UNIVERSITY OF THE WESTERN CAPE

Faculty of Community and Health Sciences

Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

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Contents

| | Keywo | Keywordsv | | | |
|---|---------|--|------|--|--|
| | Abbrev | viations | v | | |
| | Definit | tion of Terms | . vi | | |
| | Abstra | ct | vii | | |
| | Metho | dology | vii | | |
| | Results | S | vii | | |
| | Conclu | sion and Recommendations | viii | | |
| | Declar | ation | . ix | | |
| | Ackno | wledgements | x | | |
| | Dedica | ition | . xi | | |
| C | HAPT] | ER 1: INTRODUCTION | 1 | | |
| | 1.1 | Study Background | 1 | | |
| | | commended Contraceptive Methods for HIV-Positive Women | | | |
| | 1.3 Pro | blem Statement | 4 | | |
| | 1.4 | Rationale | | | |
| | 1.5 | Outline of the Research | | | |
| C | HAPT] | ER 2: LITERATURE REVIEW | | | |
| | 2.1 | Introduction | | | |
| | 2.2 | Defining terms | | | |
| | 2.3 | Dual Protection use among HIV-positive women in sub-Saharan Africa | 6 | | |
| | 2.4 | Factors Influencing use of Dual Protection by HIV-Positive women in sub-Saharan Africa | a. 7 | | |
| | 2.4. | Socio-Cultural Factors | 7 | | |
| | 2.4.2 | 2 Health System factors | 8 | | |
| | 2.4.3 | Personal factors | 10 | | |
| | 2.5 | Time of diagnosis | 10 | | |
| | 2.6 | Myths and Misconceptions | 10 | | |
| | 2.7 | Conclusion | 11 | | |
| 3 | CH | APTER 3 METHODOLOGY | 12 | | |
| | 3.1 | Introduction | 12 | | |
| | 3.2 | Research Aim | 12 | | |
| | 3.3 | Specific Objectives | 12 | | |
| | 3.4 | Study Design | 12 | | |
| | 3.5 | Research Setting | 13 | | |
| | 3.6 | Study Participants | 14 | | |

| 3.7 | 3.7 Access to the Sample | | 14 |
|----------|--------------------------|--|----|
| 3.8 | 3.8 Sampling | | |
| 3.9 Samp | | nple Size | 16 |
| 3.10 | Dat | a Collection | 17 |
| 3.1 | 0.1 | Data Collection Methods | 18 |
| 3.1 | 0.2 | Piloting | 20 |
| 3.11 | Dat | a Management | 20 |
| 3.12 | Ana | alysis | 21 |
| 3.1 | 2.1 | Phase 1: Familiarization | 21 |
| 3.1 | 2.2 | Phase 2: Generating initial codes | 21 |
| 3.1 | 2.3 | Phase 3: Defining and Naming Themes | 22 |
| 3.1 | 2.4 | Phase 4: Integration and interpretation | 22 |
| 3.13 | Rig | our | 22 |
| 3.1 | 3.1 | Data Source and Method Triangulation | 22 |
| 3.1 | 3.2 | Audit Trail | 23 |
| 3.1 | 3.3 | Transferability | |
| 3.1 | 3.4 | Credibility | |
| 3.1 | 3.5 | Reflexivity | 23 |
| 3.14 | Eth | ical Considerations Autonomy and Respect for the Dignity of Persons | 24 |
| 3.1 | 4.1 | Autonomy and Respect for the Dignity of Persons | 24 |
| 3.1 | 4.2 | Confidentiality | |
| 3.1 | 4.3 | Risk and Benefits | 25 |
| 3.1 | 4.4 | Justice | 26 |
| СНАРТ | ER 4 | 4: FINDINGS | 27 |
| 4.1 | Intr | oduction | 27 |
| 4.2 Sc | ocio I | Demographic Characteristics of Participants | 27 |
| 4.2 | .1 Fo | cus group discussions | 27 |
| 4.2 | .2 Ke | y Informants | 28 |
| 4.3 Fi | nding | gs from the Focus Group Discussions with HIV-Positive Women | 28 |
| 4.3 | .1 HI | V-Positive Women's Knowledge about Contraceptives | 28 |
| 4.3 | .2 Cu | rrent Use of Dual Protection by HIV-Positive Women | 28 |
| 4.3 | .3 Ba | rriers of Dual Protection Use among HIV-Positive Women in Harare | 31 |
| 4.3 | .3.1 F | Personal Factors | 31 |
| Exp | perier | nce of contraceptive method side-effects | 31 |
| Par | tner's | s refusal to use a condom | 31 |
| 4.3 | .3.2 S | Social Cultural Factors | 33 |

| HIV-positive women's negative perception of condom use | 33 |
|---|---------|
| 4.3.3.3 Health System Factors | 34 |
| Negative attitudes of the HCWs towards HIV-positive women's use of contracept | tives34 |
| 4.3.4 Facilitators of Dual Protection Use among HIV-Positive Women in Harare | 37 |
| 4.3.4.1 Health Factors | 37 |
| 4.3.4.2 HIV Sero-Discordant Couples | 37 |
| 4.3.4.3 Couples HIV Testing and Counseling | 38 |
| 4.3.5 HIV-Positive Women's Experiences of Contraceptive Use | 38 |
| 4.3.6 Summary of the Focus Group Discussions | 39 |
| 4.4 Findings from the Individual Interviews with HIV-Positive Women | 40 |
| 4.4.1 Individual Interview with HIV-positive Woman 1 | 40 |
| 4.4. 2 Individual Interview with HIV-positive Woman 2 | 41 |
| 4.4.3 Summary | 42 |
| 4.5 Findings from Interviews with Health Care Workers | 42 |
| 4.5.1 Use of Contraceptives by HIV-Positive Women at the Clinic | 43 |
| 4.5.2 Health Care Worker's knowledge of Dual Protection | 43 |
| 4.5.3 Barriers to Dual protection use among HIV-Positive women | |
| 4.5.3.1 Cost of Services | 44 |
| 4.5.3.2 Long Waiting Times | 44 |
| 4.5.3.3 Non Availability of a Wide Range of Contraceptives | 44 |
| 4.5.3.4 Health Care Worker Judgmental Attitude towards Contraceptive Method (Positive Women | |
| 4.5.3.5 Socio-Cultural Factors | 45 |
| 4.5.4 Facilitators of Dual Protection Use among HIV-Positive Women | 45 |
| 4.5.4.1 HIV Testing and Counseling | 45 |
| 4.5.4.2 Couple HIV Testing and Counseling | 46 |
| 4.5.5 Disclosure Status | 46 |
| 4.5.6 Time/Reason for Testing | 46 |
| 4.5.7 Health Care Worker Recommendations on Dual Protection | 47 |
| 4.5.7 Summary | 47 |
| 4.6 Findings from the In Depth Interview with the Community Member | |
| 4.6.1 Community Perception on the Use of Contraceptive by HIV-Positive Wome | en49 |
| 4.6.2 Economic Dependency | 49 |
| 4.6.3 Recommendation | 50 |
| CHAPTER 5: DISCUSSION | 51 |
| 5.1 Introduction | E1 |

| 5.2 Knowledge on Dual Protection from the Participants | |
|--|----|
| 5.3 Current use of Contraceptives among the Women. | 51 |
| 5.4: Factors Influencing Contraceptives Use among HIV-Positive Women | 52 |
| 5.4.1 Barriers of Dual Protection Use among HIV-Positive Women. | 52 |
| 5.4.1 Personal Factors | 53 |
| 5.4.2 Socio-Cultural Factors | 53 |
| 5.4.3 Health Systems Factors | 55 |
| 5.5 Facilitators of Dual Protection Use among HIV-Positive Women. | 57 |
| 5.6 HIV-Positive Women's Experiences of Contraceptives Use | 58 |
| 5.7 Study Limitations | 58 |
| CHAPTER 6: CONCLUSION AND RECOMMENDATIONS | 59 |
| 6.1 Conclusion | 59 |
| 6.2 Recommendations | 60 |
| 6.2.1 Health service provider related services. | 60 |
| 6.2.2 Access to Contraception Services | 61 |
| 6.2.3 Side effects of non-barrier contraceptives | 61 |
| 6.2.4 Promoting Male Involvement in Sexual Reproductive Health Services | 61 |
| 6.2.5 Community involvement | 61 |
| 6.2.6 Future Research | 61 |
| 7.0 REFERENCE LIST | 62 |
| 8.0 APPENDICES | 68 |
| Appendix 1. Focus Group Discussion Participant Information Sheet (English) | 68 |
| Appendix 2. Focus Group Discussion Participant Information Sheet (Shona) | 71 |
| Appendix 3. Focus Group Discussion Confidentiality binding form (English) | 74 |
| Appendix 4. Focus Group Discussion Binding Form (Shona) | 75 |
| Appendix 5. HCW Participant Information Sheet (English) | 76 |
| Appendix 6. Informed Consent form (English) | 79 |
| Appendix 7. Informed Consent form (Shona) | 80 |
| Appendix 8. Focus Group Discussion Guide | 81 |
| Appendix 9. Guide to conduct In-depth Interview with Health Care Workers | 84 |
| Appendix 10. UWC Ethics Approval | 86 |
| Appendix 11. City of Harare Permission Letter | 87 |
| Appendix 12. Medical Research Council of Zimbabwe (MRCZ) Approval Letter | 88 |

Keywords

- Dual Protection
- Contraceptives
- Human Immunodeficiency Virus (HIV)
- Prevention of Mother-to-Child Transmission (PMTCT) of HIV
- Reproductive Health
- Unintended Pregnancy
- Unmet Need for Contraception
- HIV-Positive Women
- Zimbabwe

Abbreviations

DP Dual Protection

HIV Human Immunodeficiency Virus

PMTCT Prevention of Mother—to-Child Transmission

SSA sub-Saharan Africa

WHO World Health Organisation

FGDs Focus group Discussions

KII Key Informant Interview

HCW Health Care Worker

PIS Participant Information Sheet

Definition of Terms

Dual Protection:

Consistent condom use on its own or together with a highly effective method of family planning either hormonal, intrauterine device (IUD) and or sterilization method to reduce both incidence of sexual transmitted infections (STI)s and unintended pregnancies (WHO, 2012).

Unmet need for contraception:

The proportion of women of reproductive age who are sexually active, not using any contraceptives, but reporting that they do not want any more children or want to delay the next child (UNAIDS, 2012).



Abstract

Dual protection is protection against unwanted pregnancy, HIV and other sexually transmitted infections and a means of achieving safer sex and birth control (WHO, 2012). It is one of the essential tools promoted by the WHO for preventing unintended pregnancies and sexual transmitted infections among HIV-positive women to reduce dual risk of unintended pregnancies, re-infections and transmission of HIV in the cases of sero-discordant couples. However, the use of dual method use among HIV-positive women in Zimbabwe is poorly described. Hence to fill in the existing research gap, this study aims to explore the factors influencing dual protection use by HIV- positive women participating in a prevention of mother-to-child transmission (PMTCT) program in an urban setting in Zimbabwe.

