about condom use. Johnson, Kincaid, Laurence, Chikwava, Delate & Mahlasela, (2014) put forward that media promotion on prevention messages of STIs including HIV was done in South Africa, through national mass media by the government and NGOs. However, female condom use required more education and campaigns in order to be accepted and adapted by women who were sexually active. Acceptance and adequate adoption of female condom by sexually active women would also contribute to the eradication of HIV and AIDS and teenage pregnancies (Beksinska et al., 2013). It is imperative therefore to adopt female condom as one of the best dual protection strategies.

On contrary, the National contraceptive policy according to Lince-Deroche, Mulongo, Pleaner, Morroni, Mullick, Firnhaber, Harries, Sinanovic, et al., (2016), male condom use was encouraged more than the female condom leaving queries if a female condom was important. On the other hand, although some of the sexually active women knew about female condom and had a positive attitude towards it, they lacked skills to use it (Valens & Joseph, 2013). The findings further showed that educational status, religious affiliation and residential factors also affected the knowledge of female condom use. Mnyipika, (2014) supported this finding by stating that condom use among teenagers was influenced by demographic, attitudinal and educational factors. The more educated the sexually active women are as well as staying in urban areas, the better the knowledge of condom use than that of women in rural areas (Mnyipika, 2014). Valens and Joseph (2013) also highlighted the issue of the age difference, which also affected the knowledge of female condom use. For instance, young sexually active women got knowledge on condom use from the media while the older women needed to be educated by health professionals or from the pharmacy where they bought female condoms. The challenge with these sources of information is that information is not always available, resulting in poor female condom use.

Silassie, Teka & Abebe, (2016) emphasised the importance of knowledge, attitude and practices in the prevention of risky sexual practices. Furthermore, some of the women who were sexually active had minimal and limited knowledge of female condom. This therefore, could be due to the failure of health care services to market

the female condom information through media, posts and campaigns. Thus, improved knowledge for female condom use was needed for the promotion of positive attitude towards female condom and improved safe practices of sexual activity (Silassie et al., 2016). On the other hand, Boyd, Perkins & Lawrence, (2015), in their study proposed that information sharing and open discussions about female contraception might encourage intentions to use female condoms. Moreover, they stated that at least health professionals were the main source of information for female condom as compared to the male condom.

Andrews et al., (2015) highlighted a lack of knowledge regarding the importance of consistent condom use during each sexual activity. In another study conducted by Nduka, Enwereji, Nduka & Ahuizi, (2014) showed that only 29% of the participants used condom consistently with their spouses. This reflected a need for the women to be empowered and trained on female condom use. Nonetheless, there was an urgent need to empower both males and females about both male and female condom frequent use and the importance of using it each time partners are engaged in sexual activity. This would enable the partners to live within the accepted behaviour related to sexual activity and minimise chances of STI's, HIV, teenage, unplanned and unwanted pregnancies.

In conclusion, World Health Organisation (WHO) (2013) described sexuality as a fundamental aspect of human being throughout life. Sexuality includes sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Moreover, WHO (2013) highlighted the fact that sexuality is knowledgeable and communicated in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships, thus it is better to speak about it. Due to lack of knowledge, many women fail to understand that they have the right to negotiate for safer sex, and use the female condom with their partners. Empowering sexually active women is crucial so that women could also be responsible for their prevention and promotion of healthy sexual lives.



#### **2.4.2 Attitude and behavior**

Gender affairs and male power struggle between partners become an influential factor for women to intervene during sexual engagement in using a female condom. There has been power struggle between men and women during sexual engagement because women had no right to negotiate anything related to sex. Furthermore, gender inequality did not only end up in family matters but might influence women's decision not to practise safer sex (Vouking, Evina & Tadenfok, 2014). Moreover, Korndorfer (2014) also suggested that young women did not have control over their sexual reproductive health. Instead, the situation was worsened by the fact that the females were so submissive and gave men the power over their bodies. Koster et al., (2015) further mentioned that because some women depended on men educationally, socially, politically and sexually, they had a tendency to put themselves at risk of contracting HIV and unplanned pregnancies.

A high number of girls across the world have been physically and mentally abused due to gender inequality (UNAIDS Global AIDS Report, 2013). For example, the teenagers have been sold for sex work or involved themselves in transactional sex for monetary gain (WHO 2013). In the process, neither female nor male condom was used. The uneven power relations between men and women continue to have an adverse effect on women's reproductive health United Nations Development Programme (UNDP)-Uganda Country Gender Assessment October 2015). According to Peters et al., (2014) in South Africa male partners raped women and sexually active girls. In this case, due to lack of knowledge about criminal law and understanding the importance of practising safer sex, non-use of a female condom might result.

Previous studies indicate that women who accepted the use of female condom were those who had adequate knowledge, a positive attitude, willingness to use condoms and those who had already used it (Ezire et al., 2013). In a research conducted in Nigeria by Ezire et al., (2013) most women were negative and unhappy about female condom use. Some of their partners confirmed that they used a female condom because male partners insisted and that showed gender inequality (Ezire et al., 2013). Gender inequality prevented women to raise concerns about the female condom. Other studies have reported negative views about condoms issued by government

(McMahon Therese & Braksmajer 2016). There was a belief that government condoms break easily, smell, dry out easily and were of poor quality. Some women raised concerns about the big size and shape of the female condom stating that it is not appetising (Mokgetse, 2015). Moreover, some women also stated that it is oily and makes 'noise' during sexual intercourse due to the material used to make it. The study done by Ashmore and Henwood (2015) reported that flavoured condoms were ascertained to be much more dominant than unflavoured ones.

Subramanian and Sahay (2016) supported the view that government condoms are of poor quality because female condoms have been defined to be difficult to use, have negative implications, and lacked the necessary negotiation skills to introduce it to their partners. The researcher further mentioned that brothel-based female sex workers prefer to buy condoms privately than using government condoms because of their poor quality (Subramanian & Sahay, 2016). The above characteristics resulted in women preferring male condoms to female condoms.

Men displayed mixed attitude about whose responsibility to initiate male condom use (Beksinska et al., 2013). According to men, it was their duty to ensure the availability of male condom but initiating its use was not their responsibility. Masoda and Govender, (2013) reported that in Angola consistent condom use was perceived to be of married or cohabiting relationships. Initiation of female or male condom use by a married female was perceived to be socially unappealing and weird (Islama & Laugena (2015). Male and female condoms not used because of circumcision misconceptions. Some women were manipulated by engaging in unprotected sex with circumcised men, putting their 'faith on circumcision that they will not contract HIV. Thus, male circumcision was highly encouraged like a 'magic bullet' (Boyle & George, 2014). This misconception has even spread to even the women themselves.

The female condom was associated with stigma (McLaurin-Jones et al., 2016). That prevented young girls from getting a female condom from the health services since it is linked to promiscuity. This leaves them to continue engaging in sexual activities unprotected. Sexual risk behaviours have been noted to increase during the festive season when alcohol consumption level is high across the country (Mnyipika, 2014). This unacceptable behaviour of non-condom use exposes teenagers to HIV infections,

STIs unwanted pregnancies that might lead to abortions. Risky sexual behaviour and alcohol consumption are closely inter-related. In agreement, Brown et al., (2016) and WHO (2013) support the above statement by highlighting that the heavier the alcohol consumption, the more chances of non-condom use. It is well documented that thinking ability is affected by alcohol consumption. WHO (2013) in various studies supported the fact that teenagers are fully aware of consequences when engaging in unprotected sex. It is therefore the health care workers' responsibility to put emphasis on female condom use and advised teenagers about the benefits of a female condom. In conclusion, despite the abovementioned reasons, their knowledge, understanding and level of awareness should not be ignored as they vary accordingly WHO, (2013).

#### **2.4.3 Availability and accessibility of female condom**

The female condom was introduced in 1998 to give women the power to control their female reproductive health. However, female condom was poorly marketed and was not made available and accessible to the women. The unavailability and inaccessibility of female condom have negatively affected female condom uptake. Most region

s to be affected by the scarcity of female condom are within the sub-Saharan Africa. In sub-Saharan Africa, especially South Africa in KZN women have very little exposure to female condoms due to its inaccessibility (Naidu, 2013). The non-availability of female condoms will have no distinct impact on the public makers to increase female condom availability (Cavanaugh, Mial & Tulloch, 2016).

However, condom week usually was conducted yearly as a preventive strategy for all the sexual active diseases, but the emphasis on distribution was always on a male condom than a female condom. Moreover, health care employees failed to educate the recipients on how to use the female condom. Therefore, marketing in terms of availability, accessibility and educating was more on male condoms than on female condoms. According to Pizzarossa, (2018) this was not only violation of women, sexual and reproductive rights, but rights that were prioritised and acknowledged at the global policy level.

Nevertheless, restricted access to female condoms due to the high price and low availability prevented condom use (Cumber & Tsoka-Gwegweni (2016); Ancia et al.,

(2014) mentioned that female condom sales were in millions (61, 5 million) worldwide comparing to the billion sales (22. 8 billion) of male condom worldwide (Bernama, 2014). The information further explained that female condom is still expensive compared to the male condom and is hardly available in low socio-economic areas. The female condom was introduced to be available in public health service and be given free of charge. Inaccessibility and availability of this device in public health services resulted in the female condom being sold in private sectors. That has led to private sectors selling the condoms at an expensive price especially to those people from low socio-economic communities. In addition to high price, the female condom is also related to the endorsement that it is for one-time use only, meaning like a male condom, it is only used once and then discarded. The price of the female condom greatly deterred its access. Moreover, chemists made it difficult for young girls to access condoms, both male and female. Some young people felt uncomfortable to ask for condoms and resulted in risky sexual behaviours due to the inaccessibility of condoms.



On the other hand, UNAIDS Global Overview information (2013) confirmed inaccessibility of both male and female condoms especially for high school sexually active teenagers in South Africa. UNAIDS (2013) highlighted that these teenagers needed to travel long distances in order to access female condoms. Furthermore, the report also stated that by the time the teenagers arrived in shops, shops were already closed. Therefore, the health care providers impeded the availability of the female condoms through the challenges explained above. Nevertheless, the Department of health also had forbidden the distribution of female condoms at school (Mnyanda, 2013). Therefore, female condoms had many challenges like accessibility, availability and cultural barriers.

Cultural barriers also prohibited women from accessing female condoms (Nayak (2013); Madiba & Ngwenya 2017). However, the above researchers argued that there was a lack of women's rights that were deeply embedded in cultural norms and values which people and institutions hold on to. WHO (2013) supported the idea and stated that some cultures believed that free supply of condom might lead to early sexual engagement. The minimal support of female condoms due to the support of cultural issues from parents, religious leaders and peers decreased female condom uptake

and use (Crosby et al., 2014). Moreover, some of KwaZulu-Natal and Eastern Cape areas did not allow children to openly speak about sexual relationships (Crosby et al., 2014). Therefore; culture also promoted submissiveness to the females especially Africans. The submissive role of women, sometimes due to poverty and the absence of income, lack of understanding and information related to prevention, harmed women (Mokgetse, 2015). These socio-economic and cultural factors had led to non-use of female condom predisposing women to HIV, STIs and unwanted pregnancies. However, men in sub-Saharan Africa used this submissiveness of women to control sexual activities, preferring to compromise the benefits of female condom use than buying expensive female condom (Mavhandu-Mudzusi and Asgedom (2016). Cultural aspects including morality, religion, and attitudes impact on individual choices.

UNAIDS (2014) also stated that moral, religious attitudes and choices were likely to curb both male and female condoms promotion. Chimala (2014) stated that Malawi is in the list of countries with low female condom uptake due to the religious beliefs. In Malawian churches, the condom use was associated with sin, dirt and immorality. Moreover, WHO (2013) also reported that condom use in some churches for an example, the Catholic Church, was associated with promiscuity. The Catholic churches prohibited condoms for both prevention and contraception purposes (Mokgetse, 2015). Peters et al., (2014) the sub-Saharan African women perceived promiscuous behaviour associated with female condom has made it difficult even for married Christian women to negotiate condom use. Accessibility and availability would be improved if condoms were put in places like public toilets, bars and hotels as Botswana does (Mokgetse, 2015). Thus, accessibility, acceptability and availability of female condom might improve female condom uptake.

## **2.5 Condom Uptake**

Several studies have proven that female condom is a gender-responsive way for sexually transmitted infections, but women's response towards this device is poor. The term *condom uptake* may be defined as consistent use of a condom. It should be noted that high distribution of condom does not really mean high condom uptake. Condoms might be distributed in huge numbers and not being used. It is therefore important to empower women to use condoms every time one engages in sexual activity. Condom

uptake is measured by condom use at last sexual activity (Beksinska et al., 2013). Education on female condom use plays a huge role in condom usage especially in women. However, female condom use in both urban and rural areas of South Africa is low.

Bouscaillou, Evanno, Proute', Niangoin, Kabran, Luhmann, Dje-Bi, Sidibe et al., (2016) indicated that the sustainable development goals and HIV response emphasised that HIV and AIDS eradication depends on condom use. Nevertheless, since 2002, Human Sciences Research Council (2010) noted that three HIV surveys conducted in 2002, 2005 and 2008 have indicated a clear shift in male condom usage from 57.1% to 87.4 % in men and from 46.1% to 73.1% in women. In comparison, female condom uptake was low. The reason for low female condom use might be its effect during sexual intercourse, and misconceptions that it could decrease sexual pleasure (Ashmore & Henwood, 2015).

HSRC (2017) in 2014 suggested that South Africans were minimally using female condoms whilst engaging in sexual activities (Kahn, 2014). Thus, SFH (2013) suggested that there must be an increase of female condom promotion and distribution. According to SFH (2013), the promotion and distribution of condom 'primarily' is not confined to high-risk areas, such as the townships, as the disease could be described as economically racist, but also to places of higher learning.

The study with the highest percentage of women (98%) willing to use the female condom involved commercial sex workers (Peters et al., 2014). If this uptake is encouraged, the South African government's effort to reduce or minimise HIV and AIDS prevalence rate could be achieved. However, SFH (2013) in conjunction with many NGOs in the country were tasked to educate and distribute condoms both female and male free of charge to citizens (SFH, 2013). SFH (2013) also supported the notion that an intervention promoting female condom use might bring good results. There was evidence from the Human Science Research Council (2017) that showed the decline of condom use in South Africa (Van der Linde, 2013). The decline of condom use was a problem because the majority of males and females had a tendency of discontinuing condom use once the relationship was stabilized, thus

trusting the partners (Beksinska et al., 2013). It has been reported that men with multiple partners consistently used condoms (Masoda & Govender, 2013).

Mokgetse (2015) stated that statistics from health facilities in Jwaneng, one of Botswana areas, showed 811 female condoms were distributed against 86 890 male condoms distributed from January to December 2012. The numbers were echoed by the quarterly statistics submitted to the District Multi-Sectoral AIDS Committee (DMSAC) revealing enormous numbers of expired female condoms from the facilities (Mokgetse, 2015). This report was alarming and raising concerns if the health workers were doing their job. Similarly, in sub-Saharan Africa condom distribution contrasted with the extensive condom promotion efforts (Kaelo & Malema, 2014).

## **2.6 Conclusion**

The literature has revealed that female condom was not well marketed and promoted. This has been affected by the beliefs, attitudes and risks that women portrayed during different studies conducted across the globe. The literature review has also indicated that women showed minimal knowledge about female condom benefits. Nevertheless, female condom is still 'a weapon' for women to take charge of their reproductive health.



## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter is about the methodology used in the study to answer the research question. This chapter focuses on the processes of research methodology such as, research approach, research design, settings, population, sampling method, data collection, data analysis, ethical considerations and limitations of the study.



#### 3.2 Research Approach and Research Design

A quantitative descriptive and contextual design was used in this study. Barnham (2015) described the quantitative research approach as the measurement of objectives focusing on the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys or by manipulating pre-existing statistical data using computational techniques. Furthermore, Regonial (2015) suggested that quantitative research is aimed at numerical data gathering and the generalisation of the gathered data across the subjects or giving an explanation to a phenomenon. The approach was suitable for obtaining the information needed to answer the research question. The descriptive and contextual designs are discussed below.

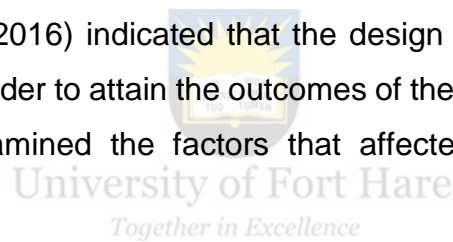


### **3.2.2 Descriptive design**

The descriptive design is the collection of information from a population sample using either questionnaires, interviews or survey studies (Brink, et al., 2018). This descriptive design was used in this study to understand the knowledge, attitudes and behaviour of sexually active women of any age regarding the factors affecting female condom use. The researcher was interested in understanding and describing the factors affecting the use of female condoms by sexually active women in East London, Reeston community.