Methodology

A qualitative exploratory study design with a combination of qualitative research methods including interviews and focus group discussions was conducted. A total of five focus group discussions (FGDs) each consisting of 8-12 participants was conducted with a total of 51 women. Five in-depth interviews were conducted with key informants. All interviews and FGDs were audio recorded using a digital voice recorder. The interviews were conducted in Shona and translated into English. Data analysis was done manually using thematic coding. Codes emerged from the data using an inductive approach. Ethical principles of research and rigour were observed throughout the study.

Results

Dual protection use was low among the HIV-positive women. Absolutely non-use of contraceptive was reported by some women. The main methods of contraceptives were the pill, depo provera and condoms. Inconsistent condom use was mentioned among the few women who reported using condoms. Many barriers to contraceptives use among HIV-positive women in Zimbabwe were identified. However there were a few facilitating factors too. Health system factors associated with health care workers (HCWs) related factors and service delivery processes were reported as major barriers to contraceptive use. Women expressed negative attitude towards condom use associating them with unfaithfulness. Facilitators of contraceptive use identified were couples' HIV testing and counselling, women's increase in CD4 count result, fear of vertical transmission and HIV sero-discordance between couples.

Conclusion and Recommendations

In conclusion, dual protection use among HIV-positive women in this community was low. Health system factors were the main barriers to contraceptives use whilst health related factors were the main facilitators. HIV-positive women still face challenges in accessing and utilisation of contraceptives. Hence the barriers to contraceptive use needs to be addressed at the same time promoting the facilitators.



Declaration

I, Precious Chandiwana declare the research study "Exploration of Factors Influencing the Contraceptives Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe" is my work and has not been submitted before for any degree or examination at any other university, and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Precious Chandiwana

Signature:

November 2016

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Last but not least my sincere and greatest thanks go to the Almighty God for the guidance, strength and wisdom throughout my research endeavours.

Dedication

This thesis is dedicated to all HIV-positive mothers in the world.

I also wish to dedicate this work to my sons Tanaka and Tapiwa. Let this accomplishment be your source of inspiration and motivation to achieve all your future goals and endeavours.



CHAPTER 1: INTRODUCTION

This chapter provides background information which situates this study's focus area of dual protection use among HIV-positive women in Zimbabwe. In addition, it presents the study background, rationale, problem statement and the outline of the thesis.

1.1 Study Background

Although World Health Organisation (WHO) guidelines recommend dual protection (DP) as a strategy for family planning to reduce both incidence of STIs and unintended pregnancies among HIV-positive women, unmet needs for contraception in sub-Saharan Africa (SSA) remains high against a background of high HIV prevalence (WHO, 2012). Unmet need for contraception is defined as the proportion of women of reproductive age who are sexually active, not using any contraceptives yet reporting that they do not want any more children or want to delay having the next child (UNAIDS, 2012). Unmet need for contraception potentially leads to unintended pregnancy. However, if unmet need for contraception occurs in an HIV-positive woman, she is more likely to vertically transmit the virus to her infant if she becomes pregnant or horizontally to a partner. Vertical transmission of HIV is more likely to happen when viral load is high, above 1000 copies per millilitre (copies/ml) of plasma, thus risking the health of the mother and survival and growth of the unborn child (Wilcher et al., 2008). It also increases risk of preterm birth and or low birth weight babies.

Unfortunately, the number of HIV-positive women in SSA who report unmet need for contraception remains high, consequently leading to high rates of unintended pregnancies among these women (MacCarthy et al., 2012; McCoy et al., 2014; Todd et al., 2011; UNFPA, 2011; WHO, 2012b; Wilcher et al., 2008). Prevention of unintended pregnancies is a priority for maternal health and elimination of vertical transmission (WHO, 2012). In Uganda, unintended pregnancies accounted for 21.3 percent of new child HIV infections in 2009, a high figure that could be prevented by the use of contraceptives (Hladik et al., 2009).

Zimbabwe is one of the countries in SSA with a generalised HIV epidemic and reporting high unmet need for contraception among HIV-positive women (McCoy et al., 2014). Unmet need for contraception is pegged at 10.4 percent among married women in the general population (CSO, 2012). This unmet need would be even higher if the data included information on sexually active unmarried women whose contraceptive needs and reproductive intentions may be different from those of unmarried women. This was evident in a population-based

sample from five out of ten provinces in Zimbabwe which reported 35 percent unintended pregnancy among women with a recent birth (McCoy et al., 2014). Only a quarter of HIV-positive women self-reported contraceptive uptake and the unmet need for contraception was 19 percent (McCoy et al., 2014). These rates suggest higher unmet need for contraception in this population. The prevalence of unintended births among HIV-positive women was ten percent higher when compared with their HIV-negative counterparts further confirming higher unmet need for contraception (McCoy et al., 2014).

The fertility rate is relatively high, estimated at 4.3 births per woman, in the general population in Zimbabwe (CSO, 2012) and some of this could be attributed to unmet need for contraception. Furthermore, condom use in the country is low, estimated at five percent, thus fuelling transmission of HIV (ZIMSTAT, 2014). Indeed, remarkable progress in the fight against HIV has been noted in Zimbabwe, but the epidemic continues to exhort a high toll on children and women contributing significantly to maternal morbidities and children's poor health outcomes (MoHCW, 2012). Vertical transmission of HIV was pegged at 6.6 percent in 2014, a figure much higher than the global elimination target of less than five percent (MoHCW, 2012). In addition horizontal transmission of HIV is the major route of HIV transmission in the country (CSO, 2012).

HIV prevention interventions require a combination of methods such as safer sexual practice and use of antiretroviral drugs (UNAIDS, 2013). The UNFPA has estimated that if unmet need for contraception is provided as part of HIV-related services for all pregnant women in SSA, maternal deaths would drop by 69 percent per year whilst new-born deaths would drop by 82 percent and HIV infections among new-borns would decline by 93 percent (UNFPA, 2014). This was evidenced in a study from Uganda which shows that PMTCT services could avert 8.1 percent of new HIV infections in the country whilst more 19.7 percent could be avoided with proper contraceptive use (Hladik et al., 2009).

Therefore, use of contraceptives is one of the essential strategies called for by the WHO to fight the epidemic (WHO, 2012b). Contraception allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births is achieved through use of contraceptive methods and the treatment of involuntary infertility (UNFPA, 2011). The WHO guidelines recommend dual protection strategies to reduce both incidence of STIs and unintended pregnancies (WHO, 2015). This dual protection is defined as consistent condom use on its own or together with a highly effective method of contraception either hormonal, intrauterine device (IUD) and or sterilization method (WHO,

2015). Using two methods simultaneously provide dual protection against both unintended pregnancies and STIs, is commonly referred to as dual method use (Cates and Steiner, 2006). The other approaches for dual protection is the use of one method, condoms because of its ability to protect against both pregnancy and STIs but only when used correctly and consistently. However, when used in isolation, condoms are associated with higher unintended pregnancy rates than when used together with a more effective contraceptive under typical use (UNAIDS, 2013). Male condom use alone is associated with a one-year cumulative incidence of unintended pregnancy of about 18 percent for typical users (Hatcher et al., 2011).

In Zimbabwe, there is paucity of information on dual protection use among HIV-positive women and the available information is largely quantitative and does not explore women's motivations. Hence, shedding more light on HIV-positive women's understandings of dual protection and the factors that influence their use or non-use is of particular importance. This is because it enables an understanding of how service providers could address barriers to contraceptives and dual protection use in order to reduce unmet need for contraception in this population. Hence the need for a qualitative study to describe use of dual protection and to explore the barriers and facilitators of dual protection use among HIV-positive women.

1.2 Recommended Contraceptive Methods for HIV-Positive Women

The WHO guidelines for improving quality of care in contraception care clearly states that there are no restrictions for use of contraceptive methods among HIV-positive women. However, hormonal contraceptives does not protect against STIs hence simultaneous use of condoms correct and consistent is recommended to offer protection for both unintended pregnancies and STIs thus dual protection (WHO, 2015). For HIV clinical stage one or two, the following hormonal contraceptive methods: combined oral contraceptives, progestogenonly pills, progestogen-only injectable, levonorgestrel and etonogestrel implants are recommended for combined use with condoms for additional protection (WHO, 2015). Women living with advanced HIV (WHO clinical stage three or four) should not initiate use of IUD until their illness has improved to asymptomatic or mild HIV clinical disease. Nevertheless, if a woman already has an IUD inserted and then develops severe or advanced HIV clinical disease, there is no need to remove the IUD but the woman should be closely monitored for pelvic infection (WHO, 2015).

1.3 Problem Statement

The high unmet need for contraception among HIV-positive women in Zimbabwe is a cause of concern against a backdrop of high HIV prevalence, because of the risk of unintended pregnancies and the subsequent risk of HIV transmission vertically or horizontally to a partner. HIV-positive women in Zimbabwe still report high unmet need for contraception as compared to their negative counterparts (Kurewa et al., 2011; McCoy et al., 2014) and the reasons for this are poorly described. Without an understanding of the factors that influence contraceptive use in Zimbabwe from HIV-positive women's perspective, it will be difficult to reduce unmet need for contraception among this group. In addition, there is a paucity of data on dual protection use among this population. Hence the need to gain an understanding on dual protection use so as to craft policies that can respond to HIV-positive women's needs.

1.4 Rationale

This qualitative research is important and necessary for many reasons; first a gap exists in exploring the understanding and motivations for use of dual protection among HIV-positive women in Zimbabwe. The available literature mainly focuses on the quantitative aspect of contraceptive use by HIV-positive women. This study is focusing on qualitative findings in order to gain an in-depth understanding on the factors that influence dual protection use by these women. The results of the study will provide a deeper understanding of why some HIVpositive women do not use contraceptive even if they do not intend to get pregnant and why they are not also necessarily protecting themselves against HIV through the use of a condom. It will provide an overview of the factors that influence the use of contraceptives, condoms and also dual protection among HIV-positive women in an urban setting in Zimbabwe. Understanding these issues from the HIV-positive women's, community and health care provider's perspective will help to improve delivery of health services that meet the sexual and reproductive health needs of HIV-positive women in Harare and add to the body of evidence on the reproductive health needs of HIV-positive women. In addition, the study will provide information for future researchers who wish to study dual protection use by HIVpositive women in Zimbabwe.

1.5 Outline of the Research

This thesis is comprised of six chapters and appendices. This chapter has provided a brief background of the study by highlighting the use of dual protection by HIV-positive women in SSA describing the contraceptive options recommended for HIV-positive women, a brief

overview of contraceptive use in Zimbabwe, problem statement and study rationale. Chapter two will present a comprehensive review of literature related to factors that influence dual protection use among HIV-positive women in various settings in SSA. The third chapter describes research methods including participant sampling and selection, methods of data collection and data analysis, the validation strategies used to achieve rigour and reliability of the study and ethical consideration. Chapter four present and highlight the findings of the focus group discussions (FGDs) with the HIV-positive women and in-depth interviews with key informants coupled with reflections of both the participants and the researcher. Themes that emerged from the analysis will be discussed including direct quotes were necessary. Chapter five will discuss findings. The discussion will draw insights from the issues raised by the HIV-positive women, community representative and HCWs about contraceptives, condoms and dual protection use by HIV-positive women. The last chapter provides some implications of the study with regards to service provision and future research. The appendices include the ethics and regulatory approvals, the informed consent forms both

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English and Shona version and the interview guides.