### **3.2.3 Contextual design**

Creswell (2014) stated that the context is both personal and social, but, it is taken in a certain context. This research study took place in Reeston community of Buffalo City Metropolitan, Eastern Cape. The rationale for using the contextual design was to find out the factors contributing to minimal female condom use in Reeston area. However, Burns, Grove and Gray (2016) indicated that the design of this nature should be a guide for researchers in order to attain the outcomes of the phenomenon under study. Therefore, the study examined the factors that affected female condom use in Reeston.



### **3.3 Research Setting**



Research setting is an identified area or place where the information would be gathered (Brink, et al., 2018). This study was conducted in East London Township known as Reeston. It is located in the Buffalo City Metropolitan Municipality in the Eastern Cape, South Africa. Buffalo City Metropolitan Municipality (BCMM) is situated on the east coast of the Eastern Cape Province. The two former municipalities, Transitional Local Councils of East London and King William's Town have merged into one. Other areas that were previously not included in either of them are now part of BCMM.

According to Statistics South Africa, 2011 BCMM population was 755 200 and was considered overcrowded. Yet, the South African National HIV Prevalence, Incidence and Behaviour Survey 2012, HIV prevalence rate in BCCM was 13.6%, following eThekweni Metro and Ekurhuleni Metro, which were ranging between 14.3% and 14.5% respectively. A study conducted by Mnyanda, (2013) found that 259 girls ageing 14 -19 years were pregnant in one school in Mdantsane, BCMM. This highlights the nature of sexual relations in the Metro, which would be associated with high rates of HIV prevalence.

The area was challenged by noteworthy levels of socio-economic issues such as unemployment, crime, alcohol, drug abuse, poverty and HIV and AIDS. The latter was

prominent in the community and was accompanied by teenage and unwanted pregnancies, which might have been caused by above-mentioned socio-economic issues. The entertainment facilities are daringly lacking thus, leaving only the shebeens and poor sexual behaviours as the alternative sources of recreation. The researcher, therefore, selected this setting in order to use the findings to empower females and address sexual related problems. Further, the researcher was interested in finding out about the factors affecting female condoms use in the community of Reeston.

### **3.4 Population**

The study targeted a population of childbearing age women between 15-49 years, who were sexually active and living in Reeston community of Buffalo City Municipality in the Eastern Cape Province.

#### **3.4.1 Inclusion criteria**

The respondents who participated in the study had the following characteristics:

- All women who were sexually active
- Age between 15 – 49 years
- Living in Reeston

The rationale for choosing the above criteria was to find out if they are using the condom correctly, frequently and age eligibility purposes.

#### **3.4.2 Exclusion criteria**

The study excluded all women who were mentally ill. Mentally ill patients may be sexual active but not be able to answer the questionnaires due to their mental state. Mentally ill women would not be able to answer questions due their mental state.

### **3.5 Sampling and Sampling Method**

According to (Creswell, 2014). sampling is the process of selecting a group of people or things from the total population with the purpose of presenting it. Polit & Beck (2017) further supported the importance of selecting a sample when doing research. The

sampling process exploits the representatives of the total population, thus enabling generalisation to be as precise as possible. Convenient sampling was used to recruit all the women who were sexually active. All the respondents who were available in the community hall on the day of collecting data voluntarily participated in the study.

### **3.5.1 Sample size**

The sample size for this study was 599, calculated at 10% of the 5 990 population of Reeston population (Brink et al., 2018). The bigger the population (200 000) the smaller the sample size percentage (2%), and the smaller the population (2000) the bigger the sample size percentage (10%).

## **3.6 Data Collection Instrument**

Data was collected using the questionnaires containing questions related to demographic data of respondents from Reeston community, knowledge, attitude and behaviour of all the sexually active women about the use of female condom. The questionnaire had different sections of closed-ended questions. Some questions needed responses of yes or no, always, occasionally or never depending on the question asked. The aim for these types of questions was to answer one word rather than making the participant responds by writing sentences. The researcher used the questionnaires to understand the knowledge, attitude and perceptions about female condom use.

### **3.6.1 Data collection procedure**

Data was collected from the sexually active women, who were willing to participate in the study and residing at Reeston community, Buffalo City, East London. Data was collected after permission was granted from the community leader (councillor). The researcher also explained the objectives of the study to the councillor and the women who were sexually active during the recruitment. The participants were recruited through the community leaders and the councillor to gather at a community hall. Only women aged between 15–49 years participated in the study.

During data collection, the participants and the community leaders as well as peer educators involved in HIV/AIDs were given an explanation about the study. Then, interested and eligible participants were given informed consent to sign after the researcher had responded to participant's questions. However, for respondents who were below 18 years, their parents/guardians were requested to sign informed consent on their behalf to ensure ethical considerations were maintained. Questionnaires were self-administered by the researcher with the assistance of peer educators involved in HIV/AIDs. Data was collected for approximately two months because of the bigger number of the sample size.

### **3.7 Validity**

According to Noble and Smith (2015), validity confirms whether the data collection instrument measures what it was expected to measure accurately. In this study, the questionnaire measured knowledge, perceptions and attitudes of women regarding factors affecting the use of female condoms. The questionnaires were adapted from knowledge; attitude and perceptions (KAP) validated questionnaires. Then the questionnaires were also piloted with the first 10 respondents in order to correct any mistakes in the questionnaire (Brink et al., 2018).

#### **3.7.1 Content validity**

In this study, content validity was used. Brink et al., (2018) suggested that content validity examines the extent to which the instrument was used to represent all major components being measured and always come before data collection. In this study, the questionnaires were used. The questions that were asked included the women's attitude, knowledge and behaviour regarding female condom use.

### **3.8 Reliability**

Reliability is focusing on yielding the same results every time the questionnaire is used, thus ensuring consistency (Noble & Smith, 2015). The research instrument was adapted from the KAP questionnaires and covered the objectives that talked about the consistency of sexually active women's challenges and benefits associated with the use of female condoms. A statistician quantified the values of the variables to ensure consistency.

### **3.9 Data Analysis**

Data was analysed using Statistical Package for the Social Sciences (SPSS version 22). The results were summarised in tables and charts. Descriptive statistics were used to describe, summarise data, measure frequency distribution, central tendency and relationship as described by Noel (2015). In this study, Chi-Square test was used.

### **3.10 Ethical Consideration**

Permission to conduct the study was sought from the Research Ethics Committee of the University Of Fort Hare. The Provincial Department of Health Research committee granted the permission, from the office of the Buffalo City Metropolitan Municipality manager and the ward councillor of Reeston community. This, therefore, assisted the researcher to access the suitable location (community hall) where we met with the respondents.

#### **3.10.1 Respecting and protecting human rights**

Ethical considerations refer to the moral responsibilities to which the researcher must follow when research involves human participants (Brink et al., 2018). However, Resnik, (2015) suggested that ethics in research are guided by voluntary participation and informed consent in order to protect the participants. The participants were given details of what the study was all about, the purpose of the study and what would be its desired outcomes before participation. The informed consent was clear, easy, and with understandable information regarding participation in the research project. The participants were informed on the right to withdraw from the study at any time without a penalty when feeling uncomfortable. In this study, no participants were allowed to participate without the prior signing of the consent form. The respondents who were below 18 years of age were requested to have their parents to sign their consent form.

#### **3.10.2 Right to privacy**

The respondents in this study had the right to privacy and the right to decide whether the information shared with the researcher should be shared or not. Therefore, the respondents in this study were given the assurance that this information would not be shared with anyone; only the researcher would have access to the questionnaires, as advised by Brink et al., (2018).

### **3.10.3 Anonymity**

Anonymity emphasized the protection of the participant's identity by keeping it secret. In this study, participants were given codes instead of their names during the data collection and no respondents were associated with the collected data (Brink et al., 2018).

### **3.10.4 Confidentiality**

In the study all information gathered from the respondents were kept under lock and key to maintain confidentiality. In the case where the information would be divulged for other researchers and scientists benefit, the respondents will be informed prior disclosure as noted by Brink et al., (2018).

### **3.10.5 Right to protection from discomfort and harm**

Based on the principle of beneficence, the respondents were protected from emotional, psychological discomfort and physical harm (Brink et al., 2018). The respondents' who experienced any discomfort were given the right to withdraw from the research process (Polit & Beck, 2017). The respondents in this study were treated with respect and their views and opinions respected and maintained.

## **3.11 Limitation of the Study**

The limitation of this study was the fact that the researcher conducted the study in one community whereas the factors affecting female condom use could vary from community to community.

## **3.12 Conclusion**

The quantitative research design was used to yield the desired results of the study through the application of the descriptive and contextual design. Data was collected from sample of 599 respondents (sexually active women) using questionnaires, and analysed using descriptive statistics. Furthermore, ethical considerations relevant to this study were applied. The next chapter focuses on the data analysis and presentation of results.

## CHAPTER 4

### PRESENTATION OF FINDINGS

#### 4.1 Introduction

The previous chapter described the quantitative research methodology used in the study. This chapter presents the results on the factors affecting female condom use in the Buffalo City Metropolitan Municipality, Eastern Cape, South Africa. The results cover demographic data, awareness of female condoms, attitude towards female condom and female condom efficacy. The results are then interpreted, discussed and fitted against the literature in the next chapter.

#### 4.2 Results on Demographic Characteristics of the Respondents

Table 4.2: Demographic characteristics of study participants

| Variables                 | Frequency N= | Percent %   |
|---------------------------|--------------|-------------|
| <b>Level of education</b> |              |             |
| No formal education       | 24           | 4.0         |
| Grade 1-6                 | 99           | 16.5        |
| Grade 12                  | 426          | 71.1        |
| Higher education          | 50           | 8.3         |
| <b>Total</b>              | <b>599</b>   | <b>99.9</b> |
| <b>Age</b>                |              |             |
| 15-20                     | 86           | 14.3        |
| 21-25                     | 84           | 14.0        |
| 26-30                     | 121          | 20.2        |
| 31-35                     | 99           | 16.5        |
| 36-40                     | 96           | 16.0        |
| Above 40                  | 113          | 18.8        |
| <b>Total</b>              | <b>599</b>   | <b>99.8</b> |
| <b>Race</b>               |              |             |
| Black                     | 594          | 99.1        |
| Coloured                  | 5            | 0.8         |
| <b>Total</b>              | <b>599</b>   | <b>99.9</b> |



|                           |            |             |
|---------------------------|------------|-------------|
| <b>Religion</b>           |            |             |
| Orthodox                  | 292        | 48.7        |
| Seventh day               | 33         | 5.5         |
| Pentecostal               | 181        | 30.1        |
| Zion                      | 60         | 10.0        |
| No response               | 33         | 5.5         |
| <b>Total</b>              | <b>599</b> | <b>99.8</b> |
| <b>Marital status</b>     |            |             |
| Currently married         | 141        | 23.5        |
| Never married             | 318        | 53.0        |
| Previously married        | 37         | 6.2         |
| Cohabiting                | 103        | 17.1        |
| <b>Total</b>              | <b>599</b> | <b>99.8</b> |
| <b>Occupation status</b>  |            |             |
| Employed                  | 133        | 22.1        |
| Unemployed                | 330        | 55.1        |
| Self-employed             | 42         | 7.0         |
| Student                   | 94         | 15.6        |
| <b>Total</b>              | <b>599</b> | <b>99.8</b> |
| <b>Place of residence</b> |            |             |
| Semi-urban                | 197        | 32.8        |
| Urban                     | 402        | 67.1        |
| <b>Total</b>              | <b>599</b> | <b>99.9</b> |

#### 4.3 Behaviour Characteristics of the Respondents

**Table 4.2: Smoking, Alcohol and sexual Behavioural characteristics of study Respondents**

| <b>Variables</b>           | <b>Frequency N=</b> | <b>Percentage %</b> |
|----------------------------|---------------------|---------------------|
| Smoke                      |                     |                     |
| Yes                        | 121                 | 20.1                |
| No                         | 480                 | 79.9                |
| Alcohol                    |                     |                     |
| Yes                        | 253                 | 42.1                |
| No                         | 348                 | 57.9                |
| Are you in a relationship? |                     |                     |

|                                      |     |      |
|--------------------------------------|-----|------|
| Yes                                  | 598 | 99.5 |
| No                                   | 3   | 0.5  |
| Sexually active in the last one year |     |      |
| Yes                                  | 598 | 99.5 |
| No                                   | 3   | 0.5  |