5

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews and critically interprets literature relating to dual protection use by HIV-positive women in low resource settings. The literature reviewed other studies that investigated factors known to influence contraceptive, condom and dual protection use among HIV-positive women in low resource settings.

The following themes emerged from the literature: dual protection use among HIV-positive women in sub-Saharan Africa (SSA), major factors influencing dual protection use were socio-cultural factors, health system factors and personal factors.

2.2 Defining terms

Dual protection in this study refers to consistent condom use on its own or together with a highly effective method of family planning either hormonal intrauterine device (IUD) and or sterilization method to reduce both incidence of sexual transmitted infections (STIs) and unintended pregnancies (WHO, 2012). In this study I will refer to dual protection and mean the latter definition.

2.3 Dual Protection use among HIV-positive women in sub-Saharan Africa UNIVERSITY of the

Although the World Health Organisation (WHO) guidelines recommend dual protection use for all HIV-positive women (WHO, 2012b), few HIV-positive women in sub-Saharan Africa (SSA) protect themselves against the dual risk of unintended pregnancy and STIs by using an effective modern contraceptive method and a condom, thus exposing themselves to adverse health outcomes (Antelman et al., 2015). Less than 20 percent of people living with HIV in SSA reported using dual method use (Chibwesha et al., 2011; Nattabi et al., 2011; Wanyenze et al., 2011). However, country level differences in dual method use are observed across the region with countries like Namibia, Kenya and Tanzania reporting 34, 28 and 19 percent respectively (Antelman et al., 2015), this could be due to health system or socio-cultural differences between countries.

In Kenya, a qualitative study revealed that dual method use was low among HIV serodiscordant couples (Roxby et al., 2016). Similar findings were observed in India where over three-quarters of HIV-positive married women were not using both condoms together with an effective method of contraceptive to reduce risk of both infections and unintended pregnancies (Chakrapani et al., 2011). Nevertheless the majority (70 percent) of women reported exclusive condom use for dual protection, potentially risking unintended pregnancies, if condoms are not used correctly and consistently (Chakrapani et al., 2011). In Cambodia, majority of HIV-positive women in a cross sectional survey conducted at five government run health centres reported using condoms only for dual protection, risking unintended pregnancies and unmet need for contraception was high among the group (Nakaie et al., 2014).

Consistent with other countries in Africa, less than one fifth of HIV-infected women in 16 HIV clinics in Zambia reported dual method use (Chibwesha et al., 2011). In Swaziland, one of the countries in SSA with very high HIV prevalence, 77 percent of female HIV patients on treatment reported use of condoms but mainly due to fear of viral re-infection as opposed to contraceptive purposes and unmet need for contraception was 32 percent (Church et al., 2014).

To sum up, the results presented here confirm that dual method use among HIV-positive women in SSA settings is low thus exposing HIV-positive women to the dual risk of unintended pregnancy and re-infections. Exclusive condom use seems to be the most widely dual contraceptive method used by HIV-positive women in Africa, risking unintended pregnancies (Antelman et al., 2015; Chibwesha et al., 2011; Roxby et al., 2016). Hence a further qualitative exploration is warranted to understand what influence use of dual protection, including dual method use among HIV-positive women in Zimbabwe.

2.4 Factors Influencing use of Dual Protection by HIV-Positive women in sub-Saharan Africa

Research to date suggests that various factors influence dual protection use among HIV-positive women in SSA. Dual protection use by HIV-positive women is influenced by the various circumstances women find themselves in (MacCarthy et al., 2012). For the purpose of this review, the factors are classified into four main groups: socio-cultural factors, health related factors, health system factors and personal factors as described below.

2.4.1 Socio-Cultural Factors

Culture and society influence dual protection use among HIV-positive women (Antelman et al., 2015). There are a lot of beliefs and misconceptions around some contraceptive methods reported by HIV-positive people across the region. Condoms, the only method of contraceptive that offers dual protection on their own when used correctly and consistently and defined as dual method use when used together with a modern contraceptive are

unacceptable in many settings due to the negative perceptions that people attach to them (Chibwesha et al., 2011; Kurewa et al., 2011; Nattabi et al., 2011; Roxby et al., 2016). Condoms are associated with mistrust or casual sex in Zimbabwe hence its use in formal relationships is often considered unacceptable (Kurewa et al., 2011). In Kenya, both men and women referred to dual protection use a sign of possible unfaithfulness with some women perceiving dual protection use as unnecessary (Roxby et al., 2016). Cates & Steiner (2002) reported that condoms have been mainly promoted for disease prevention leading to stigmatise the method, thus causing people at risk of infections from using them.

Ability to ask a partner to use condom was associated with dual protection use among people living with HIV in Kenya, Namibia and Tanzania (Antelman et al., 2015). This could be due to different power dynamics between men and women in African settings where men are often the decision makers about reproductive matters and contraceptive use whilst women may have limited power to make these decisions (Maynard-Tucker, 2009). In a qualitative study, evidence suggests that HIV-positive women reported living with traditional gender roles and felt that it was men's responsibility to determine sexual and reproductive decisions (Mulrenan et al., 2015). Similar findings were reported in Kenya where some women participating in a PMTCT program cited partner approval as a key determinant of their contraceptive use (Akelo et al., 2013).

Partner preference was reported in Swaziland, Kenya and in Uganda as possible determinates of dual protection use (Mulrenan et al., 2015; Roxby et al., 2016 Nattabi et al., 2011). This could be due to religious and or cultural reasons. In Uganda partner refusal to contraception use was associated with uptake of contraceptives (Nattabi et al., 2011).

2.4.2 Health System factors

The health system of a country has been revealed to have an influence on dual protection use among HIV-positive women. Experiences of HIV-positive women's interaction with the health system determine their sexual and reproductive health decisions, thus influencing uptake of dual protection. Factors such as discussing benefits of dual method use between health care workers (HCW)s and HIV-positive women influence dual protection use among HIV-positive women (Chibwesha et al., 2011). Negative attitudes of HCWs and biases towards contraceptive use by HIV-positive women have been reported in some studies among the determinants of dual method use (MacCarthy et al., 2012).

In Uganda lack of health care workers training in contraception needs of people living with HIV negatively influences contraceptive use thus impacting dual protection (Nattabi et al., 2011). It was found that discussing the additional benefits of using hormonal contraceptives with a HCW was associated with an increased likelihood of dual method use (Antelman et al., 2015). HIV-positive women value recommendation by HCWs thus influencing choices of dual protection use among HIV-positive women (Crede et al., 2012). This was evident in South Africa where HCW's recommendations were found to be the most common factor that influenced contraceptive method choice (Crede et al., 2012). Unfortunately most HCWs in HIV settings focus their counselling around consistent condom use with only a few discussing the additional benefits of hormonal contraceptives (Antelman et al., 2015), thus lowering the rate of dual method use and exposing women to the potential risk of unintended pregnancies. In India, lack of discussions around other contraceptives besides condoms by HCWs was also reported as a barrier to dual protection use (Chakrapani et al., 2011). This was true in Mozambique, where HCWs believed that condoms are the only valid method of contraception for HIV-positive women (Hilliard et al., 2014) thus aiding in dual protection messaging but limiting the added benefits of dual method use for dual protection.

The negative attitude of HCWs towards contraceptive use by HIV positive women influence use of dual protection. Although HCWs play an essential role in helping women to identify contraceptive options that fit their lives, their negative attitude towards contraceptive use by HIV-positive women was perceived as a barrier to dual protection (Chibwesha et al., 2011). Stigma is rife in clinical settings with HIV-positive women often not able to express their fertility desires and intentions to become pregnant in most developing countries (Hilliard et al., 2014; Laher et al., 2009; McCoy et al., 2013; Montgomery et al., 2011). Many providers continue to believe that HIV-positive women should not have children and this raises concerns and can be a barrier in the provision of contraceptive counselling and use (Gourlay et al., 2013; Hilliard et al., 2014). Furthermore, most HCWs are reported to give inaccurate information, which is tainted with their own personal bias which includes among them the belief that HIV-positive women should not use any other contraceptive besides condom, limiting dual method use (Hilliard et al., 2014). Lastly, most HCWs in developing countries lack skills and knowledge of contraceptive options for HIV-positive couples (Nattabi et al., 2011) influencing dual protection and dual method use uptake among the group.

In conclusion, (Chibwesha et al., 2011) argued that HCWs that offer HIV care should be trained about the sexual and reproductive health needs and rights of people living with HIV

and need to be competent in offering contraceptive counselling in a non-judgmental and unbiased manner.

2.4.3 Personal factors

Contraceptive method side effects such as amenorrhea, disordered menstrual bleeding, weight gain caused by the injectable contraceptive were reported by some HIV-positive women in South Africa and Uganda as factors that lead to non-use of hormonal contraceptives consequently leading to reduced dual method use (Laher et al., 2009; Nattabi et al., 2011). HIV testing and counselling was perceived as a facilitating factor of dual protection use in India, this was alluded to the increased awareness and knowledge on the importance of dual protection use (Chibwesha et al., 2011). In Kenya, both males and females agree that men's involvement is essential in promoting dual protection use (Roxby et al., 2016). This could be due to poor couple communication that is often observed in many African settings due to power dynamics between men and women (Wanyenze et al., 2011) including ability to ask partner to use condoms to ensure dual protection described (Antelman et al., 2015) above. Hence male involvement in contraceptive use counselling and couples is perceived as a facilitator to dual protection use.

2.5 Time of diagnosis

Antelman et al. (2015) revealed that the period of one knowing her HIV status influenced dual protection use. The study reported that women who reported an HIV diagnosis in the past year were more likely to report dual protection use as compared to women who had known their diagnosis for three years or more suggesting that the time since diagnosis may influence dual protection use.

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2.6 Myths and Misconceptions

There are a lot of information gaps and myths about interaction between hormonal contraceptives with ART (Nattabi et al., 2011; McCoy et al., 2014; WHO 2012b). Some HIV-positive women believe that contraceptives accelerate HIV disease progression, leading to reduced use due to fear of health deterioration, thus a potential barrier to contraceptive use (Morrison et al., 2011).

In contrast, in Swaziland, some HIV-positive women on ART reported increased use of contraceptives citing health related reasons such as a decrease in CD4 count, fear of passing infection on to unborn child and orphaning children due to HIV-related premature death

(Mulrenan et al., 2015). This may suggest that HIV-positive women seem to be concerned more about the health and survival of their children as opposed to their own health.

2.7 Conclusion

In summary, dual protection use by HIV-positive women in SSA is low suggesting that prevention of unintended pregnancy among HIV-positive women has not received the much needed attention as promoted by the WHO. Dual method use among HIV-positive women is low with dual protection ensured through exclusive condom more common, this potentially exposes women to a potential risk of unintended pregnancy if not used consistently. Three major factors that influence dual protection use were revealed. Firstly, health related concerns with regards to contraceptive method use were noted. Method side effects were perceived as barriers to dual protection and fear of vertical transmission was a facilitator to dual protection use reported by the women. Secondly, health system factors which include communication gaps regarding hormonal contraceptives between HCWs and HIV-positive women and the negative attitude of HCWs towards contraceptive use by HIV-positive women including lack of HCWs training in contraception counselling. Thirdly, there are negative socio-cultural beliefs that influence dual protection use, such as lack of acceptability of some contraceptives and power dynamics that call for men to decide on choice of contraceptives on behalf of women, thus influencing dual protection use. Lastly, other personal factors such as couples' HIV testing and counselling, fear of possible drug interaction between antiretroviral drugs and hormonal contraceptives and partner preference were also noted to influence dual protection use among HIV-positive women.

However, there is limited existing research from Zimbabwe about the factors that influence dual protection use among HIV-positive women. Therefore, knowing more about which factors that women perceive to influence dual protection use in this environment would build evidence that could further advance the sexual and reproductive health and rights of HIV-positive women.

3 CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter provides a description of the research methodology used in this study. Firstly, it starts by justifying the chosen approach and design followed by explaining the research process, participant selection process, data collection and the analytic and interpretive procedures. Finally, it gives a description of the ethical considerations and their application in this study.

3.2 Research Aim

The study aimed to explore the factors affecting dual protection use by HIV-positive women participating in a prevention of mother-to-child transmission (PMTCT) program in an urban setting in Zimbabwe.

3.3 Specific Objectives

- To explore and describe the contraceptive use experiences of HIV-positive women participating in a PMTCT program in an urban setting in Zimbabwe.
- To explore the facilitators and barriers of contraceptive use by HIV-positive women participating in a PMTCT program in an urban setting in Zimbabwe from the perspectives of HIV-positive women.
- To explore the facilitators and barriers of contraceptive use by HIV-positive women participating in a PMTCT program in an urban setting in Zimbabwe from the perspectives of health care providers.
- To explore the facilitators and barriers of contraceptive use by HIV-positive women participating in a PMTCT program in an urban setting in Zimbabwe from the perspectives of the community.

3.4 Study Design

This is a qualitative explorative study. The approach allows the researcher to explore the factors that influence dual protection use by HIV-positive women from the women, health care workers (HCW)'s and community's perspective. The qualitative approach enabled the researcher to have an in-depth understanding of the use of dual protection by HIV-positive women in an urban setting in Zimbabwe and the factors that influence its use. The approach is flexible meaning that the design can be adjusted or changed during the research process in

line with the purpose of the study and research question it seeks to answer (Robson, 2011). Qualitative research develops concepts which help to understand social phenomena in a natural setting, giving due emphasis to the meaning, experiences and views of all participants (Pope and Mays, 1995). It acknowledges that people have different views about a problem and gives emphasis to the world of experience as it is lived, felt and undergone by people acting on the social situation (Baum, 1995). Qualitative research confirms that social interactions are constructed through interaction between people and argues that meaning does not exist on its own (Baum 1995). Hence the approach allowed the researcher to explore reasons, opinions and attitudes behind participant's answers through asking probing questions such as why, how and what to gain deeper understanding of the factors that influence dual protection use by HIV-positive women in Harare. In addition, it has the potential to explore the aspects of individual, social, cultural and health system factors that influence dual protection use by HIV-positive women.

3.5 Research Setting

The study was conducted at Hatcliffe polyclinic in Harare district, a high density urban setting situated approximately 30 kilometres north of central Harare, the capital city of Zimbabwe. The suburb is adjacent to one of the affluent suburbs, Borrowdale. It serves as the first medical point of entry for both adults and children for treatment of acute and chronic illnesses. It offers mainly curative and preventive services such as immunization and growth monitoring for under-fives, family planning services, antenatal care and delivery. The clinic is manned by nurses and nurse midwives and has a doctor that visits the clinic once a week. It opens every week day from Monday to Friday from 07:30 to 16:00hrs, half day till 12:00hrs on Saturday and closed on Sundays but the maternity side is opened 24 hours a day.

The suburb has a total population of 321 782 with most of the population aged between 15 and 64 years. Women of childbearing age (15 to 49 years) constitute over a fifth (22 percent) of the total population. HIV prevalence among pregnant women is 18 percent (City of Harare, 2014). The population is rapidly growing as demonstrated by the mushrooming of illegal settlements in and around the suburb, consequently congesting the social and health services in the area. Sanitation is poor, with a serious water supply crisis. Most of the households do not have running water and use communal boreholes. Poverty is high leading to poor living conditions and a high burden of diseases. Infectious diseases such as HIV and Tuberculosis are the major cause of morbidities and mortalities in the area (City of Harare, 2014).

The clinic, with the help of community health workers who are also HIV-positive, conducts monthly PMTCT support group meetings for HIV-positive women at the community hall which is approximately less than a kilometre away from clinic. The support group meetings offer HIV-positive women a platform to share knowledge and experiences with regards to their HIV infection. Various health topics such as family planning, nutrition and ART are discussed.

3.6 Study Participants

Robson (2011) defines the population as 'all the cases' from which data can be collected. The study population in this study was all HIV-positive women participating in PMTCT support groups at Hatcliffe clinic, Harare in Zimbabwe. The study targeted HIV-positive women of child bearing age because it was assumed that the women were sexually active and are participating in the PMTCT programme. In addition, the women were easy to reach because they already belong to a group and have a known HIV status.

To gain a range of perspectives on the use of dual protection, HCWs and community representatives were selected as key informants (KIs) in the study. The clinic HCWs were selected because of their interaction with HIV-positive women at the clinic and to gain their expert view in issues of dual protection among HIV-positive women. Significant community representatives were purposively sampled as key informants and to gain lay opinion on dual protection by HIV-positive in Harare. Residents with first hand information about the community were selected to get a thorough understanding of the community's view and beliefs on contraceptives use by HIV-positive women.

3.7 Access to the Sample

The HCWs who work at the clinic in the PMTCT program assisted the researcher to gain access to the study participants. The sister in charge at the facility introduced the researcher and explained her intention to the community nurse at the facility who then referred her to the support group co-ordinator. The support group co-ordinator then invited the researcher to the support group meetings. She introduced the researcher to the women and gave the researcher the opportunity to introduce herself and to tell the women her intentions. The study aims, procedures and processes were explained in detail to the women and in turn the women were given opportunity to ask questions. Those who volunteered to participate in the study were given an information sheet to read and were booked for the FGD. The researcher then made a follow-up call to those who verbally agreed to participate to invite them to the FGD. In

addition some potential participants were identified during routine clinic visits at the family health clinic where mothers bring their under-five year old children for immunization and growth monitoring and also for ART. With assistance from the nurse/midwife, the researcher approached potential participants face-to-face on an individual basis and invited them to participate in the study. Those women who verbally agreed to participate in the study were taken through the informed consent process. The researcher then made a follow-up phone call to those who verbally agreed to participate to make appointments for the FGD.

For the HCWs, the sister in charge referred the researcher to the family health service clinic where HIV-positive mothers receive their HIV care. Potential participants were contacted in person individually to make an appointment to interview them at a place and time convenient to them, to avoid disruption of clinic activities.

The community nurse at the clinic helped the researcher to identify the possible community representatives that she thought would be able to provide rich and relevant data pertinent to the research question. The potential community representatives were approached in person one by one, in the same way as the HCWs.

3.8 Sampling

A sample can be described as a portion of the study population (Moule and Hek, 2011). Sampling is the selecting of study participants from the population for the purpose of obtaining rich relevant information (Robson, 2011). Convenience sampling was done to select HIV-positive women and HCWs working at the clinic and community member who could provide in-depth rich information on use of contraceptives by HIV-positive women. In this study, HCWs working at the clinic were included in the sample as KI to gain an inside knowledge and understanding on the uptake of family planning among HIV-positive women. They gave insight into some of the health system factors that might influence contraceptive use. Community representative was chosen to gather information on the community's knowledge and perception on dual protection use by HIV-positive women. The KIs in this study were selected to confirm data gathered from the women during FGDs.

To enhance quality or rigour in sampling, an inclusion and exclusion criteria on selection was used as given as below:

Inclusion Criteria

For the FGDs:

- HIV-positive women.
- 15-45 years of age
- Accessing HIV care and participating in the PMTCT program at the selected facility
- Willing to participate and to give informed consent to participate in the study and agree to be audio taped.

For the key informant interviews (KIIs)

- A health care worker at the clinic directly providing health services to HIV-positive women at the clinic.
- A community member who resides and has vast knowledge about the area.

Exclusion Criteria for the FGDs

- Very ill women
- Participants who refuse to be audio taped
- Women who reported not to be sexual active.

3.9 Sample Size

Sample size is often small in qualitative research but the data must be rich enough to cover all dimensions. The sample size was chosen purposively to provide rich data that yields detailed information until saturation of data was reached (Ritchie, 2003). A total of five focus groups of 8 to 12 participants with the HIV-positive women each were conducted. Creswell (2007) states that in qualitative research, employing five to ten subjects in-depth interview represents a reasonable size in a study. Hence five KIIs were done, two in-depth interviews were conducted with HCWs and one with a community representative. Following FGDs, two indepth interviews with individual HIV-positive women were done among selected participants whom the researcher noticed that they seem to have rich valuable information to contribute towards the study. One of the participants reported consistent dual protection use and the other reported absolutely non-use of contraceptive.

Table 1: Study Sample

| Data Collection Method | Total Done | Sample Size |
|--|-------------------|-------------|
| Focus Group Discussion | 5 | 51 |
| Individual interview with HIV-positive women | 2 | 2 |
| Key informant interview with Health Care Workers | 2 | 2 |
| Key informant with community representative | 1 | 1 |
| Total Sample size | 10 | 56 |

3.10 Data Collection

Data collection was done between July 2015 and March 2016. In June 2015 the researcher started by looking for an opportunity to familiarize herself with clinic staff and structures. She attended the PMTCT support group session in June 2015. During the month of July first FGD was conducted at the city community hall where support group normally took place. The discussion was recorded and transcribed. Transcript was shared with the supervisor. The month of July was dedicated to analysis of the data from first FGD and setting agenda for subsequent FGDs. Subsequent FGDs were conducted in August and September 2015, which were analysed and written up during the month of November and December 2015.

In January 2016, participant selection for KII was done and the interviews were conducted in February and March 2016. In April 2016 the KII were given opportunity to go through the transcribed data and share out their views on the data. The three KIs agreed that data was a true reflection of their knowledge, beliefs and experiences of working with HIV-positive women with regards to dual protection use.