#### 4.4 Awareness on Female Condom Use

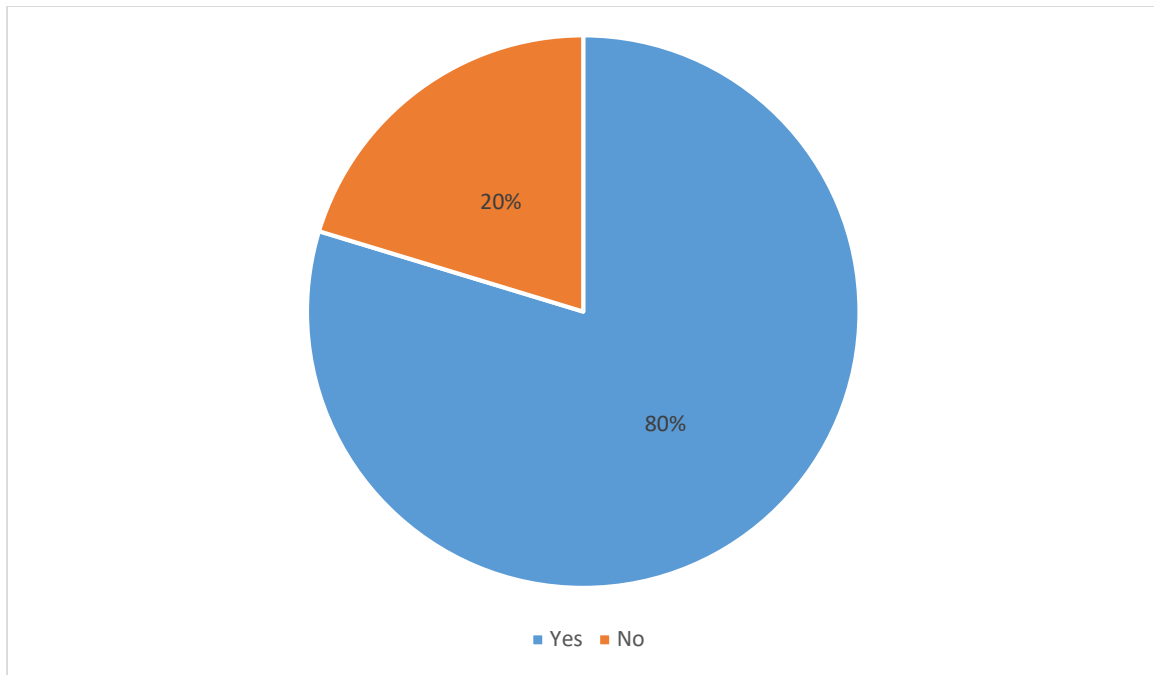


Figure 4.1: Awareness of female condom

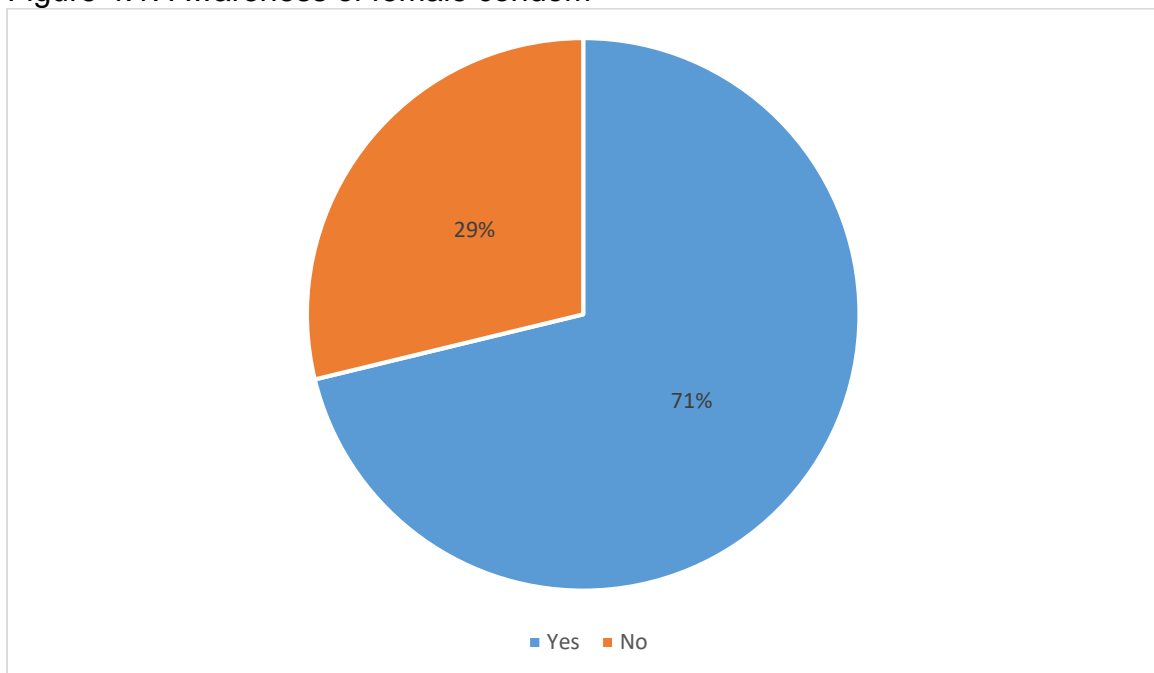


Figure 4.2: Women who have seen a female condom

#### 4.5 Socio-Economic Factors Associated with Female Condom Awareness

Table 4.3: Factors associated with awareness of female condom

| Variables           | Aware of female condom | Not aware of female condom | P-value |
|---------------------|------------------------|----------------------------|---------|
| Level of education  |                        |                            |         |
| No formal education | 16 (66.7)              | 8 (33.3)                   | 0.169   |
| Grade 1-6           | 75 (75.8)              | 24 (24.2)                  |         |
| Grade 12            | 350 (81.8)             | 78 (18.2)                  |         |
| Higher education    | 38 (76.0)              | 12 (24.0)                  |         |
| Age                 |                        |                            |         |
| 15-20               | 65 (75.6)              | 21 (24.4)                  | 0.233   |
| 21-25               | 63 (75.0)              | 21 (25.0)                  |         |
| 26-30               | 94 (76.4)              | 29 (23.6)                  |         |
| 31-35               | 86 (86.9)              | 13 (13.1)                  |         |
| 36-40               | 80 (83.3)              | 16 (16.7)                  |         |
| Above 40            | 91 (80.5)              | 22 (19.5)                  |         |
| Race                |                        |                            |         |
| Black               | 477 (80.0)             | 119 (20.0)                 | 0.059   |
| Coloured            | 2 (40.0)               | 3 (60.0)                   |         |
| Religion            |                        |                            |         |
| Orthodox            | 234 (79.6)             | 60 (20.4)                  | 0.778   |
| Seventh day         | 24 (72.7)              | 9 (27.3)                   |         |
| Pentecostal         | 144 (79.6)             | 37 (20.4)                  |         |
| Zion                | 49 (81.7)              | 11 (18.3)                  |         |
| Marital status      |                        |                            |         |
| Currently married   | 111 (78.7)             | 30 (21.3)                  | 0.755   |
| Never married       | 260 (81.3)             | 60 (18.8)                  |         |
| Previously married  | 28 (75.7)              | 9 (24.3)                   |         |
| Cohabiting          | 80 (77.7)              | 23 (22.3)                  |         |
| Occupation status   |                        |                            |         |
| Employed            | 107 (80.5)             | 26 (19.5)                  | 0.002   |
| Unemployed          | 279 (84.0)             | 53 (16.0)                  |         |
| Self-employed       | 30 (71.4)              | 12 (28.6)                  |         |
| Student             | 63 (67.0)              | 31 (33.0)                  |         |
| Place of residence  |                        |                            |         |
| Rural               | 22 (64.7)              | 12 (35.3)                  | 0.022   |
| Semi-urban          | 140 (84.8)             | 25 (15.2)                  |         |
| Urban               | 317 (78.9)             | 85 (21.1)                  |         |

#### 4.6 The Determinants of Female Condom Use

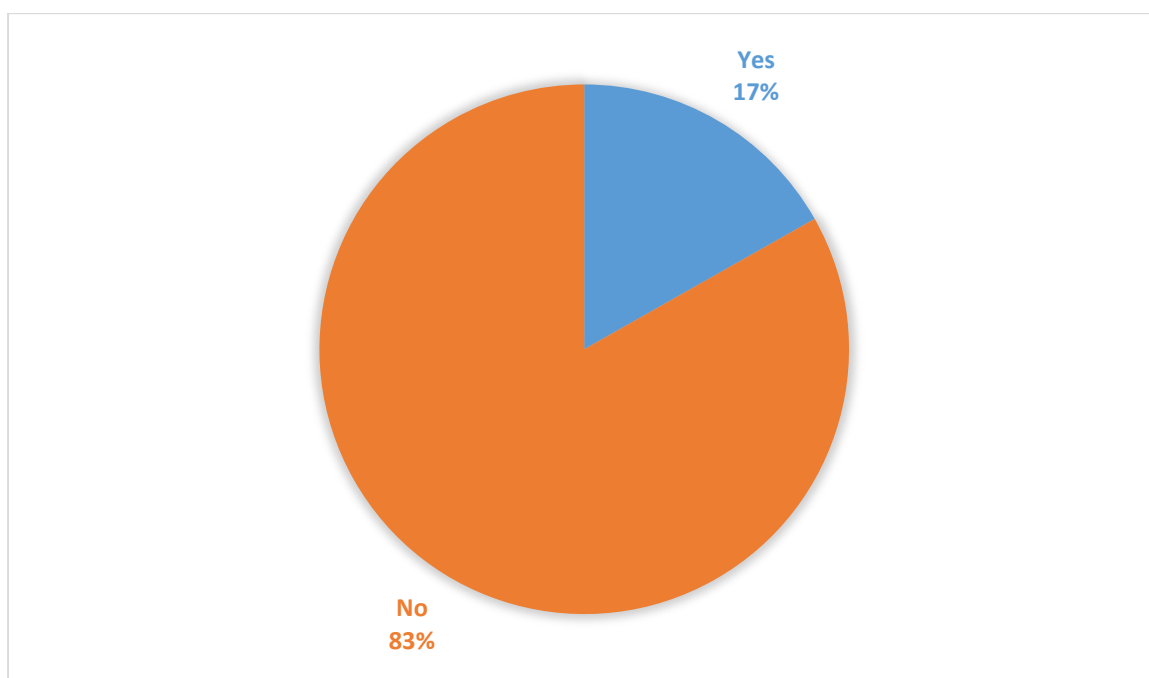


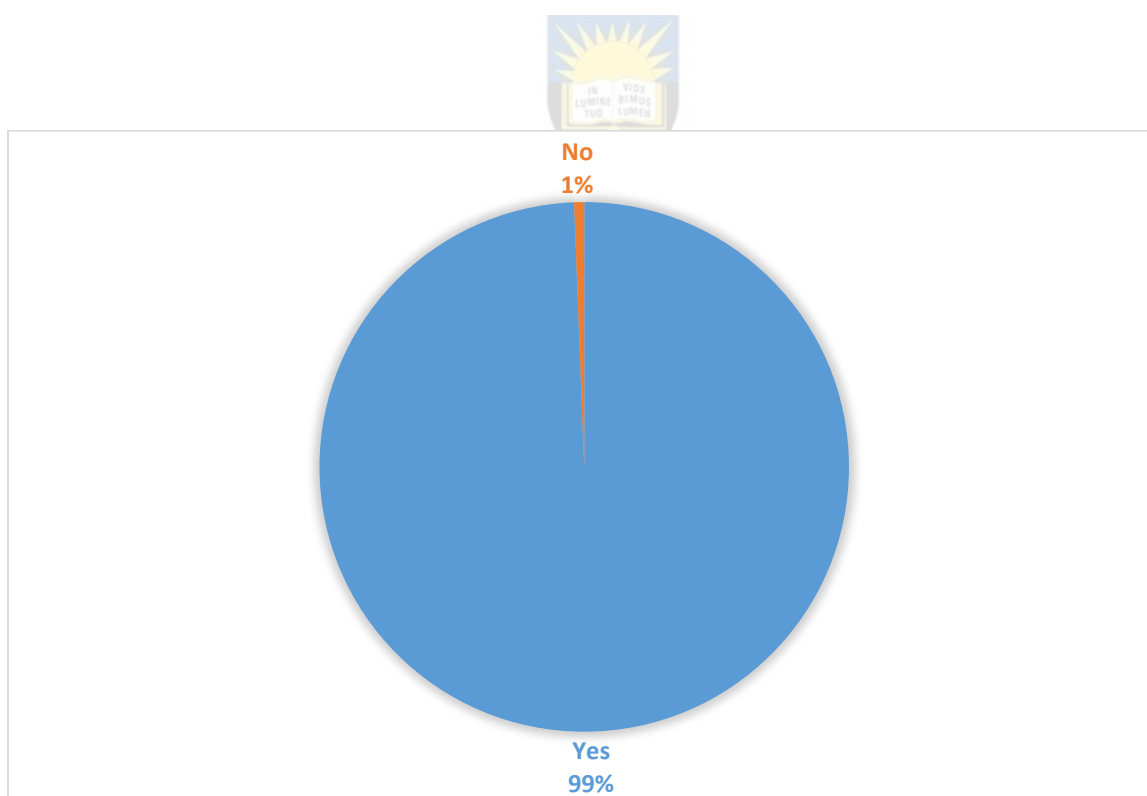
Figure 4.3: Women who have never used a female condom

University of Fort Hare

Table 4.4: determinants of ever use of female condom

| Variables           | Ever used a female condom | Never used a female condom | P-value |
|---------------------|---------------------------|----------------------------|---------|
| Level of education  |                           |                            |         |
| No formal education | 5 (20.8)                  | 19 (79.2)                  | 0.413   |
| Grade 1-6           | 20 (20.2)                 | 79 (79.8)                  |         |
| Grade 12            | 65 (15.2)                 | 363 (84.8)                 |         |
| Higher education    | 11 (22.0)                 | 39 (78.0)                  |         |
| Age                 |                           |                            |         |
| 15-20               | 8 (9.3)                   | 78 (90.7)                  | 0.273   |
| 21-25               | 13 (15.5)                 | 71 (84.5)                  |         |
| 26-30               | 20 (16.3)                 | 103 (83.7)                 |         |
| 31-35               | 18 (18.2)                 | 81 (81.8)                  |         |
| 36-40               | 22 (22.9)                 | 74 (77.1)                  |         |
| Above 40            | 20 (17.7)                 | 93 (82.3)                  |         |
| Race                |                           |                            |         |
| Black               | 101 (16.9)                | 495 (83.1)                 | 0.397   |
| Coloured            | 0 (0.0)                   | 5 (100.0)                  |         |
| Religion            |                           |                            |         |
| Orthodox            | 51 (17.3)                 | 243 (82.7)                 | 0.462   |
| Seventh day         | 4 (12.1)                  | 29 (87.9)                  |         |

|                    |           |            |       |
|--------------------|-----------|------------|-------|
| Pentecostal        | 28 (15.5) | 153 (84.5) |       |
| Zion               | 14 (23.3) | 46 (76.7)  |       |
| Marital status     |           |            |       |
| Currently married  | 26 (18.4) | 115 (81.6) | 0.108 |
| Never married      | 46 (14.4) | 274 (85.6) |       |
| Previously married | 11 (29.7) | 26 (70.3)  |       |
| Cohabiting         | 18 (17.5) | 85 (82.5)  |       |
| Occupation status  |           |            |       |
| Employed           | 33 (24.8) | 100 (75.2) | 0.005 |
| Unemployed         | 50 (15.1) | 282 (84.9) |       |
| Self-employed      | 10 (23.8) | 32 (76.2)  |       |
| Student            | 8 (8.5)   | 86 (91.5)  |       |
| Place of residence |           |            |       |
| Rural              | 2 (5.9)   | 32 (94.1)  | 0.215 |
| Semi-urban         | 29 (17.6) | 136 (82.4) |       |
| Urban              | 70 (17.4) | 332 (82.6) |       |



**Figure 4.4: Women who ever used a male condom**

**Table 4.5: determinants of ever use of male condom**

| <b>Variables</b>          | <b>Ever used a male condom</b> | <b>Never used a male condom</b> | <b>P-value</b> |
|---------------------------|--------------------------------|---------------------------------|----------------|
| <b>Level of education</b> |                                |                                 |                |
| No formal education       | 21 (87.5)                      | 3 (12.5)                        | 0.903          |
| Grade 1-6                 | 85 (85.9)                      | 14 (14.1)                       |                |
| Grade 12                  | 370 (86.4)                     | 58 (13.6)                       |                |
| Higher education          | 45 (90.0)                      | 5 (10.0)                        |                |
| <b>Age</b>                |                                |                                 |                |
| 15-20                     | 56 (65.1)                      | 30 (34.9)                       | 0.000          |
| 21-25                     | 74 (88.1)                      | 10 (11.9)                       |                |
| 26-30                     | 113 (91.9)                     | 10 (8.1)                        |                |
| 31-35                     | 94 (94.9)                      | 5 (5.1)                         |                |
| 36-40                     | 84 (87.5)                      | 12 (12.5)                       |                |
| Above 40                  | 100 (88.5)                     | 13 (11.5)                       |                |
| <b>Race</b>               |                                |                                 |                |
| Black                     | 518 (86.9)                     | 78 (13.1)                       | 0.134          |
| Coloured                  | 3 (60.0)                       | 2 (40.0)                        |                |
| <b>Religion</b>           |                                |                                 |                |
| Orthodox                  | 258 (87.8)                     | 36 (12.2)                       | 0.459          |
| Seventh day               | 26 (78.8)                      | 7 (21.2)                        |                |
| Pentecostal               | 157 (86.7)                     | 24 (13.3)                       |                |
| Zion                      | 50 (83.3)                      | 10 (16.7)                       |                |
| <b>Marital status</b>     |                                |                                 |                |
| Currently married         | 128 (90.8)                     | 13 (9.2)                        | 0.042          |
| Never married             | 268 (83.8)                     | 52 (16.3)                       |                |
| Previously married        | 30 (81.1)                      | 7 (18.9)                        |                |
| Cohabiting                | 95 (92.2)                      | 8 (7.8)                         |                |
| <b>Occupation status</b>  |                                |                                 |                |
| Employed                  | 119 (89.5)                     | 14 (10.5)                       | 0.000          |
| Unemployed                | 301 (90.7)                     | 31 (9.3)                        |                |
| Self-employed             | 41 (97.6)                      | 1 (2.4)                         |                |
| Student                   | 60 (63.8)                      | 34 (36.2)                       |                |
| <b>Place of residence</b> |                                |                                 |                |
| Rural                     | 30 (88.2)                      | 4 (11.8)                        | 0.365          |
| Semi-urban                | 148 (89.7)                     | 17 (10.3)                       |                |
| Urban                     | 343 (85.3)                     | 59 (14.7)                       |                |

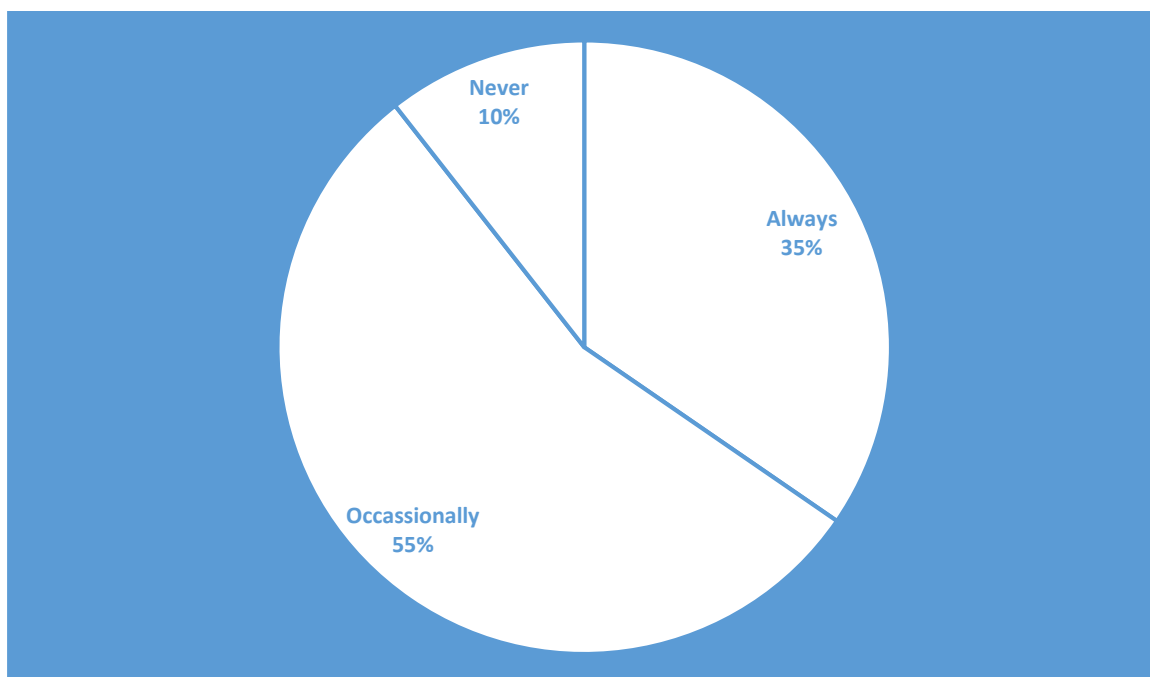


Figure 4.5: Frequency of condom use

#### 4.7 Correctional Analysis of Determinants of Female Condom Use

Table 4.6: Chi-square statistics showing the determinants of condom use frequency

| Variables                 | Always (n=193) | Occasional (n=306) | Never (n=59) | P-value |
|---------------------------|----------------|--------------------|--------------|---------|
| <b>Level of education</b> |                |                    |              |         |
| No formal education       | 5 (22.7)       | 14 (63.6)          | 3 (13.6)     | 0.000   |
| Grade 1-6                 | 33 (35.9)      | 54 (58.7)          | 5 (5.4)      |         |
| Grade 12                  | 125 (31.5)     | 223 (56.2)         | 49 (12.3)    |         |
| Higher education          | 30 (63.8)      | 15 (31.9)          | 2 (4.3)      |         |
| <b>Age</b>                |                |                    |              |         |
| 15-20                     | 31 (37.8)      | 23 (28.0)          | 28 (34.1)    | 0.000   |
| 21-25                     | 34 (43.6)      | 36 (46.2)          | 8 (10.3)     |         |
| 26-30                     | 38 (33.3)      | 68 (59.6)          | 8 (7.0)      |         |
| 31-35                     | 26 (28.6)      | 63 (69.2)          | 2 (2.2)      |         |
| 36-40                     | 34 (38.6)      | 50 (56.8)          | 4 (4.5)      |         |
| Above 40                  | 30 (28.6)      | 66 (62.9)          | 9 (8.6)      |         |
| <b>Race</b>               |                |                    |              |         |
| Black                     | 192 (34.7)     | 304 (55.0)         | 57 (10.3)    | 0.098   |
| Coloured                  | 1 (20.0)       | 2 (40.0)           | 2 (40.0)     |         |
| <b>Religion</b>           |                |                    |              |         |
| Orthodox                  | 102 (36.2)     | 153 (54.3)         | 27 (9.6)     | 0.259   |
| Seventh day               | 13 (48.1)      | 12 (44.4)          | 2 (7.4)      |         |
| Pentecostal               | 46 (28.4)      | 98 (60.5)          | 18 (11.1)    |         |
| Zion                      | 24 (42.9)      | 25 (44.6)          | 7 (12.5)     |         |

|                                |            |            |           |       |
|--------------------------------|------------|------------|-----------|-------|
| <b>Marital status</b>          |            |            |           |       |
| Currently married              | 37 (27.6)  | 85 (63.4)  | 12 (9.0)  | 0.014 |
| Never married                  | 109 (36.8) | 146 (49.3) | 41 (13.9) |       |
| Previously married             | 9 (26.5)   | 23 (67.6)  | 2 (5.9)   |       |
| Cohabiting                     | 38 (40.4)  | 52 (55.3)  | 4 (4.3)   |       |
| <b>Occupation status</b>       |            |            |           |       |
| Employed                       | 40 (32.8)  | 73 (59.8)  | 9 (7.4)   | 0.000 |
| Unemployed                     | 102 (33.2) | 185 (60.3) | 20 (6.5)  |       |
| Self-employed                  | 14 (35.0)  | 26 (65.0)  | 0 (0.0)   |       |
| Student                        | 37 (41.6)  | 22 (24.7)  | 30 (33.7) |       |
| <b>Place of residence</b>      |            |            |           |       |
| Rural                          | 11 (35.5)  | 19 (61.3)  | 1 (3.2)   | 0.047 |
| Semi-urban                     | 45 (28.3)  | 101 (63.5) | 13 (8.2)  |       |
| Urban                          | 137 (37.2) | 186 (50.5) | 45 (12.2) |       |
| <b>Currently smoke</b>         |            |            |           |       |
| Yes                            | 25 (22.3)  | 76 (67.9)  | 11 (9.8)  | 0.005 |
| No                             | 168 (37.7) | 230 (51.6) | 48 (10.8) |       |
| <b>Currently drink alcohol</b> |            |            |           |       |
| Yes                            | 66 (28.3)  | 149 (63.9) | 18 (7.7)  | 0.001 |
| No                             | 127 (39.1) | 157 (48.3) | 41 (12.6) |       |



University of East London

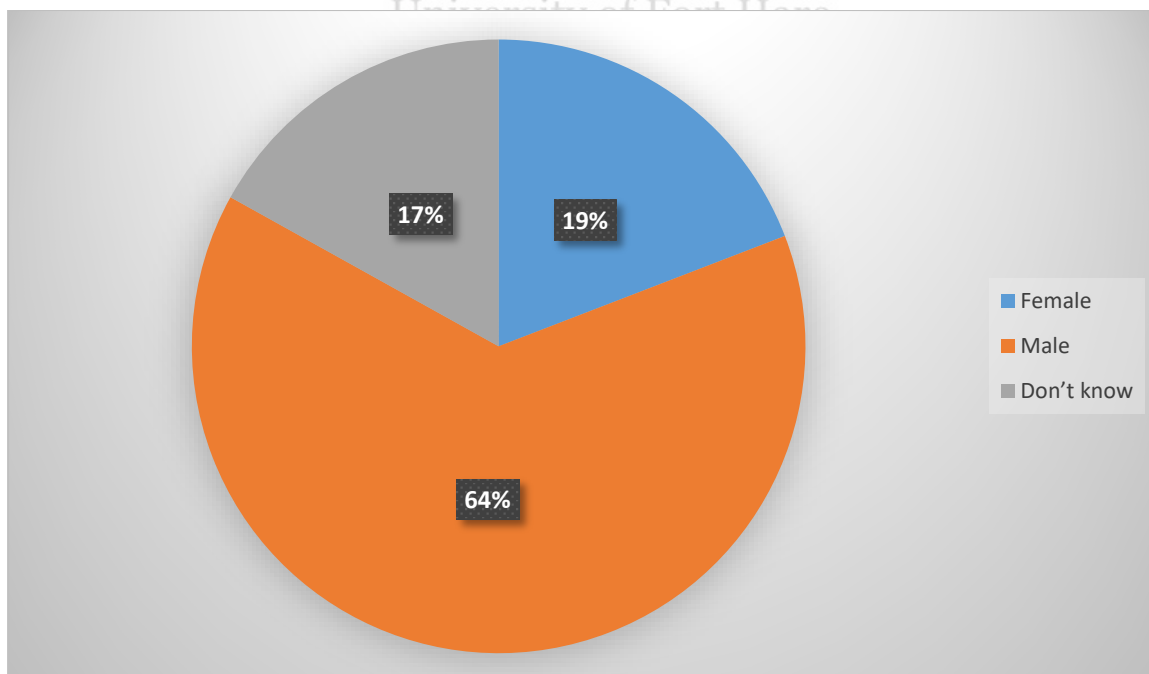


Figure 4.6: Most preferred type of condom use



**Table 4.7: Determinants of condom type preference: a chi square analysis**

| <b>Variables</b>          | <b>Female (n=112)</b> | <b>Male (n=374)</b> | <b>Undecided (n=99)</b> | <b>P-value</b> |
|---------------------------|-----------------------|---------------------|-------------------------|----------------|
| <b>Level of education</b> |                       |                     |                         |                |
| No formal education       | 3 (13.0)              | 16 (69.6)           | 4 (17.4)                | 0.111          |
| Grade 1-6                 | 24 (24.5)             | 62 (63.3)           | 12 (12.2)               |                |
| Grade 12                  | 75 (18.1)             | 271 (65.5)          | 68 (16.4)               |                |
| Higher education          | 10 (20.0)             | 25 (50.0)           | 15 (30.0)               |                |
| <b>Age</b>                |                       |                     |                         |                |
| 15-20                     | 8 (9.5)               | 36 (42.9)           | 40 (47.6)               | 0.000          |
| 21-25                     | 10 (12.2)             | 52 (63.4)           | 20 (24.4)               |                |
| 26-30                     | 18 (15.0)             | 85 (70.8)           | 17 (14.2)               |                |
| 31-35                     | 19 (20.0)             | 70 (73.7)           | 6 (6.3)                 |                |
| 36-40                     | 25 (26.9)             | 58 (62.4)           | 10 (10.8)               |                |
| Above 40                  | 32 (28.8)             | 73 (65.8)           | 6 (5.4)                 |                |
| <b>Race</b>               |                       |                     |                         |                |
| Black                     | 111 (19.1)            | 371 (64.0)          | 98 (16.9)               | 0.979          |
| Coloured                  | 1 (0.9)               | 3 (60.0)            | 1 (20.0)                |                |
| <b>Religion</b>           |                       |                     |                         |                |
| Orthodox                  | 54 (18.8)             | 192 (66.9)          | 41 (14.3)               | 0.079          |
| Seventh day               | 2 (6.3)               | 23 (71.9)           | 7 (21.9)                |                |
| Pentecostal               | 36 (20.5)             | 100 (56.8)          | 40 (22.7)               |                |
| Zion                      | 13 (22.0)             | 39 (66.1)           | 7 (11.9)                |                |
| <b>Marital status</b>     |                       |                     |                         |                |
| Currently married         | 35 (25.70)            | 87 (64.0)           | 14 (10.3)               | 0.045          |
| Never married             | 51 (16.3)             | 198 (63.3)          | 64 (20.4)               |                |
| Previously married        | 10 (27.8)             | 21 (58.3)           | 5 (13.9)                |                |
| Cohabiting                | 16 (16.0)             | 68 (68.0)           | 16 (16.0)               |                |
| <b>Occupation status</b>  |                       |                     |                         |                |
| Employed                  | 27 (20.8)             | 93 (71.5)           | 10 (7.7)                | 0.000          |
| Unemployed                | 62 (19.2)             | 221 (68.4)          | 40 (12.4)               |                |
| Self-employed             | 10 (25.0)             | 27 (67.5)           | 3 (7.5)                 |                |
| Student                   | 13 (14.1)             | 33 (35.9)           | 30 (50.0)               |                |
| <b>Place of residence</b> |                       |                     |                         |                |
| Rural                     | 1 (3.0)               | 25 (75.8)           | 7 (21.2)                | 0.063          |
| Semi-urban                | 31 (19.5)             | 108 (67.9)          | 20 (12.6)               |                |
| Urban                     | 80 (20.4)             | 241 (61.3)          | 72 (18.3)               |                |

#### 4.8 Attitudes towards Female Condom Use

**Table 4.8: Attitude towards female condom**

| Variables   | Frequency N= | Percent % |
|---|--------------|-----------|
| <b>Know anyone using a female condom</b>  |              |           |
| Yes   | 133          | 22.5      |
| No  | 458          | 77.5      |
| <b>What is your relationship with the person? N= 209</b>  |              |           |
| Friend  | 99           | 47.4      |
| Relative  | 56           | 26.8      |
| Neighbour   | 23           | 11.0      |
| Others  | 31           | 14.9      |
| <b>Ever discussed female condom</b>   |              |           |
| Yes   | 204          | 35.0      |
| No  | 379          | 65.0      |
| <b>Intention to use female condom in the future</b>   |              |           |
| Yes   | 386          | 65.2      |
| No  | 93           | 15.7      |
| I don't know  | 113          | 19.1      |
|   |              |           |
| <b>With you present knowledge and skills, do you think you can use a female condom every time you have sex?</b> |              |           |
| Yes   | 374          | 63.1      |
| No  | 120          | 20.2      |
| Possible  | 38           | 6.4       |
| I don't know  | 61           | 10.3      |
| <b>How difficult is it to remember to use a female condom correctly?</b>  |              |           |
| Very difficult  | 102          | 17.3      |
| Somewhat difficult  | 62           | 10.5      |
| Not difficult at all  | 137          | 23.3      |
| I don't know/won't say  | 288          | 48.9      |

#### 4.9 Accessibility of Female Condoms

**Table 4.9: Access to male and female condoms**

| Where do you get condoms | Frequency | Percent |
|--------------------------|-----------|---------|
| Clinic                   | 496       | 83.8    |
| Chemist                  | 83        | 14.0    |
| Clinic and chemist       | 13        | 2.2     |

|   |     |      |
|---|-----|------|
| Are male condoms always available?  |     |      |
| Yes   | 565 | 95.1 |
| No  | 29  | 4.9  |
| Are female condoms always available?  |     |      |
| Yes   | 120 | 21.0 |
| No  | 452 | 79.0 |
| Which condom type is easily available?  |     |      |
| Male condom   | 472 | 81.9 |
| Female condom   | 32  | 5.6  |
| None  | 69  | 12.0 |
| Both  | 3   | 0.5  |
| Do most people that you know approve of the use of a female condom every time you have sex? |     |      |
| Yes   | 90  | 15.2 |
| No  | 242 | 40.9 |
| Possible  | 68  | 11.5 |
| I don't know  | 191 | 32.3 |
| Most people don't know about female condom  | 1   | 0.2  |



University of Fort Hare  
Together in Excellence

#### 4.10 Determinants of Female Condom Self-efficacy

**Table 4.10: Determinant female condom self-efficacy**

| Variables                   | Average female condom self-efficacy scores | P-value |
|-----------------------------|--|---------|
| Average self-efficacy score | 509 (30.1)                                 |         |
| Level of education          |  |         |
| No formal education         | 17 (25.8)                                  | 0.001   |
| Grade 1-6                   | 75 (30.0)                                  |         |
| Grade 12                    | 370 (30.1)                                 |         |
| Higher education            | 47 (31.8)                                  |         |
| Age                         |  |         |
| 15-20                       | 78 (29.9)                                  | 0.975   |
| 21-25                       | 68 (29.9)                                  |         |
| 26-30                       | 113 (30.2)                                 |         |
| 31-35                       | 84 (30.3)                                  |         |
| 36-40                       | 78 (30.3)                                  |         |
| Above 40                    | 88 (29.8)                                  |         |
| Race                        |  |         |
| Black                       | 504 (30.1)                                 | 0.416   |

|                           |            |       |
|---------------------------|------------|-------|
| Coloured                  | 5 (28.2)   |       |
| Religion                  |            |       |
| Orthodox                  | 246 (30.2) | 0.478 |
| Seventh day               | 30 (30.7)  |       |
| Pentecostal               | 153 (30.0) |       |
| Zion                      | 50 (29.3)  |       |
| Marital status            |            |       |
| Currently married         | 117 (30.6) | 0.474 |
| Never married             | 272 (30.0) |       |
| Previously married        | 33 (29.1)  |       |
| Cohabiting                | 87 (30.0)  |       |
| Occupation status         |            |       |
| Employed                  | 116 (30.6) | 0.521 |
| Unemployed                | 272 (30.1) |       |
| Self-employed             | 37 (29.4)  |       |
| Student                   | 84 (29.7)  |       |
| Place of residence        |            |       |
| Rural                     | 29 (27.9)  | 0.006 |
| Semi-urban                | 152 (31.0) |       |
| Urban                     | 328 (29.9) |       |
| Currently smoke           |            |       |
| Yes                       | 104 (28.3) | 0.000 |
| No                        | 405 (30.5) |       |
| Currently drink alcohol   |            |       |
| Yes                       | 209 (29.1) | 0.000 |
| No                        | 300 (30.8) |       |
| Aware of female condom    |            |       |
| Yes                       | 411 (30.4) | 0.009 |
| No                        | 98 (28.9)  |       |
| Seen a female condom      |            |       |
| Yes                       | 361 (30.4) | 0.044 |
| No                        | 148 (29.4) |       |
| Ever used a female condom |            |       |
| Yes                       | 85 (32.7)  | 0.000 |
| No                        | 424 (29.5) |       |
| Condom type preference    |            |       |
| Female                    | 91 (32.7)  | 0.000 |
| Male                      | 325 (29.5) |       |
| I don't know              | 81 (29.2)  |       |

**Table 11: Ordinary least square regression showing determinants of female condom self-efficacy**

| Item     | Unstandardized coefficients<br>B | Standardized Coefficients<br>Beta | T     | P-value |
|----------|----------------------------------|-----------------------------------|-------|---------|
| Constant | 31.50                            |                                   | 15.14 | 0.000   |

|                           |       |       |       |       |
|---------------------------|-------|-------|-------|-------|
| Age                       | -0.02 | -0.04 | -0.90 | 0.370 |
| Level of education        | 0.98  | 0.13  | 3.14  | 0.002 |
| Place of residence        | -0.25 | -0.03 | -0.78 | 0.436 |
| Currently smoke           | 1.36  | 0.11  | 2.52  | 0.012 |
| Currently use alcohol     | 0.87  | 0.09  | 1.98  | 0.048 |
| Aware of female condom    | -0.56 | -0.05 | -1.04 | 0.301 |
| Seen a female condom      | 0.13  | 0.01  | 0.27  | 0.785 |
| Ever used a female condom | -2.21 | -0.17 | 4.15  | 0.000 |
| Condom type preference    | -1.12 | -0.14 | -3.14 | 0.002 |

The results in Table 11, represent the factors associated with female condom self-efficacy and were examined using the ordinary least square regression. The results show that the level of education, ever used a female condom, lifestyle behaviours such as alcohol use and smoking were significantly associated with female condom self-efficacy. Age, place of residence and awareness of female condom were not associated with female condom self- efficacy.