Table 2: Data Collection Schedule

| Month Year | Action |
|-----------------------|---|
| June 2015 | Familiarization with clinic staff and structures. |
| | The researcher attending the PMTCT supports group session. |
| July 2015 | First and second Focus group discussion conducted, transcript shared with |
| | supervisor. Setting agenda for subsequent FGDs. |
| August and September | Subsequent FGDs were conducted. |
| 2015 | |
| November and December | Analysis and write up. |
| 2015 | |
| January 2016 | Participant selection for the KII and participant in-depth interviews. |
| February and March | Key informant interviews (KII) conducted. |
| 2016 | UNIVERSITY of the |
| April 2016 | Member checking by KI APE |
| May 2016 | Analysis and write up. |

3.10.1 Data Collection Methods

A combination of qualitative research methods was conducted including interviews and focus group discussion so as to increase rigour through triangulation of data methods (Robson, 2011). The FGDs were done to stimulate group interactions, women were encouraged to talk to each other, confirm or dispute and comment on each other's knowledge, perceptions, beliefs and experiences on the use of family planning (Liamputtong and Ezzy couples' HIV testing and counselling, 2005). The FGDs explored dual protection use among the women and the factors that influence its use from the women's perspectives. The FGDs also give the HIV-positive women an opportunity to talk about their experiences of contraceptive use and to express their feelings with regards to dual protection thereby providing much needed support to one another.

Data collection was done with the help of a research assistant (note taker) and with the researcher as the moderator. The moderator helped to keep the discussion focused, interactive and stimulated the women's engagement in the discussion. The note taker was recording all the non-verbal cues during the discussions and noting down some issues that needed further clarification. The FGDs were guided by open-ended questions that were derived from the objectives and literature review. The FGD guide is contained in Appendix 11. It is composed of five open ended questions that guided the researcher during the discussion process. The researcher stimulated discussions by asking open-ended questions and following up ideas brought out during the talk. The open ended questions allowed the researcher to probe on the KI's perspectives of issues raised by the women during FGDs. Each discussion lasted on average 45 to 60 minutes and had a minimum of eight and a maximum twelve participants. The FGDs were conducted in Shona, the local language and were audio recorded and transcribed verbatim. Data collection was done until data saturation occurred (Robson, 2011).

On KIIs, one-on-one in-depth interviews were conducted by the researcher with the KIs to gain a thorough understanding on their knowledge and perceptions of the use of dual protection by HIV-positive women. It helped to describe the challenges of the provision and utilization of contraceptive methods by HIV-positive women. In addition, the interviews explored some of the issues raised by women during FGDs. Similar to the FGDs; interviews were guided by open-ended questions that were derived from the objectives and literature review. These open-ended questions allowed the researcher to probe on the KI's perspectives of issues raised by the women during the FGDs. The interview guides for HCWs and community members are contained in Appendix 12 and 13 respectively. It was composed of five opened ended questions that guided the researcher during the interview process. The researcher probed discussion by following up ideas raised by the participants.

In addition, the researcher used a research diary to record what happened, meanings derived, reminders, instructions or critiques and progress reports at the end of each day of data collection. Thoughts, feelings and interpretations of the interviews were also written down as a way of reducing researcher bias (Creswell, 2007). The research diary also served as a detail of an audit trail as it was used to document decision making processes relating to the research process. At the end of each discussion or interview, the researcher would summarize all the issues raised during the discussion to confirm accurate recording of the participant's experiences, beliefs, understanding and interpretation of the phenomena.

3.10.2 Piloting

A pre-test was done to refine the interview guide questions. The piloting was also used as a platform to practice moderating skills by the researcher. From the piloting, it was noted that the discussion would take on average of 45 to 60 minutes long. The women had no problems with understanding and responding to the questions. Some minor changes were made in the sequencing of some questions to allow women to talk about the method of contraceptive they were using and the factors that influenced their method choice, before talking about dual protection use.

3.11 Data Management

Each interview was assigned a code and date in order to maintain confidentiality. At the end of each interview, recordings were transcribed verbatim and then translated to English by the researcher. Research diary notes written by both the researcher and the assistant were collated and analysed at the end of each day for reflective purposes. The notes were referred to during the transcription and analysis of data. Electronic data (audio-taped recordings and transcriptions) were stored on the researcher's work computer. Security codes were set to limit access to other persons outside the study. Backups were maintained on an external hard drive which was kept in a locked cabinet in the researcher's work based office. Hard copies of data (note books and consent forms) were also securely locked in this cabinet. Only the researcher was in possession of the key set for this cabinet. All stored data will be destroyed six months after the end of study so as to maintain confidentiality.

3.12 Analysis

Data analysis was done manually using thematic coding (Gibbs 2007). Codes emerged from the data using an inductive approach (Robson 2011). Below are the phases of thematic coding analysis done.

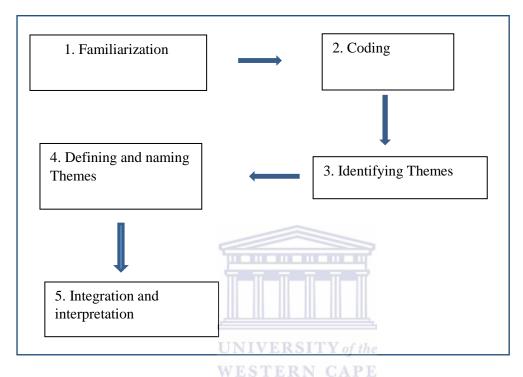


Figure 1: Phases of Thematic Coding Analysis (Gibbs, 2007).

3.12.1 Phase 1: Familiarization

The researcher familiarized herself with the data by repeatedly listening to the audio recordings of the interviews and FGDs and through transcription of data. The transcripts were read through multiple times. This allowed the researcher to immerse herself in the data and develop a deep understanding of the data as a whole as well as its parts (Savin-Baden and Major, 2012). Whilst listening to and reading the transcripts, the researcher noted down key issues findings in her research diary.

3.12.2 Phase 2: Generating initial codes

Conceptually similar data were allocated codes (Dey, 1993). The codes align with women's interactions, events and consequences that HIV-positive women encounter in the provision and utilization of contraceptives (Gibbs, 2007). The identified codes were clustered into

overarching themes: a phrase or sentences that identify the meaning of the data. Serious review and reflection was done repeatedly to identify how similar codes group together to develop themes. Visual representation (Braun and Clarke, 2006) helped to identify frequently used codes. Some codes were collapsed, renamed whilst others that failed to match the already existing themes were renamed.

3.12.3 Phase 3: Defining and Naming Themes

The identified themes were refined by reviewing and regrouping to ensure clear and identifiable distinctions between themes (Patton, 2002). Identified themes were reorganized to form coherent pattern and making comparisons. Collective meanings of the codes were identified leading to formation of a thematic map. Different colours and visual guides were used and this made it easy to see how different codes are grouped in each of the themes. Appropriate names that capture the meaning of all the significant statements were identified.

3.12.4 Phase 4: Integration and interpretation

Finally, further refinement of the themes was done and the themes were clearly defined and assigned names. The researcher continuously reflected on the setting and context in which the phenomena were experienced to help interpret the phenomena.

3.13 Rigour UNIVERSITY of the

Rigour refers to standards for qualitative studies (Robson, 2011). Qualitative research has some set principles to maintain scientific standards. Different authors suggest different terms for describing rigour in qualitative studies. Creswell and Miller, (2000) use the term "validity" for rigour and aim for credibility whilst (Malterud, 2001) quoting Lincoln and Guba (1985) use credibility, dependability, confirmability and transferability as alternative criteria for describing quality in qualitative research. Participants recognizing their own experience and openly discussed their personal experience they encountered at the facility and their interaction with the HCWs when seeking contraceptives, thus trustworthy has been achieved in this study.

3.13.1 Data Source and Method Triangulation

Trustworthy of data was achieved through two aspects: triangulation of data source, HIV-positive women and key informants and data collection methods such as focus group discussions and individual in-depth interview.

3.13.2 Audit Trail

An audit trail which provides clear documentation of all research decisions and activities was maintained (Creswell and Miller, 2000) in such a way that any colleague or peer external to the research process who has knowledge and experience in qualitative research could monitor the status of the research at all stages to ensure appropriate decisions were made throughout (Carpenter, 2008). In this study, the researcher kept a research diary of all research activities, data collection chronology and record data analysis procedures and made use of the research supervisor who had knowledge and experience of qualitative research to do an audit check. All details of the research process have been represented clearly in this thesis to ensure dependability was adhered to, thus making the study credible.

3.13.3 Transferability

To demonstrate authenticity of the study and to make the findings transferable, the researcher provided a rich description of the study setting and participants to ensure applicability of study findings to similar settings, thus achieving credibility (Creswell, 2000). The findings of this study are relevant to most HIV clinical care settings in SSA.

3.13.4 Credibility

Credibility of the study was also ensured by immediate transfer of data to a CD. Data was kept under lock and key to ensure confidentiality was maintained. Verbatim transcription and translation of Shona to English was done by the researcher and the researcher attempted to develop an accurate reflection of the participant's knowledge and experiences. Furthermore, the researcher used direct quote to express participant's thoughts and experiences noting all the non-verbal cues. At the end of each FGD, the researcher would give a summary of the discussion to confirm the accurate recording of the participant's experiences, beliefs, understanding and interpretation of the phenomena. Member checking was also done with the HCWs to assess the trustworthiness of the research finding. Preliminary data codes were shared with supervisor for comparison thus ensuring rigour.

3.13.5 Reflexivity

The researcher being a nurse by profession and once worked at the site before, cognizance was taken that some of the participants may know her as a nurse. The researcher started each data collection by declaring her background, interests and philosophical assumptions that influenced the research through a strategy called reflexivity (Creswell, 2007). In addition, the researcher had to be constantly aware of her own subjectivities and biases and not to impose

any of this during data collection. The researcher also used a diary as a tool to critique and write reflections of the research process, thus enabling her to remain true to the research findings. Also the researcher being nurse with experience of working in a PMTCT programme made her to comprehend the social and cultural issues of participants and had empathy for the women during FGDs. Furthermore, reflexivity was achieved by constantly reflecting on the researcher's preconception, beliefs on the use of contraceptives by HIV-positive women and my personal and professional experiences before collecting data to help reduce bias and help achieve transparency or dependability of the study (Malterud, 2001). This was achieved by self-critique, appraising the researcher's influence on the process and keeping a diary was done to ensure constant monitoring.

3.14 Ethical Considerations

To ensure that the rights and well-being of study participants and integrity of data, the four philosophical principles that guide ethical research were observed (Wassenaar, 2007). Firstly the proposal was reviewed by the Senate Research committee at the University of the Western Cape (UWC), appendix 10. In Zimbabwe where the study was conducted, the proposal was reviewed and approved by the Medical Research Council of Zimbabwe (MRCZ/B/877) prior to data collection, appendix 12. The FGD guide was reviewed by the University of Western Cape (UWC) research ethic committee before use. In addition, permission to conduct the study in the city of Harare clinics was sought from the City of Harare directorate, appendix 11. The following ethical principles were observed.