#### 4.11 Chapter Summary

Demographic graphs depicted that the majority of sexually active women were interested in using female condoms but were not empowered on the importance of female condom use. All the stakeholders are responsible for the introduction and promotion of the female condom use for the protection and empowerment of sexually active women. Therefore, campaigns, media involvement and counselling from the health centres are crucial in promoting female condom use. The study also highlighted that most women use a male condom due to limited knowledge about the female condom. However, accessibility and availability of female condoms will contribute to the condom use.

## CHAPTER 5

### DISCUSSION, IMPLICATIONS, LIMITATION AND RECOMMENDATIONS

#### 5.1 Introduction

The previous chapter presented the results on the demographic data, knowledge about condoms, how to use the female condom, access to the female condoms, attitude towards female condoms and poor lifestyle of the women who are sexually active, and comparison of male and female condom use and self-efficacy of the condom in Reeston community, Buffalo City Municipality in East London. The results exposed that women who are sexually active preferred the use of male condoms as compared to the female condoms due to various reasons. This chapter will thus, focus on the discussion of the results mentioned above, hitherto illustrating the implications, limitations and making recommendations as far as the study is concerned.

#### 5.2 Demographic Data of the Respondents

##### 5.2.1 Level of education of the respondents

Table 4.1 presented the results showing women who had reached Grade 12 were n=426(71.1%), Grade 1-6 were n=99(16.4%), while those who had attained higher education were n=50(8.3%). Notably, those with no formal education were only n=24(4.0%). Therefore, the majority of the women in this study could be viewed as educated ones. Perhaps, they could be perceived to be knowledgeable regarding matters of female condom use. In relation to this finding, Mnyipika (2014) stated that, the more educated women were and the more they live in the urban areas, the better the knowledge about female condom. On the contrary, a study conducted in Rwanda showed that about 79% of university students knew about female condom and its benefits but lacked the skill on how to use it (Valens & Joseph, 2013; Wang Xi et al., 2014). In this case, it was only 24% of the participating students who knew how to insert it (how to use the female condom). This is an indication that female condom was not well promoted and marketed in some countries of the world.

The study also revealed that a minimal number of the women respondents had no formal education and the researcher expected them to have less knowledge pertaining to female condom use. This is because; most of the uneducated women are

unemployed resulting to two in three women get married before age of 18 years, where in some cases parents 'sell' their children for money. Van der Vaart, De Witte & Van den Broeck (2017) reported that early marriage contributed negatively to women's reproductive health. These researchers stated unemployment and poverty also result to low self-esteem of the women. Furthermore, Van der Vaart, De Witte & Van den Broeck (2017) emphasised the deceptive influence on the behaviour of the girls and the ability to complete their education, hence, girls are unable to make good decisions about their reproductive health. Some sexually active women showed lack of education, knowledge, and understanding the importance of practising safer sex which resulted in none or minimal use of female condoms. SFH, (2013), stated that the promotion and distribution of condoms 'primarily' should not be confined to high-risk areas, such as the townships, as the disease could be described as economically racist, and should also focus in places of higher learning. Although the majority of sexually active women in this study  $n=426(71.1\%)$  had reached matric (Grade 12 level) and some tertiary education  $n=50(8.3\%)$  they did not know how to use the female condoms.



### **5.2.2 Age of the respondents**

The analysis revealed that age group 26-30 years were  $n=123(20.5\%)$ , 41 years and above were  $n=113(18.8\%)$ , 31-35 years were  $n=99(16.5\%)$ , 36-40 years were  $n=96(16.0\%)$ , 15-20 years were  $n=86(14.3\%)$  and 21-25 years were  $n=84(14.0\%)$ . All the age groups, which participated in the study, had more or less the same numbers. Therefore, all the age groups were sexually active but the age group 15-20 were not supposed to be the same as the other groups because they supposed to be focusing in school.

Ross, Colich, LeMoult, Gotlib & Joormann, (2015) stated that from the age of 8 years, children were exposed to the sexual material on the internet and other media platforms. Molecular psychiatry 20(5), 615 (2015) stated that from the age of 8 years, children were exposed to the sexual material on the internet and other media platforms. For example, Mnyipika (2014) also reported that teenagers started to engage early in unprotected sexual activity due to exposure to sexual contents in movies. Ross et al (2015) also highlighted the effects of early exposure to sexual

content, where children from 10-12 years showed curiosity in other people's sex issues according to their parents.

Bowker, JC. & Etkin, RG. (2016) also emphasized on the "crushes" which referred to one-sided desirability and illusions for another person. Thus, parents and guardians are supposed to guide young girls on issues related to sexual activity and the importance of female condom use. Moreover, culture and religion in this study impacted negatively on sexual education as parents were uncomfortable to educate their children on sexual activity and use of female condoms as a protection. These barriers lead to decrease in condom uptake and use (Crosby et al., 2014). Furthermore, in some areas of KwaZulu- Natal and Eastern Cape, parents do not allow children to openly speak about sexual relationships. This culture, therefore, prevents teenagers from getting information about sexual relationships and behaviour, thus leading to teenagers getting involved in early sexual activity. In other cultures, however, the teenagers have been reported to be sold for sex work and involved themselves in transactional sex (for monetary gain) (WHO, 2013). Therefore, parents, religious leaders and the community at large have a responsibility to educate the youth and empower them on safe practice of sexual activity.

### **5.2.3 Race of the Respondents**

The respondents in this study were dominantly Blacks n= 594(99.2%). This is because Reeston is a semi-formal settlement for Blacks with only a few Coloureds n=5(0.8%). In sub-Saharan Africa, which is predominantly black, men take charge of sexual reproductive activities including condom use for both male and female (Mavhandu-Mudzusi and Asgedom (2016). In addition, Madiba & Ngwenya 2017) in a study conducted from Pacific Island countries, found that knowledge of the role of identity, traditions and culture is crucial in improving condom use. However, in this study the impact and comparison of different races and cultures were not explored. It is thus recommended that further studies focus on localities with different races and cultures in order to understand the impact of race and culture on female condom use.

### **5.2.4 Religion of the respondents**

Different races practise religion differently. In this study, the community practised different types of religions. However, the dominating religion was Christianity. Women belonging to the Orthodox denomination were n=294(48.9%), Pentecostal were



n=181(30.1%), Zion Church were n=60(10.0%), Seventh Day Adventist were n=33(5.5%) and n=33(5.5%) did not answer this question. From the above data, the women who participated in the study were seen to be religious with an exception of a few who did not belong to any denomination. The overall finding as shown in Table 4.1 showed that residents were religious, but had minimal use of female condom and this could be attributed to the religious beliefs.

WHO (2013) reported that some conservative churches, for an example the Catholic Church, labelled and associated condom use with promiscuity. However, in Kenya, religion contributes positively in sexual education with the church leaders uplifting moral arguments that were extremely influential, thereby increasing condom uptake (Greenwood et al., 2013) Unlike in Kenya, Chimala, (2014) supported the WHO (2013) views by stating that, due to the negative religious beliefs, Malawi was in the list of countries with low female condom uptake. In Malawian churches, condom use was associated with sin, dirt and immorality. Hence, the Catholic churches prohibited condoms for both prevention and contraception purposes on the bases of immorality, sin, dirty and promiscuity (Mokgetse, 2015). Therefore, in this study religion also had a negative impact on the sexual activity of the women because of the religious beliefs upheld by different religions practised by the community.

### **5.2.5 Marital status**

Marital status is one of the key values that the community always attach to all the adult females who are sexually active. This study was dominated by sexually active women who had never married n=320(53.2%), while those in marriage were n=141(23.5%), cohabiting n=103(17.1%) and those who were previously married were n=37(6.2%). Therefore, the results showed that the majority of sexually active women were not married but only a few who were married. These results depicted that the women in this community were involved in unaccepted relationships such as cohabiting and divorces that contributed to broken family structures. Under these circumstances, the research perceives that the condom use should be of great interest.

Valens and Joseph, (2013) suggested that relationships are supposed to be built on trust. However, many relationships outside marriage were not trustworthy as

compared to the marriage relationship, which is the core and accepted type of sexual relationship in any society. Family values and morality always play a significant role in upbringing children. On the other hand, the cohabiting relationships always are characterized by the use of a condom but when the relationship is stable, trust prevails. Moreover, Kanda & Mash (2018) and Koster et al., (2015) supported the above idea of trust once the relationship was well established. At this stage, the partners may find no reason of using a condom to practise safe sex. This, therefore, showed inadequate information about safe sex and frequent use of a female condom.

Cavanaugh, Mial and Tulloch (2016) also indicated that minimal information about female condom use, benefits and sometimes costs might negatively affect the frequent use of a female condom. However, in every relationship married or not, men have an upper hand especially during a sexual engagement. Moreover, the culture may also influence the upbringing of men and women negatively because power is always vested in men. Therefore, gender inequality is promoted because men resulting in women being unable to make the best decisions regarding the use of a condom (Schuyler et al., 2016) dominate women. In response to this inequality in sexual engagements, the government therefore introduced the female condom in order for the women to use with or without knowledge of men. The government also wanted to empower all women by giving knowledge and benefits of using the female condoms. Therefore, women, need to be educated about female condoms so that if men do not want to use condoms, women can have the alternative to use the female condoms for prevention of sexually transmitted diseases as well as unwanted and unplanned pregnancies.

### **5.2.6 Occupation status**

Occupational status in any community and country is essential because people contribute positively to the economy of the country. In this study, the number of unemployed women was the highest, n=332(55.2%), employed were n=133(22.1%), students were n=94(15.6%) and self-employed women were n=42(7.0%). The majority of women in this study were unemployed and are expected to behave responsibly. The high unemployment rate may result in poverty and unaccepted sexual behaviours.

Mokgetse, (2015) in a study conducted in Botswana highlighted the negative impact of unemployment in decision making on female condom use. However, unemployed women are solemnly dependent on their partners for survival and that makes them to be unable to negotiate for safer sex. Mokgetse, (2015), also stated that women were not wage earners and therefore they became poor. Poverty disadvantages women, making them passive individuals in relationships thereby being unable to voice out their views even if they had knowledge regarding safer sex.

Unemployment and poverty are the sources of many social ills of any community. In this study, women were vulnerable because men were the sole providers for the family. Furthermore, unemployment of women also gave men more ammunition and power towards women by becoming submissive to them. Therefore, men had the right to the women's body and demand sex without the use of a condom.

### **5.2.7 Place of residence**

The study was conducted in an urban setting with formal and informal settlements. Women residing in an urban area were n=435(72.5%), while those residing in the semi-urban area were 165(27.5%).

Condom use was also low in women in the urban areas due to inaccessible and unavailability of female condoms. UNAIDS (2013) confirms inaccessibility of condoms especially for high school teenagers in South Africa. However, UNAIDS (2013) report showed that teenagers need to travel long distances in order to access female condoms, which was time-consuming and costly. Furthermore, female condom was also expensive as compared to the male condom and was not available in low socio-economic areas. Mnyipika (2014) highlighted that women living in urban areas were better receivers of the knowledge about the female condom. Thus, more marketing in terms of campaigns, media shows and training of health care promoters on condom use is crucial for the community at large to benefit and be empowered sexually.

In summary, the majority of sexually active women were interested in using female condom but were not empowered on the importance of female condom use. There were different religious beliefs that were practised by the Reeston community, which

had influenced female condom use negatively. The government introduced the female condom to promote protection and empower the sexually active women. However, unemployment and poverty continues to challenge the efforts towards empowering women to engage in safe sex practices.

## **5.2 Knowledge Regarding Female Condom**

Knowledge and empowerment play a major role in every human being in order to ensure an informed decision. Female condom use is always essential for protection and prevention of sexual diseases. Therefore, sexually active women were in need of frequent empowerment about female condom use.

Figure 4.1 presented the results on the awareness of female condom where the majority of sexually active women were not aware of female condom,  $n=479(80\%)$ . Those who had never seen a female condom were  $n=428(71\%)$  and those who had never used a female condom were  $n=500(83\%)$ . Table 4.3 showed a P-value of 0.002 for occupation (employed) which suggested that the results were highly significant. However, employed sexually active women were aware of the female condom and its benefits. The rest of the results exposed that women were aware of the female condom, but prefer male condoms than females due to various reasons. Some of the reasons given were that the sexually active women did not know how to use it and it is too big. However, women who were sexually active in this study did not understand the power and benefits associated with the use of the female condom. Wang et al., (2014) confirmed that there is minimal public awareness about the female condom, where some women clearly highlighted that they did not know that female condom could protect them against STIs.

Although Nigerian women were aware of the benefits of female condoms Ezire et al., (2013) in a study conducted in Nigeria discovered that Nigeria promotes female condom use. Female Nigerians also used a female condom as a contraceptive and for prevention of sexually related infections (Ezire et al., 2013). Moreover, in Rwanda about 79% of university students knew about female condom and its benefits but lacked the skill on how to use it (Valens & Joseph, 2013; Wang Xi et al., 2014). Therefore, some women were aware of and wanted to use a female condom but some circumstances such as culture, gender inequality and sexual preferences prevented them from using it. Women who are empowered to know the benefits of female

condom use are likely to promote the female condom uptake. Nevertheless, sexually active women in this study and other studies showed that condoms were available and accessible, but the failure lied on the lack of awareness of the targeted users. For instance, some women also reported that they had never seen the female condom, which is contributing factor of minimal use of the female condom.

According to the results on Figure 4.2, the sexually active women who had never seen female condom were  $n=428(71\%)$  and only  $n=171(29\%)$  who had managed to see a female condom. In this study, the majority of sexually active women reported that they only heard about the female condom and never saw it. This, therefore, suggested the minimal use of a female condom. Mokgetse, (2015) conducted a study in Botswana and about 9% of the respondents reported that they had never seen a female condom. The reasons for not using the female condom were lack of information and educating the female community at large about the female condom use.

In Botswana, female condom use was dependent on proper marketing and campaigns that would educate the female community. However, in this study, there is low socio-economic status in the community and the female community depend on the health care workers to understand and be empowered on the use of the female condoms. In contrast, Andrews et al., (2015) stated that most men had heard about and saw female condoms but they needed to know more about it. The majority of the study population were students and this may have contributed to the high percentages of women who had never seen the female condom and therefore the lack of knowledge about it. On the contrary, the Department of Education policy prevents the health talks regarding reproductive health in schools (National Department of Health, 2015). In this study, generally the sexually active women had never used the female condom.

Figure 4.3 presented data on women who had never used the female condom. The majority ( $n=500(83\%)$ ) of the sexually active women in the study had never used a female condom due to various reasons. Figure 4.4 showed majority of sexually active women  $n=519(87\%)$  using male condoms and only  $n=80(13\%)$  not using the male condoms.

Therefore, in this study one would argue that most of the women did not know about female condoms, had never seen it and did not know how to use it. This means that the majority of women who were sexually active in this study had minimal knowledge about

the female condom. Some of the reasons attributable to this lack or low knowledge were unavailability and inaccessibility of the female condoms.

South African District Health Information System (DHIS) (2014) showed that in BCMM 10, 180,318 condoms were distributed, which were 41.7 condoms per male and 86,921 that translate to 0.6 condoms per female in 2014/15. Also in the second quarter of 2015/16, 4,918,240 condoms were distributed which is 80.2 condoms per male and 36,452 female condoms which was one condom per female. In contrast, the statistical reports presented to District Multi-Sectoral AIDS Committee (DMSAC) on quarterly basis showed huge numbers of female condoms were expiring in government facilities (Mogketse, 2015). Results of Nigerian studies showed that empowered women could use a female condom as dual protection (Ezire et al., 2013). Therefore, female condoms had many factors that were associated with female condom use.