3.14.1 Autonomy and Respect for the Dignity of Persons

This principle acknowledges the dignity and freedom of every person and protects persons with impaired autonomy. It demands voluntary informed consent by all participants and protection of individual confidentiality. Informed consent is a process by which a study participant voluntarily confirms his or her willingness to participate in a study, after having been given detailed information regarding the research to be able to understand the information and have the right of free choice, allowing them to agree to participate voluntarily or to decline to participate (Polit and Hungler, 1993). The researcher fully informed the participant of all aspects of the study to the fullest extent possible in a language that each participant understood best. A participant information sheet (PIS) stating the objectives, procedures, potential risks and discomforts, benefits and implication of the study was given to help the potential participant make informed decision. Participants were

informed that participation is voluntary and are free to withdraw at any stage in the study. The information sheet was read and explained to potential participants who have difficulty reading or understanding to allow them to make an informed decision (Appendix 1 PIS for the Focus group Discussion English, Appendix 2 PIS for the FGD Shona, and for the HCW Appendix 5. Participants who read and understood the study and agreed to participate voluntarily signed an informed consent (Appendix 6 for English and ICF Shona 7). A written informed consent was obtained from each participant prior to participating into the study. During the research process, the researcher was available to answer to any questions related to the research that the women asked.

3.14.2 Confidentiality

To maintain confidentiality, interviews and FGDs were done in a closed room to ensure privacy. No original names were recorded, and data was numerically and alphabetically coded. During data collection, the researcher collaborated with the mothers in coming up with pseudo names that were used as a way of identifying participants. In FGDs, confidentiality was ensured by building a relationship of trust and mutual respect among the research participants so that information can be shared freely without risk of harm (Halai 2006). All members signed a confidentiality binding form (Appendix 3 English and Appendix 4, Shona) to ensure non-disclosure of information outside the discussion. Participants were informed about the way in which the data was recorded, stored and processed. The raw data will be destroyed six months after the submission of the thesis to maintain confidentiality.

3.14.3 Risk and Benefits

Researchers maximize benefits and minimize harms associated with research: *risk/benefit determination* (Wassenaar, 2007) through provision of a platform for the women to express and share their life experiences of living with HIV and using contraceptives. The researcher made efforts to maintain respect. In cases where the researcher felt that the women need other services such as counselling, referrals were made. The sensitivity of HIV and contraceptives means that a participant's emotional response was a potential risk, therefore the respondents were treated with care and respect. Whenever necessary, provision for further counselling and support services was available at the clinic including referrals for contraceptives.

3.14.4 Justice

Justice refers to act in a fair or just manner. It demands participants' right to fair treatment in the selection and during the course of the study and right to privacy (Polit and Hungler, 1993). In this study, participants were treated equally and fairly without being discriminated or stigmatized. Participants were assured that they will not be punished or lose their rights to attend other medical services should they decide not to participate in the study. The researcher explained the reasons why participants were selected to participate in this study using the inclusion criteria.

Findings of the study are presented below.



CHAPTER 4: FINDINGS

4.1 Introduction

This chapter presents the findings of the focus group discussions (FGDs) conducted among HIV-positive women, individual interviews with HIV-positive women and the in-depth interviews with the key informants. It captures key issues raised by the respondents with regards to contraceptive use generally and specifically dual protection use. The findings of this study are reported according to data source under the following themes:

- The socio demographic description of study participants.
- Findings from the FGDs with HIV-positive women.
- Findings from the individual interviews with HIV-positive women.
- Findings from the in depth interviews with health care workers.
- Findings from the in depth interview with a community representative.

The participants and researcher's reflections about the setting and context were incorporated into the findings to give a richer description of contraceptive use by HIV-positive women in Harare.

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4.2 Socio Demographic Characteristics of Participants

4.2.1 Focus group discussions

All the women who participated in the discussion were married and/ or were in sexual relationship, have at least one child and were on antiretroviral therapy (ART). The majority of the women were unemployed and depends on their husbands/partners for survival. Few women were in informal employment as vendors, cross boarders and house maids. Below is the women's age range.

Table 3: Age range of focus group discussion participants.

| Focus Group Discussion | Age range |
|-------------------------------|-------------|
| FGD 1 | 18- 24years |
| FGD 2 | 25-30 years |
| FGD 3 | 31-35 years |
| FGD 4 | 36-40 years |
| FGD 5 | 41-45 years |

4.2.2 Key Informants

Table 4: Key informants interviews participant's socio demographic characteristics

| Health Care Worker 1 | A female nurse midwife aged 41 years. She has been working with HIV-positive women for almost 2.6 years at the clinic. |
|--------------------------|---|
| Health Care Worker 2 | A female nurse midwife aged 39 years with over eight years working with HIV-positive women at the clinic. |
| Community Representative | A female retired community health care worker aged 67 years. She has been staying in the area for over 40 years and is known as a counsellor at the local Catholic church responsible for providing counselling and support to young couples and commonly known as <i>vatete</i> in the area. |
| HIV-positive woman 1 | A full time house wife, married with two children. She got to know her HIV after the birth of her first child in 2013. Unemployed and depend on her husband for survival. |
| HIV-positive woman 2 | A cross boarder trader, aged 35 years. She was diagnosed HIV in 2007. She is married for over 9 years with one child aged 8. Currently in a long distance relationship, husband works in South Africa and comes home occasionally for the past three years. |

4.3 Findings from the Focus Group Discussions with HIV-Positive Women

4.3.1 HIV-Positive Women's Knowledge about Contraceptives

The women expressed knowledge about various contraceptives by mentioning a range of methods. The pill seemed to be the most commonly mentioned method followed by the injectable depo provera. The implant came up in the discussions the least, possibly suggesting that it was the least well known. Long acting reversible contraceptives such as intrauterine devices and tubal ligation were also rarely mentioned by the groups, possibly suggesting lack of knowledge about or use of these methods.

4.3.2 Current Use of Dual Protection by HIV-Positive Women

The term dual protection (DP) was not generally familiar to the women within the groups. This was demonstrated by some women shaking their heads when asked to describe what they knew about dual protection, suggesting that they did not know about or could not describe what dual protection was. However, to gather information about the use of dual protection by the women, the researcher asked the women to describe the method of contraceptives they were currently using. Initially, the women were hesitant to answer and some women quickly responded and reported that "family planning is not for us, it does not concern us".

Some women expressed concern about the use of contraceptive methods other than condoms, reporting that use of another method of contraceptive may suggest something about the woman.

If someone is using depo [provera] or pills, [it] automatically confirms that she is having unprotected sex (FGD 1).

The above assumption stimulated further discussion among the women, with some women urging the importance of wanting to avoid pregnancy thus reflecting the perceived value of contraceptives by some women in the group.

Us, with our HIV, you don't just get pregnant, the pregnancy will kill [you] if [your] viral load is high... you will give birth to a sick child (FGD 5).

This statement raised a lot of discussion, with some women nodding their heads confirming the same or a similar understanding of the situation.

Some women reported using traditional methods of contraception, such as the withdrawal method.

My husband doesn't like the condom, he ejaculates outsides [laughing], we are using the withdrawal method (FGD 1).

Many of the women reported instances of inconsistent condom use.

I am not on any method. We were told to use condoms but we don't use it every day, it is on and off (FGD 4).

Few women across the discussions reported using condoms together with a hormonal contraceptive. One woman who reported dual protection use provided her motivations.

I was told by the nurse that using a condom alone is risky, it can burst and I can get pregnant and she advised me to use another method in case it happens, so I am on the pill too (FGD 3).

However, some of the women who reported using dual method also described their condom use as inconsistent.

...use both the pill and the condom but our use of condom was on and off (FGD 3).

Absolute no-use of contraceptives was also reported by many of the women across the groups. A woman reporting not using any method of contraceptive laughed before telling the group that she was not using any method, [laughing], *nothing*, *we are not using any method of family planning* [laughing from the group and cross talking]" (FGD 4). The laugh from the woman and the group seemed confirmatory and suggests that many in the group identified with this woman's limited use of contraceptives.

In general, contraceptive use seemed low among the group, with some women reporting not using any contraceptive at all or inconsistent use of condoms. Those that reported dual protection use were those that mentioned exclusive condom use and a few women who reported consistent condom use together with an effective hormonal contraceptive.

Unmet need for contraception was revealed because some of the women who reported not using any method were also not planning to get pregnant in the near future.

As for me, I am not on any method, I wanted jadelle [hormonal implant], but I can't get it, they don't offer it here, I was advised to wait for the outreach programme from PSI [a non-governmental organisation that promotes reproductive health] that usually visits the clinic regularly, it's now over three months, and I am still waiting. I am afraid of getting pregnant again (FGD 2).

Another woman also reported;

I am afraid that I might get pregnant...I am not on any method, our fear is who will look after the children when we are gone (FGD 2).

This woman mentioned infrequent sex as a reason for not using contraceptives.

I am not using any method. We don't stay together, my husband is in South Africa, he comes twice a year, maybe after six months or so I find it unnecessary to take family planning (FGD 1).

Some of the women also believed that they cannot get pregnant because of the fact that they were breastfeeding. Women reported incidences of unintended pregnancies, further confirming their unmet need for contraception. The women who reported unintended

pregnancies wanted to avoid pregnancy currently, with some reporting wanting to stop childbearing altogether, because of their HIV status.

4.3.3 Barriers of Dual Protection Use among HIV-Positive Women in Harare

The discussion offered the participating women a platform to discuss their reasons for not using contraceptives, perceived as barriers in this study. The major barriers identified in this study are related to social- culture, provision and utilisation of health services, health related reasons and personal preferences. Hence the barriers are described under the following themes: personal barriers, social- cultural factors, health system factors and health related factors.

4.3.3.1 Personal Factors

Experience of contraceptive method side-effects

Some women described how they stopped using hormonal contraceptives citing method side-effects, thereby narrowing their choice of methods. The side-effects of contraceptive methods were also perceived by the participants to be potential barriers to their use. One woman spoke of multiple experiences of side-effects from different contraceptive methods.

As for myself I have a problem with family planning, I used to have a loop [pause] my husband used to complain that it was cutting him and I had it removed...recently I was given depo [provera] but since then I am bleeding continuously on and off (FGD 5).

In a separate discussion, a pregnant woman narrated her contraceptive use experience which also reveals an unmet need for contraceptives and highlighted that side-effects were a reason for not using a method.

I am pregnant now, I did not plan for this pregnancy. I used to have jadelle [hormonal implant] but I was bleeding continuously all the time, and had it removed and stopped family planning, and then got pregnant (FGD 5).

The method side effects described reduces contraceptives options for HIV-positive women, thus influencing dual protection use.

Partner's refusal to use a condom

Partner refusal to use condom was reported as a barrier to dual protection use by some women. In every focus group, women provided many examples of their partners' refusal to

use condoms. The reasons for men's refusal to use condoms varied. One woman spoke about women's inability to use condoms as a result of their partner's wishes.

Our husbands don't want condoms and we end up getting pregnant again and again unexpectedly (FGD 3).

Other women described how condom use negatively affected the men's performance and made them feel.

...each time he tries to put on the condom, nothing happens and he gets very angry if you keep on telling him to use a condom (FGD 5).

Another woman speaking about her husband's refusal to use condom explained how the use of the condom affected his sexual pleasure.

My husband complained that he does not feel anything when he uses a condoms he want it direct, skin to skin (FGD 2).

Many of the women laughed in recognition at this statement and seemed to affirm what the woman was saying.

Me too, my husband complains that condoms reduces sexual sensation, [background laugh and talking in agreement] (FGD 4).

This issue prompted discussion in the groups, with some women expressing feelings of anger about their partner's refusal to use condoms. Others blamed their partner's for bringing the HIV to the relationship by having unprotected sex outside marriage.

....I don't want to hear about sex, he infected me. I was negative before I married this man but then my status changed, what pains me more is that he refused to use condom, imagine with this sickness of ours [HIV] he still wants unprotected sex, no, no it can't, it can't (FGD 2).

The women discussed this issue at length, sharing different experiences. One woman described taking matters into her own hands.

...it's difficult, you can't force him to use condom, I then decided to have jadelle [hormonal implant] behind his back, he doesn't know that I have it (FGD 4).

Some of the women reported episodes of partner conflicts when negotiating contraceptive or condom use in their relationship.

One woman speaking relayed what her husband said to her:

I am your husband and you are my wife, I paid the lobola, [bride price] why should I use a condom. I can't wear a condom here and when I go out a condom again (FGD 2).

In another discussion, a woman expressed the emotional pressure she experiences from her husband.

It's difficult...men don't like condoms, if you refuse he will go and sleep with other women without condom. My husband would tell me blankly that I am going out to a woman who does no demand condoms. I just end up giving in [deep sigh] if you don't you ... you will lose him (FGD 2).

He will force you to have unprotected sex, we end up fighting each time we try to have sex (FGD 5).

Another woman reporting conflict with her partner because of condom use.

He would force himself on me, tearing all my pants because I will be refusing [sex] all my pants are torn into pieces (FGD 3).

Confirming this, one of the HCW reported that she once saw a woman who was severely beaten by her husband for bringing condoms home and the man accused the woman of sleeping with other men outside of their marriage.

4.3.3.2 Social Cultural Factors

HIV-positive women's negative perception of condom use

The women expressed negative perception on condom use, particularly within longer-term relationships. These perceptions could be due to fear or unwillingness to get their partners to use condoms.

This issue of condoms is a non-starter in marriage. You don't expect your husband to agree to use condom unless he is sleeping around. Normally husbands who use condoms at home are promiscuous, automatically you will know that he is sleeping around (FGD 5).

You can't expect your husband to use condoms, not in marriages, unless you are his mistress. We all grow up knowing that condoms are for those people on the streets and beer halls, outside marriages and not for married people (FGD 2).

In some instances, women expressed feelings of not wanting to use condoms because they think that condoms are for people who are unfaithful. The women described use of condoms as generally unacceptable and felt that asking their partners to use condoms was like giving them permission to have sex outside marriage.

Imagine in a marriage telling your husband to use a condom everyday...it's like you are giving him a passport to look for other women (FGD 5).

In response to this comment, many of the women laughed and some nodded their heads in agreement. Another woman agreed that condoms were unacceptable in marriage.

We are now living like strangers in our own homes, asking your husband to use condom... people do it out there but not in homes (FGD 3).

In talking about 'living like strangers' this woman was referring to casual sex. Some other women confirmed this. The women also reported that their partners complained of reduced sexual pleasure when using condoms, thus causing non use of condoms.

These negative perceptions of condom use mentioned by women were viewed as major barrier to the use of condoms within certain relationships by some women.

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4.3.3.3 Health System Factors

Negative attitudes of the HCWs towards HIV-positive women's use of contraceptives.

During the focus group discussions, many women described their experiences of seeking contraceptive services at the health facility. The negative attitudes of the HCWs were described as a major barrier to contraceptive access. Women raised instances of being ill-treated or stigmatized by HCWs when seeking contraceptives that they attributed to their positive HIV status.

Ah I think we have some issues here. [The HCWs] will ask you how can I help you and if you say jadelle or pill, they will start lecturing you on your HIV. I once asked about jadelle and she looked at me straight in my eyes and asked me why I am having sex with this infection of mine, I felt very embarrassed that day. I couldn't answer her but I don't talk of family planning with them anymore (FGD 1).

This statement prompted discussion by the group and was met with validating statements such as 'me too', 'yes, it's true'.

Me too, last time I came here I was scolded by one of the nurses and I will never forget that day. I was very embarrassed. The nurse asked me all sorts of questions... why I wanted family planning... unprotected sex...whilst on ART (FGD 4).

The women reported that the HCWs were unapproachable making it difficult for them to seek family planning services. Another woman reporting her experiences with regards to stigma.

I experienced the same here, when I asked for family planning, the nurses looked at me with a talking eye [what does this mean]. She didn't say a word at me directly but, the look was enough to tell me that something is wrong. I felt like telling her not to give me the pill (FGD 1).

Furthermore, a woman described being denied access to hormonal contraceptive methods because of her HIV status.

...I went to [local clinic], they asked me about my status and instantly I was told to use protectors [condoms] and they refused to give me the pill (FGD 2).

Another woman explained how she was getting her pill supply from the pharmacy after she experienced the same thing. The woman went on to describe the quality of service at the pharmacy.

... easy, hassle free, no queues and no one asking you anything, it's just your money (FGD 3).

Another woman expressed feelings of anger and frustration about being denied use of hormonal contraceptives by HCWs.

It's confusing, they don't want to see us pregnant and at the same time they don't want to give us family planning. I would like to make a request to our nurses, can they let us use other methods of family planning just like any other women. Yes, we can continue saying condom, condom but who is using it? We are ending up getting pregnant and most of the time the pregnancies just happen (FGD 5).

The negative attitudes and experiences HIV-positive women encounter at the hands of HCWs at the healthy facility may have an impact on their use of or choice to use certain contraceptives.

Lack of Discussion around Additional Benefits of Non-Barrier Contraceptives use by Health Care Workers

The messages that HCWs communicated to the women seem to be exclusively about condom use emphasizing infection prevention rather than prevention of unintended pregnancy.

No-one talks to us about family planning, we are only told to use condoms. Even ourselves, we don't ask about family planning we feel it's not necessary to use another method whilst using the condom (FGD 4).

The HCWs message may have an effect of women's ability to use and access contraceptives thus reducing HIV-positive women's protection against unintended pregnancies.

Availability of Preferred Method

The women expressed concerns about the unavailability of their preferred method of contraceptives at the health facility therefore narrowing women's choice.

The clinic does not have various methods here, it's only the pill and depo [provera] (FGD 2).

The women described the unavailability of a wide range of contraceptives as an influencing factor of contraceptive use.

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Cost of services

Women were potentially not able to access family planning services because of their inability to pay for them. The costs associated include travel costs to and from to the health facility and the service charges. On average it costs \$1 (US) to travel to and from the health facility. In the case of referrals, this doubled because of the increased distance. In addition, the actual costs of contraceptives vary. The pill cost \$1 for six packets plus a consultation fee bringing the total to \$2 for six months. Depo provera costs \$3 per injection bringing the total to \$4 every three months.

In addition, the women complained of the long waiting time they spent at the facility when seeking family planning services as a barrier. On average it took the whole morning to get services. Cost and delays at the healthy facility are potential barriers to accessing contraceptives and their subsequent use.

4.3.4 Facilitators of Dual Protection Use among HIV-Positive Women in Harare.

The data reveals some positive factors that may promote contraceptive use among the HIV-positive women within this study. Health factors, couples' HIV testing and counselling, and HIV sero-discordant couple were identified by the respondents as three of the primary facilitators of contraceptive use in this study.

4.3.4.1 Health Factors

Health related factors such as an increase in the CD4 count were perceived as facilitators to condom use by the women in the groups. One woman explained how an increase in her CD4 count helped her to convince her partner to continue using condoms consistently.

I used to refuse unprotected sex and my CD4 count started increasing. Each time I got a CD4 result I would show him for him to appreciate the importance of protected sex, now he is accepting condoms (FGD 3).

Another woman also related her experience with her CD4 result.

Ever since I started using condoms, my CD4 started to increase and I started gaining weight, I make sure its condoms all the time (FGD 4).

Another clinical factor that may have helped motivate condom use was the risk of vertical transmission in the case of an unintended pregnancy. One woman spoke of how fear of transmitting the virus to their unborn child helped her to get her husband to agree condom use.

I got to know my status when I was pregnancy. At first he didn't want the condom, he agrees when we were told of the risk of vertical transmission if we don't use condoms and he agrees (FGD 3).

The positive health changes mainly brought about by use of ART was perceived as a facilitator to condom use and therefore to dual protection use by some of the women within the study.

4.3.4.2 HIV Sero-Discordant Couples

The women enrolled in the study who reported an HIV sero-discordant status, were the woman was positive, reported consistent use of condoms.

For me it's different, [lowering her voice] we are a discordant couple, he is negative and I think he is afraid of getting it from me. He makes sure that each time he uses a condom (FGD 5).

Another HIV-positive woman in a sero-discordant relationship reported something similar.

I am on the pill and we use condoms. My husband makes sure that each time we sleep he wears his condom (FGD 3).

These stimulated questions from the group with another woman asking: "How is it possible to transmit infection if both partners are HIV-positive?"

And one woman quickly responded and said:

Yes, it does matter whether both of you are positive or not. The issue here is to prevent reinfections and increase in viral load. If you don't use a condom it means that you are keeping on loading the virus in your body (FGD 5)

Therefore, the group discussion offered the women opportunities to reassure each other with words of encouragement and support and highlighting the importance of having protected sex.

4.3.4.3 Couples HIV Testing and Counseling ITY of the

Some of the women who reported to have received couple HIV testing and counselling reported using dual protection.

I didn't encounter any challenges with my husband with regards to condom use. Maybe it's because we got tested and counselled together. He makes sure that he wears a condom each time we [have sex] (FGD 5).

Another woman described how couples' HIV testing and counselling promoted her to use condoms.

Me too the counselling helped us, we got tested and counselled together. Condom use is not a big problem, we both know from the start that it's now condom, but at times he doesn't [use] ...it's not always [laughing] (FGD 3).

4.3.5 HIV-Positive Women's Experiences of Contraceptive Use

The discussion offered the women an opportunity to express their feelings and to console each other by providing much needed support to one another and reinforce a common sense of purpose. The women discussed their various painful encounters and reported various coping strategies. The phrase "what do we do as women" was spoken on several occasions by the HIV-positive women when expressing their painful experiences of negotiating condom use.

When talking about condom use, another phrase that kept coming in all the discussion was 'ndizvo zvatiri, tiri positive' meaning that's what we are, we are HIV-positive meaning we have to accept it. This phrase expressed some sense or feelings of hope and contentment as shown below:

So we just accepted it, we want to save our marriages and take care of our children together. If we refuse who will take of the children, [referring to sex] I make sure that I am taking my medications, I want to serve my marriage (FGD 2).