Table 4.4 presented the results on determinants of 'ever used female condom' where the demographic variables such as the level of education, age, race, religion, marital status and place of residence P-values were not significant. It was only P-value of 0.005 for occupational status (employed) that was significant on never used a female condom'. This can be generalised to the broader category of employed women in relation to female condom use. Comparatively, in Table 4.5, the determinants of the male condom use for age and occupational status P-value were 0.000; which showed high significant value in relation to sexually active women and giving the basis of generalising the results. However, in a study done by Valens & Joseph (2013), educational status, age, domestic violence, residential factors were also impacted on the knowledge of female as compared to male condoms.

Furthermore, the issue of age difference also affected the knowledge of female condom use. For example, young girls got knowledge from media platforms, meanwhile older women need to be educated by health professionals and the pharmacist where they buy the condoms. However, these sources of information were not always available resulting in low or lack of female condom use. Mnyipika, (2014) supported the discussion above when stating that condom use among teenagers was influenced by demographic, attitudinal and educational factors. Therefore, the educated women who live in an urban area are supposed to have better knowledge of condom use than those staying in rural areas (Mnyipika, 2014).



In this study, it has been shown that sexually active women were in need of education in a form of campaigns, media, and counselling in the health centres in order to promote condom use. The study also highlighted that most women use a male condom due to limited knowledge about the female condom.

### **5.3. Attitude Regarding Female Condom**

The results in this study showed that sexually active women had a positive attitude towards female condom use; but they lacked information on how to use it. Thus, the results showed more frequency and preference of male to female condom. Figure 4.5 illustrated the frequency of condom use where the majority of sexually active women used male or female condoms always were only n=193(35%), occasionally condom users were n=306(55%) and never used condoms were n=59(10%).

Table 4.6 presented the results on the determinants of condom use frequency for sexually active women. The P-values were 0.000 for the level of education and age that indicate high significant level and had provided basis for generalising the results on female condom use. Furthermore, Table 4.8 presents results on attitude towards female condom use, where sexually active women who knew anyone using a female condom were n=458(77.5%). Those who never discussed female condom by sexually active women were n=379(65.2%). Sexually active women who found it very difficult to remember to use a female condom correctly were n=102(17.3%) and those who had trouble were n=62(17.3%); while those who did not get any difficulty were n=137(23.3%). The majority of sexually active women who did not know what to say were n= 288(49.9%).

The above values showed the need to market female condoms and educate the community at large about the importance of using a condom every time you engage in sex. This showed the lack of knowledge as well as lack of understanding of the importance of practising safe sex. However, WHO (2013) reinforced that sexuality as a fundamental aspect of human being throughout the life includes sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction.

Nevertheless, WHO, (2013) also emphasized that sexuality is learned and communicated in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships. Due to lack of knowledge, the women fail to

understand that they have the right to negotiate safer sex, that is, the use of a female condom with their partners. Table 4.6 showed the P-value of 0.000 of the level of education (no formal education), occupational status (employed) and age (15-20), P-value of 0.005 for smokers and P-value of 0.001 for alcohol drinkers, which are highly significant to female condom use.

The use of a condom is an important intervention in preventing HIV transmission and is a major strategy to reach 80% protection against HIV, compared with non-use, if used consistently (UNAIDS, 2013). Beksinska et al., (2013) articulated the successive national surveys that showed continuous use of condom at last sex. However, inconsistent and improper use of condom and the possibility of discontinuation of condoms use as the relationship grows older hampers the effectiveness of condom programmes. About 35% of women in the study used condom, 10% do not use a condom and occasional condom users were 55%. On the other hand, some women used a female condom but a greater percentage of these women did not use it consistently.

The respondents such as gender violence, negative lifestyle (promiscuity, alcohol abuse) and attitude towards female condom mentioned different reasons that lead to inconsistency. Sexually active women argued that insisting on condom use to their partners might result in domestic violence, as the partner labelled condom use a sign of distrust and disrespect. Thus, the fear of losing their partners they then prefer ignoring the use of a condom (m.health 24.com>medical, HIV/AIDS, 2014).

The respondents also believed that there was no need to use it (condom) consistently because they were a couple and they were in a stable relationship. Furthermore, the majority of sexually active women were drinking alcohol and mentioned that at times they had no time to use a condom during sexual activities. However, some engaged in sexual activity without using a condom in order to get alcohol from male friends. WHO (2013) highlighted that various studies have reported that teenagers engaged in unprotected sex for numerous reasons such as promiscuity and misconception about condom use and lack of skills to negotiate for protected sex. Notably, sexual risk behaviours increase during the festive seasons where alcohol consumption level becomes too high across the country (Mnyipika, 2014). This is because people tend to become negligent when under the influence of alcohol.



Figure 6.6 illustrated the results on the condom that was preferred by the respondents. The majority preferred the male condom  $n=374(64\%)$ , female condom  $n=112(19\%)$  and do not know  $n=99(17\%)$ . This proved that in this study the female condoms were known but less preferred as compared to male condoms by sexually active women. Table 4.7 also presented the P-value of the preferred type of condom with P-value of 0.000 for occupational status (employed) and age (15-20) showing high significance. Therefore, more attention is needed to promote the female condom use. However, the negative attitude regarding the size and appearance of the female condom discouraged the users from using it.

Mokgetse (2015) stated that some women raised concerns about the big size and the shape of the female condom in sense that it was not appetising. In addition, some women also stated that it was oily and makes some 'noise' during sexual intercourse due to the material used to make it. Some of the women further mentioned that the mere fact that female condom should be inserted eight (8) hours before sexual intercourse creates great concern; such as what if the partner does not come home or does not want sexual intercourse and she has already inserted the female condom?

Nonetheless, not all of the women had a negative attitude about the female condom. Those who had used a female condom were willing to continue using it, if it could be available and those who had never used it were willing to try it. One of those who had used the female condom mentioned that her partner was still asking her about it, meaning both partners have a positive attitude towards female condom use. The findings of the current study are supported by Nigerian studies that discovered that Nigerian females promoted the female condom that they used as a mode of contraceptive and prevention of transmission of sexually related infections (Ezire et al., 2013).

In conclusion, as far as attitude on female condom is concerned, the respondents had positive attitude and the potential to use it. However, enough information on its benefits was needed to reinforce these attitudes. All the myth and reasons for not using the female condom should be considered and explained to the public.

#### 5.4 Access to Male and Female Condoms

In this study, there were various sources of getting males and female condoms such as public health care institution which were responsible for distributing free condoms and business institutions where sexually active women had to buy a female condom.

Table 4.9 showed the results on the access to male and female condoms by the respondents. Condoms were available and accessible to sexually active women from the government health care institutions and from the pharmacist. The respondents who accessed condoms from the clinic were  $n=496(83.8\%)$ , and from the chemist were  $n=83(14.0\%)$ . However, male condom availability was  $n=565(95.1\%)$ , whereas female condom availability was  $n=120(21.0\%)$ . This, therefore, showed that male condom was easily available and was  $n=472(81.9\%)$  as compared to the female condom easy availability which was  $n=32(5.6\%)$ . On the other hand, female condom approval in this study was  $n=90(15.2\%)$  whereas the majority of women who did not approve the use of female condom were  $n=242(40.9\%)$  and did not know whether it was possible or not possible to use the female condoms.

The majority of sexually active women who participated in this study had never used a female condom, not by choice, but due to its unavailability and inaccessibility. This situation is reflected in the fact that, female condoms have been introduced for more than twenty years but most women in sub-Saharan Africa are still unable to access those (Pizzarossa, 2018). Some of the women who participated in the study showed the interest to use female condoms if they were easily accessible and available. Peters, Jansen & Van Driel (2014) reinforced the idea above as echoed by this statement 'Operation of female condom use is deserted at service delivery level although it was recognised by global AIDS and family planning policymakers, such as UNAIDS (2013) as reliable dual protection'. However, in this study, this community under study was serviced by a mobile clinic that was no longer suitable for developing this community. The overwhelming workload may result in the nursing staff overlooking some important issues such as ensuring availability and accessibility of female condoms.

Inaccessibility and unavailability of female condoms contribute to the minimal condom use. Furthermore, the mobile clinic is not always reliable for the community due to transport and other logistical challenges. Therefore, unavailability and inaccessibility affect female condom use in the study area.

## **5.5 Poor Lifestyle (smoke and alcohol) and Sexual Behaviour Regarding Female Condom Use**

The results in this study showed that the respondents were practising poor life styles such as engaging in unsafe sex. Furthermore, some women engaged in smoking and alcohol drinking which can contribute to unsafe sex due to altered thinking and ill judgement of issues related to condom use. The community was also characterized by poverty as shown by the high rate of unemployment which was n=332(55.2%).

Table 4.2, showed that the respondents who were using alcohol were n=253(42.1%) and n=121(20.1%) were smokers. Relationship wise the women who were sexually active and were in a relationship were 598(99.5%). The findings above indicated that women were sexually active and involved in the use of alcohol.

The community where the study was conducted was a township that is challenged by noteworthy levels of socio-economic issues such as unemployment, crime, and poverty. The only form of entertainment was in the shebeens (the place where the alcohol was sold and drinkers stay) and practised poor sexual behaviours.

Most of these drinking women highlighted the issue of having multiple partners and the fact that sometimes it so happens that one may use sexual intercourse as a means of getting alcohol. Therefore, it was difficult for them to negotiate for female condom use, as she did not know whom she would have sex with on a particular day. According to WHO (2013), various studies have supported the fact that teenagers are engaged in unprotected sex for numerous reasons such as promiscuity, and misconception about condom use and lack of skills to negotiate for protected.

The respondents further, opined that sometimes some women engaged in sexual intercourse without any plan to in the shebeen. On the other hand, some respondents reported that female condom was too big and it could create problems when having sex such as being pushed in when in different sex positions.

Conclusively, the respondents in this study (women who were sexually active) were influenced by the poor lifestyle in the use of female condom. Seemingly, the government was also failing the women in as far as female condom use was concerned because only male condoms were distributed to the taverns and shebeens. Nonetheless, women

can be able to practise safe sex if female condoms were available and women being educated on how to use female condoms.

### **5.6 Female Condom Self - Efficacy**

The results showed that the respondents experienced female condom self-efficacy only when health care providers educated, trained and counselled all women who were sexually active in the community under study. Table 4.10 showed the average female condom self-efficacy score was 509(30.1).

Table 4.10 also shown that the level of education was P-value 0.0001, which was highly significant in relation to female condom use and could be generalized. Whereas the respondents who were smoking, taking alcohol, had awareness of the female condom, had seen a female condom, ever used female condom and condom type preference had P-value of 0.000 which were significant and provide basis for generalising results to other populations. The results in Table 11, represent the factors associated with female condom self-efficacy and were examined using the ordinary least square regression. The results show that the level of education, ever used a female condom, lifestyle behaviors such as alcohol use and smoking were significantly associated with female condom self-efficacy. Age, place of residence and awareness of female condom were not associated with female condom self-efficacy.

Female condom use benefits women because female condom reduces teenage and unwanted pregnancies, HIV transmission and new STI infections (Valens & Joseph, 2013). The CDC, NIH, and all of the leading medical associations in the country agreed that male and female condoms were highly effective in averting HIV infection, decreasing the risk of pregnancy and a number of sexually transmitted infections. That could be possible if the government could increase the availability and accessibility of both types of condoms and empower women on use female condoms. This is important because women will have alternative and power to negotiate for safe sex, when dealing with difficult men during sexual engagement. Therefore, the female condom could offer women greater control to protect their bodies (Koster et al., 2015).

Unfortunately, majority of the women in the study were not aware of the benefits mentioned above because of the lack of knowledge regarding female condom use. However, the majority of sexually active women participating in this study disputed the

fact that female condom is safe, effective and appropriate. This is clearly shown by the 64% of women who prefer male condom to a female condom. They fear that it may slip in and fail to serve its purpose of preventing them from sexually transmitted diseases and unwanted pregnancies. Further, they expressed that, if it may slip in, it may cause more damage in the womb, may be difficult to remove, and thus needing a doctor to take it out. Women that are empowered and educated on the benefits of female condom use will promote the female condom uptake. Some researchers have discovered that condoms are available and accessible but failure to create adequate awareness on the benefits of condom use, leads to non-condom use.

In summary, the study has highlighted that most women do not use a female condom despite their knowledge of female condom benefits. Various factors result in women ignoring these benefits. Some of these factors is poverty, which outweighs female condom benefits.

### **5.7 Summary of the Research Findings**

The aim of the study was to explore factors affecting female condom use in Reeston in Buffalo City Metropolitan Municipality in Eastern Cape. The study targeted women between 15-49 years of age, sexually active and those residing at Reeston, Buffalo City Municipality in East London. The intention was to increase female condom uptake and thus decreasing the negative implications associated with sexual activities. The assessment of the respondents' attitudes toward the use female condom plays a significant role in the promotion and utilisation of the female condom to prevent HIV/AIDs, teenage or unwanted pregnancies, and STIs.

In summary, the use of female condom has not been well marketed. Even though the government is talking about it, majority of the women lack knowledge about it. The attitude towards female condom was positive, but minimal knowledge, inaccessibility and unavailability of female condoms hinder its use. The respondents revealed that the government has failed women in making them take charge of their reproductive health. There is a high demand for female condoms to be placed in taverns and shebeens just like the male condoms. This was emphasised by parents whose children are struggling with drinking alcohol to promote the safety of their kids.

## **5.8 Implications**

### **5.8.1 Practice**

The researcher emphasizes on the use of female condom if a male condom is not available or the partner is reluctant to use the male condoms. The government should emphasize and mandate all the health care workers to educate and in-service women who are sexually active about the importance of using a female condom when engaged in sexual activity.

### **5.8.2 Community**

Frequent counselling sessions and outdoor campaigns about female condom use, the benefits of using a female condom should be undertaken to improve female condom use. This may increase female condom uptake. Availability and accessibility of female condom accompanied by health talks would reduce sexually transmitted infections and teenage pregnancy.

### **5.8.3 Future research**

The study focused on the factors affecting female condom use and women who were sexually active and in need of information related to female condoms. Further research could be done on empowerment of women who are sexually active through information sharing so that women could be well informed and ensure informed decisions are made during sexual engagement.

## **5.9 Limitations**

The study excluded sexually active women above 50 years of age, as they may not be highly sexual at this age. The setting of the study was only limited to one low socio-economic community in East London.

## **5.10 Recommendations**

- Education about female condom use and their benefits to all the women who are sexually active is crucial to all the age groups.
- Empowerment of women through frequent education and counselling are essential to minimize sexually related infections and teenage pregnancy.
- The government and the responsible stakeholders should promote the condom uptake, accessibility and availability in every public place.

- Department of Health and Education should be empowered on how to promote female condom use and improve the distribution of both male/ female condoms to schools.

### **5.11 Contributions of the Study**

The study has identified that health services/standards need to improve the availability and accessibility of female condom. There is a need for more health care facilities or permanent health facility. The study also highlighted the emphasis of the community health workers' empowerment and promotion of female condom uptake.

### **5.12 Conclusion**

This chapter has presented the justification for the study, limitations of the study, implications of the study, recommendations arising from the study and contributions of the study. The study highlighted that most women use a male condom than a female condom. There is limited knowledge about female condom, and unavailability and inaccessibility of female condoms, which significantly affects female condom use. The high unemployment rate has also contributed to the non-use of female condom because women have to submit to men for them to get financial support. Lastly, sexually active women were interested in empowerment programmes through campaigns, counselling and health education trainings. Therefore, availability and accessibility of the female condoms is crucial.



## REFERENCE

Ananga, M.K., Kugbey, N., Akporlu, J.M. & Asante K.O. 2017. Knowledge, acceptance and utilisation of the female condom among women of reproductive age in Ghana. *Contraception and Reproductive Medicine Journal* 2(5) DOI 10.1186/s40834-017-0042-9

Ancia, TC., Manwere, MM., Makuyana, KL., Mwanza, E. and Makado, E. (2014). Level of awareness and uptake of the female condom in women aged 10 to 49 years in Bindura district, Mashonaland Central Zimbabwe *African journals of research*. Volime 13(1) doi.org/10.2989/16085906.2014.901979

Andrews CH., Faxelid E., Sychaerun V. and Phrasisombath K. (2015). Determinants of consistent condom use among female sex workers in Savannakhet, Lao PDR. *BMC Women's Health* 2015 15:63 <https://doi.org/10.1186/s12905-015-0215-0>

Ashmore, J. & Henwood, R. 2015. Choice or no choice? The need for better branded public sector condoms in South Africa. *South African journal of HIV medicine*, 16(1):1-3.



Azwihangwisi Helen Mavhandu-Mudzusi and Teka tesfay Asgedom (2016). The prevalence of risky sexual behaviours amongst undergraduate students in Jigjiga University, Ethiopia. Department of Health Studies, University of South Africa, Preller Street, Muckleneuk Ridge, Pretoria, 0003, South Africa. *Health SA Gesondheid*, doi.org/10.1016/j.hsag.2015.11.002

Bhabani Shankar Nayak, BS. (2013). Challenges of Cultural Relativism and the Future of Feminist Universalism. *Journal of Politics and Law*; Glasgow Caledonian University, Vol. 6, No. 2; doi:10.5539/jpl.v6n2p83

Barnham, C. 2015. Quantitative and Qualitative Research: Perceptual Foundations. *Sage Journals*. <https://doi.org/10.2501/1JMR-2015-70>.

Becker, M. H. 1974. The Health Belief Model and Personal Health Behaviour. *Health Education Monographs* 2, 324–508. dx.doi.org/10.1177/109019817400200407



Beksinska, M. E., Smit, J. A. & Mantell, J. E. 2013. Progress and challenges to male and female condom use in South Africa. *Sex Health*. 9(1):51-58. <https://doi.org/10.1071/SH11011>.

Bernama. 2014. "Karex to build RM80m condom plant." *Free Malaysian Today News*, <http://www.freemalaysiatoday.com/category/business/2014/03/14/karex-to-build-rm80m-condom-plant/>.

Bouscaillou, J., Evanno, J., Proute', M., Sidibe, S., Niangoin, T., Kabran, M., Luhmann, N., Dje-Bi, S. et al. 2016. Prevalence and risk factors associated with HIV and tuberculosis in people who use drugs in Abidjan, Ivory Coast. *International Journal of Drug Policy* 30:119–123.

Bowker, JC. & Etkin, RG. (2016). Evaluating the Psychological Concomitants of Other-Sex Crush Experiences during Early Adolescence. *Journal of Youth and Adolescence* 45(5) DOI: 10.1007/s10964-016-0470-x

Boyd, K., Perkins, P. & Lawrence, K. 2015. The female condom: Knowledge, image, and power. *Journals of Black Sexuality and Relationships*. 1(3):97 – 112.

Boyle GJ, George H. (2014). Sub-Saharan African randomised clinical trials into male circumcision and HIV, *South African Medical Journal* vol.104 (3) Cape Town.

Brink, H, Van der Walt, C. & Van Rensburg, G. 2018. *Fundamentals of research methodology for healthcare professionals*, 4th edition. Cape Town: Juta.

Brown, JL., DiClemente, RJ., Sales, JS., Rose, ES., Gause, NK., Safonova, P., Olga Levina, O., Belyakov, N., and Vadim V. Rassokhin, VV. (2016). Alcohol Use, Partner Characteristics, and Condom Use among HIV-Infected Russian Women: An Event-Level Study. doi: 10.15288/jsad.2016.77.968

Cavanaugh, C., Mial, K. & Tulloch, D. 2016. Assessing and Mapping the Availability of the Female Condom in the Philadelphia Metropolitan Area. *AIDS and Behavior*. 20(12):2845–2849.

Chimala, C. 2014. Cultural and religious perception dwindling female condom uptake. Malawi. [manaonline.gov.mw/index.php](http://manaonline.gov.mw/index.php)

Cresswell, (2014). *Research design: Qualitative and quantitative approaches*. London: Sage.

Crosby, RA., Milhausen, RR., Stephanie A. Sanders, SA., Graham, CA and Yarber, WL. (2014). Condoms are More Effective When Applied by Males: A Study of Young Black Males in the United States. 24 (11):868-870. doi: [10.1016/j.annepidem.2014.07.017](https://doi.org/10.1016/j.annepidem.2014.07.017)

Cumber, SN. and Tsoka-Gwegweni JM. (2016). Knowledge and practice of condom use as well as perceived barriers among street adolescents in Cameroon, Department of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal, South Africa, *Southern African Journal of HIV Medicine*, doi.org/10.4102/sajhivmed.v17i1.479

Department of Health and Human Service (2016). National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention. United States

Ezire, O., Oluigbo, O., Archibong, V., Ifeanyi, O. & Anyanti J. 2013. "Barriers to repeated use of female condom among women and men of reproductive age in Nigeria." *Journal of AIDS/HIV Research* 5:206-213.

Greenwood, J., Kircher, P., Santos, C. and Tertilt, M. (2013). An Equilibrium Model of the African HIV/AIDS Epidemic at SSRN: [dx.doi.org/10.2139/ssrn.2239139](https://dx.doi.org/10.2139/ssrn.2239139)

Grove, SK., Burns, N. & Gray, J.R. 2016. *The practice of nursing research. Appraisal, synthesis, and generation of evidence*. 8th edition. Elsevier: Saunders.

Gungqisa, N., Schaan, M.M., Taylor, M. & Marlink, R. 2016. Personal views about womanhood against women living with HIV in Botswana. *Culture, health and sexuality: An International Journal for Research, Intervention and Care*

Hoffmann, S., Mabude, Z., Ngoloyi, C. & Stein, Z.A. 2015. Promoting female condom among female university students in KwaZulu-Natal, South Africa: results of a randomised behavioural trial. *AIDS and Behavior*. 19(7):1129 – 1140

Human Sciences Research Council. 2014. *South Africa national HIV Prevalence, Incidence and Behaviour Survey, 2012*. Retrieved May 19, 2015, from [www.hsrc.ac.za/upload/pageContent/4565/SABSSM%201V%20%LEO%20final.pdf](http://www.hsrc.ac.za/upload/pageContent/4565/SABSSM%201V%20%LEO%20final.pdf).

Islama, N. and Laugena C. (2015). Gender differences in depression and condom use among sexually active Canadians. *Journal of Affected Disorders*. 2015; 174:511-5. doi.org/10.1016/j.jad.2014.12.013

Johnson, S., Kincaid, L., Laurence, S., Chikwava, F., Delate, R. & Mahlasela, L. 2014. Second national HIV communication survey 2012. Pretoria: South Africa. *Johns Hopkins Health and Education journal*, volume 13(3)

Joint United Nations Programme on HIV and AIDS. 2012. GLOBAL REPORT: UNAIDS report on the global AIDS epidemic 2012. Geneva: Joint United Nations Programme on HIV and AIDS. ISBN 978-92-9173-592-1

Joint United Nations Programme on HIV and AIDS. 2013. GLOBAL REPORT: UNAIDS report on the global AIDS epidemic 2013. Geneva: Joint United Nations Programme on HIV and AIDS. ISBN 978-92-9253-032-7

Joint United Nations Programme on HIV and AIDS. 2014. GLOBAL REPORT: UNAIDS report on the global AIDS epidemic 2014. Geneva: Joint United Nations Programme on HIV and AIDS. ISBN 978 92 4 150665 6

Junqing Wu, Zirong Huang, Patricia S. Coffey, and Maggie Kilbourne-Brook (2016), Short-Term Acceptability of the Woman's Condom among Married Couples in Shanghai. *Journal of Sexually Transmitted Diseases*. Volume 2016, Article ID 6201421, <http://dx.doi.org/10.1155/2016/6201421>

Kaelo, G. & Malema, B.W. 2014. Female condoms as a preventive measure against HIV/AIDS infection among university students in Gaborone, Botswana. *Open access library journal*. 1, From: <http://dx.doi.org/10.4236/oalib.1100538> (accessed 10 June 2015).

Kanda, L. & Mash, R. (2018). Reasons for inconsistent condom use by young adults in Mahalapye, Botswana. *African journal of primary health care and family medicine*, volume 10(1).a1492.

Khan T, 2014, *Condom use falls in SA as HIV/AIDS fear declines - survey*, viewed 03 March 2015, "Department of Public Health, University of Venda, South Africa. <http://www.bdlive.co.za/national/health/2014/04/02/condom-use-falls-in-sa-as-hivaids-fear-declines-survey>

Kiura, A.W. 2017. Constrained Agency on contraceptive use among Somali Refugee Women in the Kakuma Refugee Camp in Kenya. Pages 147-161 | Published online: 25 Oct 2017 <https://doi.org/10.1177/0971852413515321>

Korndoerfer, T.L. 2014. The environmental challenge of HIV/AIDS: A perspective on the importance of addressing HIV for environmental sustainability in Sub-Saharan Africa. *International journal of ecology and eco solution*. 1(1):16-22.

Korte, J.E. 2015. *Encyclopaedia of AIDS*. New York. Springer science and business media doi10, 1007/978-4614-9610-6\_111-1.

Koster, W., Bruinderink, M.G., & Janssens, W. 2015. Empowering women or pleasing men? Analysing male views on female condoms use in Zimbabwe, Nigeria and Cameroon. *International perspectives on sexual health and reproductive health* 41(3):126-135.

Lam, J.U.H., Rebolj, M., Dugue', P.A., Bonde, J., von Euler-Chelpin, M., Lynge, E., Mulongo, M., Lince-Deroche, N. et al. 2016. Condom use in prevention of Human Papillomavirus infections and cervical neoplasia: systematic review of longitudinal studies. *South African Health Review* 2016 (1):95 – 108.

Lince-Deroche, N., Mulongo, M., Pleaner, M.,Morrone, C., Mullick, S., Firnhaber, C., Harries, J., Sinanovic, E. et al. 2016. Achieving universal access to sexual and reproductive health services: the potential and pitfalls for contraceptive services in South Africa. *South African Health Review* (1):95 –108.

Madiba S & Ngwenya N. (2017). Cultural practices, gender inequality and inconsistent condom use increase vulnerability to HIV infection: narratives from married and cohabiting women in rural communities in Mpumalanga province, South Africa [doi.org/10.1080/16549716.2017.1341597](https://doi.org/10.1080/16549716.2017.1341597)

Masoda, M. & Govender, I. 2013. Knowledge and attitudes about and practices of condom use for reducing HIV infection among Goma university students in the democratic republic of Congo. *Southern African journal of epidemiology and infection*. 28(1):61–68. doi: 10.1080/10158782.2013.11441521.

McLaurin-Jones, T.W., Lashley M.B. & Marshall, V. 2016. Minority college women's view on condom negotiation. *International Journal of environmental research and public health journal*. 13(1). doi: 10.3390/ijerph13010040.

McMahon J., Theresa E. & Braksmajer SA. (2016). Potential of Pre-Exposure Prophylaxis for Women in Violent Relationships: Behavioural and Psychosocial Research. *AIDS Patient Care and STDs* VOL. 30, NO. 6 doi.org/10.1089/apc.2016.0098

m.health 24. 2014. South Africans not faithful and not using condoms. [www.health24.com/medical/HIV-AIDS/news/South-Africans-not-faithful-and-not-using-condoms-2014.40403](http://www.health24.com/medical/HIV-AIDS/news/South-Africans-not-faithful-and-not-using-condoms-2014.40403).

Miller, KS., Levin, ML., Whitaker, DJ. and Xu, X. (2017). Patterns of condom use among adolescents: the impact of mother-adolescent communication. *American Journal of Public Health* volume, 88(10) 1542-1544. doi: 10.2105/AJPH.88.10.1542

Mnyanda, P. 2013. Attitudes, understanding and perceptions of teenagers about use of contraceptives Buffalo City Municipality – Eastern Cape. Unpublished Thesis. Stellenbosch University, Cape Town. <http://scholar.sun.ac.za>.

Mnyipika, Nomandla (2014) Exploring factors that influence condom use among high school teenagers aged between 16 and 18 years in Dutywa District, Eastern Cape, South Africa, University of South Africa, Pretoria, <http://hdl.handle.net/10500/18195>

Mokgetse, Moitlamo (2015) Female condom acceptability among young women in Botswana, University of South Africa, Pretoria, <http://hdl.handle.net/10500/21194>

Naidu, M. 2013. Perceptions around second-generation female condoms: reporting on women's experiences. *Anthropological notebooks journal* 19(1):25-34.

Nalwadda, G., Mirembe, F., Byamugisha, J., Nazarius, M., Tumwesigye, N.M. & Faxelid, E. 2016. *Contraception and Reproductive Medicine journal* 1:15 DOI 10.1186/s40834-016-0027-0.

National Department of Health, 2015. Cluster: Maternal Child and Women's Health and Nutrition. Sub-Directorate: Child Health. National School Health Policy and Implementation Guidelines, Pretoria.

Nduka, I., Enwereji, E.E., Nduka, E.C. & Ahuizi, E.R. 2014. Determinants of Consistent Condom Use Among HIV positive Women IN Abia State, South- EAST Nigeria. *Journal of Clinical Research in HIV AIDS and Prevention* 2(2), 1.

Nkosi, Z. 2013. The complex nature of adherence in the management of HIV/AIDS as a chronic medical condition. *Disease Journal*, Volume 1(1), 18–35 doi.org/10.3390/diseases1010018.

Noble, H. & Smith, J. 2015. Issues of validity and reliability in qualitative research. *Board of major medical journal* 18 (2), 34-35. doi.org/10.1136/eb-2015-102054

Noel AS. "Intrapersonal and Interpersonal Consequences of Loneliness: Health Behavior, Social Interactions, Self-Disclosure, and Perceived Responsiveness" (2015). *Dissertations and Theses*. Paper 2340. [https://pdxscholar.library.pdx.edu/open\\_access\\_etds/2340](https://pdxscholar.library.pdx.edu/open_access_etds/2340) [10.15760/etd.2337](https://doi.org/10.15760/etd.2337)

Peters, A., Van Driel, F. & Jansen, W. 2014. Acceptability of the female condom by sub-Saharan African women: A literature review. Institute for Gender Studies, Radboud University Nijmegen, *African journal of reproductive health* 18(4):44.

Phiri, R.R., Rhikhotso, R., Moagi, M.M., Bhana, V.M. & Jiyane, P.M. 2015. Accessibility and availability of female condom 2: Healthcare providers' perspective. *Curationis journal* volume 38(2). doi.org/10.4102

Pizzarossa, LB. 2018. Here to Stay: The Evolution of Sexual and Reproductive Health and Rights in International Human Rights Law ID Department of Transboundary Legal Studies, University of Groningen, Groningen, Netherlands.

Polit, D.F. & Beck C.T. 2017. Nursing research: Generating and assessing evidence for nursing practice 10th edition, Wolters Kluwer, Tokyo.

Resnik, D.B. 2015. What is ethics in research and why is it important. National Institute of Environmental Health Sciences journal volume 1 (10).

Ross, L.C. F., Colich, N.L., LeMoult, J., Gotlib, I.H. & Joormann, J. 2015. Telomere length and cortisol reactivity in children of depressed mothers. *Molecular psychiatry journal* 20(5), 615.

Schuyler, AC., Masvawure. TB., Smit JA., Beksinska, M., Mabude, Z., Ngoloyi C. and Mantell, JE. 2016. Building young women's knowledge and skills in female condom use: lessons learned from a South African intervention. *Health Education Research journal*, Volume 31(2) doi.org/10.1093

Shokoohi, M., Karamouzian, M., Mirzazadeh, A., Haghdoost, A & Rafierad, A. 2016. HIV knowledge, attitudes, and practises of young people in Iran: findings of a National Population Based Survey PLoS One journal 11 (9)

Silassie, S.G., Teka, B., Abebe, T. 2016. Pylori in HIV positive and negative controls in St. Paul's general specialized hospital, Addis Ababa, Ethiopia. *Scientific Journal of Public Health* 4 (5), 387–393

Subramanian, T., & Sahay, S. 2016. New HIV prevention technologies: knowledge and perceived usage by women with high-risk behaviour - A qualitative study in Tamil Nadu. *International journal of health science and research*. 6(1):8–16.

Statistics South Africa. 2011. South Africa's Census 2011 municipal fact sheet. Retrieved December 15, 2015, Census <http://www.statsa.gov.za/census2011/censusproducts/Census2011>

Taiwo A. Obembe,<sup>1,2</sup> Ayo S. Adebowale,<sup>3</sup> and Kehinde O. Odebunmi 2017. Perceived confidence to use female condoms among students in Tertiary Institutions of a Metropolitan City, South-western, Nigeria, doi: 10.1186/s13104-017-2730-6



Tobin-west, C.I., Maduka, O., Onyekwere, V.N & Tella, A.D. 2014. Awareness, acceptability, and use of female condoms among university students in Nigeria: implications for STI/HIV prevention. *International journal of adolescent medical health* 26(2):259-265.

United Nations Development Programme 2015. *Human development report 2015: work for human development*. Geneva, United Nations programme. eISBN: 978-92-1-057615-4

United Nations Population Fund. 2013. *Report of the Executive Director for 2013: Progress in implementing the United Nations Population Fund A strategic plan, 2008-2013*. Geneva: United Nations Population Fund.

Valens, M. & Joseph, N. 2013. Knowledge and attitude to female condom use among undergraduates of Kigali health. *Rwanda journal of health science*. Vol 2 No1

Van der Linde, I. 2013. "HIV/AIDS plenary session in South Africa: At Last the Glass is Half Full". Human Sciences Research Council in Durban, South Africa.

Van der Vaart, L., De Witte, H. and Van den Broeck, A. (2017). A psychosocial typology of the unemployed in South Africa, *South African Journal of Psychology*. Vol 48, Issue 2, doi.org/10.1177/0081246317721600

Vouking, M.Z., Evina, C.D. & Tadenfok, C.N. 2014. Male involvement in family planning decision making in Sub-Saharan Africa-what the evidence suggest. *The Pan African medical journal*. 2014:19:349. doi:10.11604/pamj.2014.19.349.5090.

Vu, Lung MD., Karlyn, A., Njab, J., Azeez, AMD and Ahonsi, B. (2013). High HIV Prevalence Among Men Who Have Sex with Men in Nigeria: Implications for Combination Prevention. *Journal of Acquired Immune Deficiency Syndromes: Volume 63 (2)*. 221–227 doi: 10.1097/QAI.0b013e31828a3e60

Wallace, L.A., Li, L., & McDaid, L.M. 2014. HIV prevalence and undiagnosed infection among a community sample of gay and bisexual men in Scotland, 2005 – 2011: implications for HIV testing policy and prevention. *PLOS ONE Journal* Volume 9(3). doi:10.1371



Wang, X., Xi, M., Zhang, L., Jia, L., Wang, Y., & Cheng, Y. 2014. Awareness of female condoms and failures reported with two different types in China. *International journal of gynaecology & obstetrics* 128:152-156.

Wanyenze, R., Atuyambe, L., Kibirige, V., Mbabazi, S., Tumwesigye, N.M., Djurhuus, K. & Namale, A. 2011. "The new female condom (FC2) in Uganda: perceptions and experiences of users and their sexual partners." *African journal of AIDS research* 10: 219-224.

Workowski KA, Bolan GA, 2015. Sexually transmitted diseases treatment guidelines, Pubmed, Centers for Disease Control and Prevention. Atlanta. *Annals of emergency medicine: An International Journal* 66(5):527-8.

World Health Organization. 2013. Global health strategy of HIV/AIDS 2011-2015: Let us do what is right for everyone. Geneva: WHO.

Yam, E.A., Mnisi, Z., Sithole, B., Kennedy, C., Kerrigan, D.L., Tsui, A.O. & Baral, S. 2013. Association between condom use and use of other contraceptive methods among female sex workers in Swaziland: a relationship-level analysis of condom and contraceptive use. *Sexually transmitted diseases* 40 (5), 406- 412, 2013.

Yazdkhasti, M., Pourreza, A., Pirak, A. and Abdi, F. 2015. Unintended Pregnancy and Its Adverse Social and Economic Consequences on Health System: A Narrative Review Article. *Iranian Journal of Public Health*. 44(1): 12–21.

## APPENDIX A: Ethical Clearance Certificate from University of Fort Hare



**University of Fort Hare**  
*Together in Excellence*

### **ETHICAL CLEARANCE CERTIFICATE REC-270710-028-RA Level 01**

Certificate Reference Number: VEL011SBUN01

Project title: **Factors affecting female condom use in Reeston, Buffalo City Metropolitan, Eastern Cape.**

Nature of Project: Masters in Health Science

Principal Researcher: Nosipho Bunu

Supervisor: Ms N.M Vellem

Co-supervisor: N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

**Special conditions:** Research that includes children as per the official regulations of the act must take the following into account:

Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
  - Any unethical principal or practices are revealed or suspected
  - Relevant information has been withheld or misrepresented
  - Regulatory changes of whatsoever nature so require
  - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



**Professor Lindelwa Majova-Songca**  
**Acting Dean of Research**

16 November 2017

## Appendix B: letter of permission from the Department of Health Eastern Cape Province



Enquiries: Zonwabele Merile Tel no: 083 378 1202  
Email: Zonwabele.Merile@echealth.gov.za Fax no: 043 642 1409  
Date: 24 January 2018

RE: FACTORS AFFECTING FEMALE CONDOM USE IN BUFFALO CITY METROPOLITAN (EC\_201801\_012).

Dear Nosipho Bunu

The department would like to inform you that your application for on the abovementioned research topic has been approved based on the following conditions:

1. During your study, you will follow the submitted amended protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.
2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.
3. The Department of Health expects you to provide a progress on your study every 3 months (from date you received this letter) in writing.
4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Eastern Cape Health Research Committee secretariat. You may also be invited to the department to come and present your research findings with your implementable recommendations.
5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.

Your compliance in this regard will be highly appreciated.

SECRETARIAT: EASTERN CAPE HEALTH RESEARCH COMMITTEE

## Appendix C: Participant Informed Consent Form

NAME OF APPLICANT

Ethics Human 2015

<<

>>

OFFICE USE ONLY

|     |      |
|-----|------|
| Ref | Date |
|-----|------|

If possible, I would like to come back to this area once I have completed my study to inform you and your community of what the results are and discuss the findings and proposals around the research and what this means for people in this area.

### INFORMED CONSENT

I hereby agree to participate in research regarding factors affecting female condom use. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in this interview.

I understand that this consent form will not be linked to the questionnaire, and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.

.....  
**Signature of participant** **Date**.....

I hereby agree to the tape recording of my participation in the study

.....  
**Signature of participant** **Date**.....

Document approved by UREC: 27 July 2015, V01

## Appendix D: Data collection Instrument (Questionnaire)

### Condom Use Questionnaire

#### Behaviour Statement

The study targeted women of childbearing age and who are sexually active between age 15– 49 years

Interviewer's Name: NosiphoBunu Questionnaire No.: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Gender of respondent:  Female

#### Introduction:

Dear Respondent,

My name is NosiphoBunu, studying at University of Fort Hare and I am currently conducting a research project looking at factors affecting female condom use. It will be of great assistance if I can hear some of these factors from you. Kindly, be informed that your participation in the study is voluntary and you can withdraw from answering any questions if you so desire. You are guaranteed that the information you provide in this questionnaire is for research use only and will be kept confidential.

To ensure validity of the study the KAP questions adapted from (Silassie et al., (2016) and (Agbedia & Ogben, 2012) have been used.

### Section 1: Demographic characteristics of study Respondents

**Instruction:** Please read the questions and answers very well and select your response from the options provided

|    |                          |  |                          |                          |                          |        |                          |
|----|--------------------------|--|--------------------------|--------------------------|--------------------------|--------|--------------------------|
| 1. | How old are you?         | ..... years old                          |                          |                          |                          |        |                          |
| 2. | What is your race?       | Black                                    | <input type="checkbox"/> | Coloured                 | <input type="checkbox"/> | Indian | <input type="checkbox"/> |
| 3. | What is your religion?   | Orthodox (Catholic, Methodist & Baptist) |                          | <input type="checkbox"/> | Seventh day Adventist    |        | <input type="checkbox"/> |
|    | Pentecostal              | <input type="checkbox"/>                 | Others specify           |                          | .....                    |        |                          |
| 4. | Marital status?          | Currently married                        |                          | <input type="checkbox"/> | Never married            |        | <input type="checkbox"/> |
|    | Previously married       | <input type="checkbox"/>                 | Living with my boyfriend |                          | <input type="checkbox"/> |        |                          |
| 5. | What is your occupation? | Employed                                 |                          | <input type="checkbox"/> | Unemployed               |        | <input type="checkbox"/> |
|    | Self-employed            | <input type="checkbox"/>                 | Scholar                  |                          | <input type="checkbox"/> |        |                          |

|    |   |                          |                          |            |                          |          |                          |
|----|---|--------------------------|--------------------------|------------|--------------------------|----------|--------------------------|
| 6. | 6. Place of residence?                                      | Rural                    | <input type="checkbox"/> | Semi-Urban | <input type="checkbox"/> | Urban    | <input type="checkbox"/> |
| 7. | Level of education?   | No formal education      | <input type="checkbox"/> | Grade 6    | <input type="checkbox"/> | Grade 12 | <input type="checkbox"/> |
|    | Higher degrees  | <input type="checkbox"/> |                          |            |                          |          |                          |
| 8  | Do you currently smoke?                                     | Yes                      | <input type="checkbox"/> | No         | <input type="checkbox"/> |          |                          |
| 9. | Do you currently drink alcohol?                             | Yes                      | <input type="checkbox"/> | No         | <input type="checkbox"/> |          |                          |
| 10 | Are you currently in a relationship?                        | Yes                      | <input type="checkbox"/> | No         | <input type="checkbox"/> |          |                          |
| 11 | Have you engaged in sexual activities in the last one year? | Yes                      | <input type="checkbox"/> | No         | <input type="checkbox"/> |          |                          |

| <b>Section 2: Awareness, use and attitude to female condom</b> |   |                                  |                          |          |                          |            |                          |  |
|--|---|----------------------------------|--------------------------|----------|--------------------------|------------|--------------------------|--|
| 12   | Have you ever heard about the <b>female condom</b> ?                        | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |
| 13   | Have you ever seen a <b>female condom</b> ?                                 | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |
| 14   | Have you ever used a <b>female condom</b> ?                                 | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |
| 15   | Have you ever used a <b>male condom</b> ?                                   | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |
| 16   | How often do you use a <b>male condom</b> ?                                 | Always (every time at I had sex) |                          |          |                          |            | <input type="checkbox"/> |  |
|  |   | Occasionally                     | <input type="checkbox"/> | Never    | <input type="checkbox"/> |            |                          |  |
| 17   | Which type of condom do you prefer the most?                                | Female                           | <input type="checkbox"/> | Male     | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |  |
| 18   | Do you know any person using a female condom?                               | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |
| 19   | What is your relationship to this person?                                   | Friend                           | <input type="checkbox"/> | Relative | <input type="checkbox"/> |            |                          |  |
|  |   | Neighbour                        | <input type="checkbox"/> | Others   | <input type="checkbox"/> |            |                          |  |
| 20   | Have you ever discussed female condom with this person or any other person? | Yes                              | <input type="checkbox"/> | No       | <input type="checkbox"/> |            |                          |  |

|    |  |                      |                          |                             |                          |
|----|--|----------------------|--------------------------|-----------------------------|--------------------------|
| 21 | Do you intend to use female condom in future?  | Yes                  | <input type="checkbox"/> | No                          | <input type="checkbox"/> |
|    |  | Don't know           | <input type="checkbox"/> | Already using female condom |                          |
| 22 | If no, what is preventing you from using a female condom?  | .....                |                          |                             |                          |
| 23 | If yes, what are/would be the benefits of using a female condom every time you have sex?                         |                      |                          |                             |                          |
| 24 | With your present knowledge and skills, do you think that you could use a female condom every time you have sex? | Yes                  | <input type="checkbox"/> | No                          | <input type="checkbox"/> |
|    |  | Possibly             | <input type="checkbox"/> | I don't know                |                          |
| 25 | How difficult is it to remember how to use a female condom correctly?  | Very difficult       | <input type="checkbox"/> | Somewhat difficult          | <input type="checkbox"/> |
|    |  | Not difficult at all | <input type="checkbox"/> | Don't know / Won't say      | <input type="checkbox"/> |
| 26 | Where do you get the condoms?  | Clinic               | <input type="checkbox"/> | Hospital                    | <input type="checkbox"/> |
|    |  | Chemist              | <input type="checkbox"/> | Shop                        | <input type="checkbox"/> |
| 27 | Are male condoms always available?   | Yes                  | <input type="checkbox"/> | No                          | <input type="checkbox"/> |
| 28 | Are female condoms always available?   | Yes                  | <input type="checkbox"/> | No                          | <input type="checkbox"/> |
| 29 | Which type is easily accessible?   | Male condom          | <input type="checkbox"/> | Female condom               |                          |
|    |  | None of the above    | <input type="checkbox"/> |                             |                          |
| 30 | Do most of the people that you know approve use of a female condom every time you have sex?                      | Yes                  | <input type="checkbox"/> | No                          | <input type="checkbox"/> |
|    |  | Possibly             | <input type="checkbox"/> | I don't know                |                          |

**Section 3: Female Condom efficacy (please insert your response to the corresponding column by ticking)**

|       |       |         |          |
|-------|-------|---------|----------|
| Items | Agree | Neutral | Disagree |
|-------|-------|---------|----------|



|     |  |                          |                          |                          |
|-----|--|--------------------------|--------------------------|--------------------------|
| 31. | I feel confident in my ability to put on a female condom   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 32. | I feel confident and I could purchase a <b>female condom</b> without feeling embarrassed   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 33. | I feel confident I could remember to carry a <b>female condom</b> with me should I need one  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. | I feel confident and I could gracefully remove and dispose off a <b>female condom</b> after sexual intercourse   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. | I would not feel confident suggesting using a <b>female condom</b> with a new partner because I would be afraid he would think I have a sexually transmitted disease   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 36. | I would not feel confident suggesting using a <b>female condom</b> with a new partner because I would be afraid he would think I thought they had a sexually transmitted disease                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. | I would not feel confident suggesting using a <b>female condom</b> with a new partner because I would be too shy   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. | If I were to suggest using a <b>female condom</b> to a partner, I would feel afraid that he would reject me  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. | If I were unsure of my partner's feelings about using a <b>female condom</b> I would not suggest using one   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. | If my partner and I were to try to use a <b>female condom</b> and did not succeed, I would feel embarrassed to try to use one again (e.g. not being able to unroll condom, putting it on backwards or awkwardness) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. | I would refuse to have sex with someone who is not prepared to use a <b>female condom</b> .  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. | I feel that I know how to use a <b>female condom</b> properly.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. | I am confident that I can insist on a <b>female condom</b> use every time I have sex.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

General comments on female condom:

.....

.....

.....


## Appendix E: Letter from the data analysis

TO WHOM IT MAY CONCERN

I have over six years' experience in the teaching profession, both at high school and tertiary level. My research experience span over six years and I was a principal investigator on over four projects. In my current position, as a post-doctoral research fellow at the Department of Sociology of the University of Fort Hare, I teach both Undergraduate and Postgraduate Research courses, write articles for publication, review manuscripts prior to publication for both local and international journals and evaluate students' thesis. I have over 26 publications in DHET accredited high impact peer-reviewed journals including BMC Public Health, PLOS ONE, and BMJ Open. My training in Advanced Quantitative Techniques, Epidemiology, Demography, Statistical Modeling and my over six years' experience in academic writing, and data analysis and presentation allowed me to focus on teaching research methods and work as consultant for researchers in statistical power analysis, data cleaning, data management, data analysis, and data visualization.

I hereby certify that I conducted the data analysis for the principal investigator, Nosipho, Bunu.

The project is entitled **'FACTORS AFFECTING FEMALE CONDOM USE IN BUFFALO CITY METROPOLITAN MUNICIPALITY, EASTERN CAPE, SOUTH AFRICA**

  
University of Fort Hare  
*Together in Excellence*

I trust that the data analysis was thoroughly done and accurately reflects the findings of the study and that the findings are well aligned to the objectives of the study.

Both parties respected the principles of anonymity, confidentiality, accountability and reliability.

Should there be any questions that arise from this exercise, kindly contact me on [ajayianthony@gmail.com](mailto:ajayianthony@gmail.com).



Dr Anthony Ajayi (Research Fellow and private data analyst) No  
4 Lake Street  
Vincent East  
London 5247  
January 30, 2019

**ROMITO Consulting**

~Your professional Research Partner~

9 February 2019



---

## **Declaration of Professional Edit**

I, RM Kajiita, hereby confirm that the dissertation titled:

**'FACTORS AFFECTING FEMALE CONDOM USE IN  
BUFFALO CITY METROPOLITAN, EASTERN CAPE,  
SOUTH AFRICA'**

By

**NOSIPHO**

University of Fort Hare  
**BUNU;**  
*Together in Excellence*

has been edited and proof read by me. My role was restricted to language usage, spelling, completeness, consistency and logic flow of sentences; formatting of headings, tables and figures captions, and tables of contents. Thus, I did not re-write the content, and therefore, the quality of the content remains entirely to the author.

I am academically and technically qualified to do this work. I am an associate member of Professional Editors Guild of South Africa and I have worked as Language and Writing Consultant for three years at University environment. I edit Masters and Doctoral theses, as well as articles for journal publications.

**Disclaimer:** The edited work described here may not be identical to that submitted. The author, at his/her sole discretion, has the prerogative to accept, reject, or change amendments made by the editor before submission.

Sincerely,

**DR. RM KAJITA (PhD)**



---

ID: RMK/012019/02/NB

**Associate Member, Professional Editors Guild Language & Writing Consultant**  
**Mobile: +27725253881**

---

ROMITO Consulting @ 2018



University of Fort Hare  
*Together in Excellence*

## Appendix F: Turnnit in report

# DISSERTATION

*by* Nosipho Bunu

---

**Submission date:** 07-Feb-2019 02:48PM (UTC+0200)

**Submission ID:** 1074426770

**File name:** bunu\_final\_dissertation\_Edited\_2019.docx (1.44M)

**Word count:** 22273

**Character count:** 133695