To sum up, the report by these women suggests that women encounter various challenges in negotiating contraceptives and condom use with their relationships.

4.3.6 Summary of the Focus Group Discussions

In summary, the focus group discussions findings revealed information on the use of contraceptives among HIV-positive women enrolled in the study. The results identified several factors that potentially influence contraceptives, condom use and dual protection use amongst these women. The bulk of factors identified in the results are barriers with few facilitators. Most of the barriers are related to the health system. These include negative attitudes to and information gap around contraceptives for HIV-positive women by HCWs, non-availability of a wide range of contraceptive methods at the facility including cost of accessing services. Social and cultural barriers were also reported as barriers of contraceptive use among the women. Personal barriers such as contraceptive method side effect and partner's refusal to use condoms were also reported as important barrier to contraceptive use amongst the women.

With regards to facilitators, the study found three major factors that motivate use of contraceptives among this group of women. First, health related factors such as an increase in CD4 count as a result of practising protected sex and couples' HIV testing and counselling were reported. And thirdly HIV sero-discordant couple was also reported as a facilitator to dual protection use amongst the women.

Women also experienced many problems negotiating contraceptive and condom use within their relationships. In some cases women experience very extreme mistreatment from partners in the form of physical or emotional abuse that had a very negative impact on their ability to use contraceptives and particularly condoms.

4.4 Findings from the Individual Interviews with HIV-Positive Women.

The individual interview offered the women an opportunity to narrate their contraceptive use experiences. Participant 1, (P1) was selected for the interview because she reported non use of contraceptive at all since she got to know her HIV status in 2013. She has two children and the eldest one is HIV-positive. She reported that her husband refuse to use condom and her second child's birth was unintended. Whilst Participant 2 reported that she is HIV positive and her partner is negative and reported consistent condom use.

4.4.1 Individual Interview with HIV-positive Woman 1.

The woman demonstrated knowledge and understanding on the importance of dual protection by explaining how her child got infected, blaming the transmission on her husband because of his refusal to use condoms.

I wasn't like this ... [holding back tears] during pregnancy of my first child, I tested negative and was surprised to get positive at 6 months after my child was born. My husband refused to get tested, he refuses condoms too. We were sleeping without protection and that I heard it increases the virus in my body. Our first child got infected too. (P1).

She expressed feelings of hopeless because of her husband refusal to use condoms. She further explained that she was denied depo prover injection at the facility because of her parity. The woman felt pain and anger of denied the injection.

Right now, I don't know what to do [deep sigh] my husband doesn't like condoms, and I have been denied depo here. I was told that they don't give injection to young mothers. They [HCWs] said it causes infertility in future and want me to use the pill but I cant ... on top of my drugs [referring to ART] there are too many (P1)

The woman described how she becomes pregnant with her second child unintended, further confirming her unmet need for contraception. She expressed fear that her second child might get the infection too because of unprotected sex. She seemed to know that the unintentional pregnancy she experienced was linked to their lack of contraceptive use.

She just come, I just heard movements in my tummy. It just comes [pointing to the baby on her lap]. We were sleeping without protection. I am afraid she [pause] the infection (P1)

The feeling of being powerless was expressed by the woman when she explained that asking her husband to use condom exposes her to potential violence.

Each time we talk about protection, he will physical attack me and tell me hurtful things. He would start by telling me hurt words, I am not your prostitute, he shouts at me and talking hurtful things each time I talk of condoms...He said he is not sick, it's me and my child who have AIDS and should not involve him. I don't know what to do, used [holding back tears] (P1)

The woman cited the recommendation to use condom by the HCWs and increase number of tablets per day as a contributing factor for not using contraceptives.

I was using the pill before, [pause] I stopped, when I started taking ART, the tablets were too many and most of the times I would forget to take the pill, and here [at the facility] we were told to use condoms, so I just stopped (P1).

Summary

The individual interview with the woman highlights the experiences of HIV-positive women with regards to dual protection use. It seems men are the decision makers and women have limited power to decide on the method of contraceptive that fits her. The interview also highlights some misinformation on the use of hormonal contraceptives and ART, thus influencing contraceptive intake among HIV-positive women on ART.

4.4. 2 Individual Interview with HIV-positive Woman 2

The woman reported consistent condom use since 2013.

For us we use protection all the time since 2013 (P 2)

When asked what could be the facilitating factors for consistent condom use in their home, the woman reported that 'HIV sero-discordant status' as one of the motivating factor for using dual protection. The woman reported that her husband is the one who decides what to do and reported it as a reason for using condoms consistently.

We are a discordant couple, I am positive, my husband is negative. I tested positive in 2007. We started using condom consistently since 2013. He is afraid of transmission so he makes sure that we use protection all the time

The woman was asked to share her contraceptive use experience starting from 2007 when she was diagnosed HIV-positive:

I got to know my status in 2007 during pregnancy of my child. I disclosed my status to my husband and he also gets tested and was negative. We were troubled by this and we decide to discuss the issue with our local Pastor. We went for spiritual healing and we believed that the HIV was gone. The Pastor told us that HIV is a spirit from the devil that wants to destroy our marriage and all we need is prayer and should not worry about it. So we continued as usual no condoms, no treatment. I continued using the pill as a method of contraception and everything was fine till 2013 when I got very sick. I almost died. That's when we went to the hospital and was tested again for HIV and got a positive result again [deep sigh] aaah from there everything changed [pause] he [referring to her husband] started pointing fingers at me saying I want to kill him with AIDS. Our marriage changed no sex, no communication. And that's when I started talking to him and he agreed that for the sake of our child we will be together and 'no condom no sex'. My husband makes sure that we have condoms at all times. And I then stopped the pill because I find it not necessary when using the condom

The woman's experience point an important factor on how spiritual beliefs influence HIV care including condom use.

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4.4.3 Summary

The woman's experience demonstrated how religious beliefs influence condom use. The woman did not use used condoms because she believed that she was healed of HIV. Hence religious belief can be perceived as a potential barrier to dual protection use in cases where couples are in denial of their HIV status.

The consistent condom use reported by the woman demonstrated that men play a dominant role in decision to use condoms or not.

4.5 Findings from Interviews with Health Care Workers

The Health Care Workers (HCWs) described use of contraceptives and condoms among HIV-positive women receiving care at the facility. The perception and experiences of HCWS in providing contraception services to HIV-positive women can be categorised into four main areas: use of contraceptives by HIV-positive women, HCWs knowledge on dual protection barriers and facilitators of contraceptives use.

4.5.1 Use of Contraceptives by HIV-Positive Women at the Clinic

Both the HCWs at the clinic described the use of contraceptives by HIV-positive as low and reported that the pill is the most used method among those women using contraceptives. And use of condoms is very low and felt that dual method use is almost non existence

The pill is the most used method; some women don't use any contraceptive at all (HCW 1).

Very few women use condoms and dual method use is almost zero (HCW 1).

The HCWs believed that the low condoms use by HIV-positive women could be influenced by the negative perception women have on condoms and their partner's preference.

Ok we encourage them to use [unfinished statement] but you know most of them have 'attitude towards condom'. Some women complain that their partners don't want to use condom. It's a big problem here, condom use is very low (HCW2).

We even talk about female condoms [gap] women don't like them, they complain that there are noisy and uncomfortable (HCW 2).

4.5.2 Health Care Worker's knowledge of Dual Protection

Both the HCWs interviewed at the clinic demonstrated some knowledge on dual protection by giving the definition of dual protection. The HCW described dual protection in terms of prevention of transmission of infection and unintended pregnancies. However in contrast, one of the HCW reported that she do not discuss use of hormonal contraceptive with HIV positive citing two main reasons. The HCWs argues that condom on its own is enough to offer dual protection and reported that antiretroviral therapy (ART) reduces the efficacy of hormonal contraceptives; hence they discourages its use.

There is no way we talk about other family planning methods with HIV-positive women, we talk about condoms only. It's not necessary for the women to use both the hormonal and condoms combined because the condom on its own offers dual protection (HCW 2).

ARVs suppress the efficacy of hormonal contraceptives so we don't encourage them (HCW 1).

4.5.3 Barriers to Dual protection use among HIV-Positive women

The HCWs cited the issue of cost, long waiting queues at the facility, non availability of a wide range on contraceptives, judgemental attitude of HCWs towards the contraceptive choices of HIV-positive women and socio cultural factors as possible barriers to

contraceptive use including condoms among HIV-positive women receiving care at the facility.

4.5.3.1 Cost of Services

According to the HCWs, some women were possibly not able to access contraceptives services because of their inability to pay. This is contributed by the poor socio-economic status many people are living in this community and the country at large. Hence the HCWs perceived cost of accessing contraceptive services at the facility to be potential barrier influencing the uptake of contraceptive.

Here its expensive, they [women] pay for consultation fee and the method ... some women cannot afford that, people are poor here (HCW 1).

... at times we don't have stocks, and some methods we don't offer here, we refer to Parirenyatwa [hospital] ... thats an extra cost for travelling making it unaffordable for the women (HCW 2).

4.5.3.2 Long Waiting Times

Both the HCWs reported staff shortage as a reason for long queues that women experience when accessing services including contraceptives as a contributing to the low uptake of contraceptives. Women experience delays and wait for long to receive services, discouraging them to access contraceptives. The HCW reported that on average a woman could spend over four hours to receive service and this frustrates the women and eventually causes women to stop taking their pill contributing to unmet need of contraceptive.

Here we are short staffed, they spent long time in queue ... they don't like it, they just want to walk in and be given their supply and go (HCW 1).

4.5.3.3 Non Availability of a Wide Range of Contraceptives

The HCWs expressed concerns about the unavailability of a wide range of contraceptives methods at the facility. The facility offers the pill and injection only, limiting the women's preferences. In addition the facility has periods of stock out especially with the injection, causing some women not to use contraceptive at all due to non availability of their preferred choice.

Here we only offer the pill and depo, long term methods are not readily available (HCW 2).

4.5.3.4 Health Care Worker Judgmental Attitude towards Contraceptive Method Choice of HIV-Positive Women.

The HCWs highlighted some staff judgemental attitudes towards contraceptives method choice of HIV-positive women. Some HCWs passes several rude and judgemental comments on the choice of contraceptives by HIV-positive women. These comments deter women from seeking contraceptives and or discussing their contraceptives needs with service providers.

At times we [health care workers] have a 'judgemental attitude' you hear some nurses asking all sorts of questions like 'at your age you want family planning' when talking to younger women and for older women they would say 'at your age you are still using condoms' (HCW 1)

4.5.3.5 Socio-Cultural Factors

Both the HCWs felt that some women are failing to use condoms as a result of their partner's preference. According to our culture, women consult their partners when deciding on family issues including contraceptives. The HCW described women as *not empowered to use condoms* (HCW 1), thus reducing uptake of dual protection.

Culturally women are controlled by men, they can't make their own decision without consulting their husbands. They rely on their husbands for every decision they make. Its up to the husband to use contraceptives or condoms at all, if the husband says no then it's a no, no full stop (HCW 1).

In our culture condoms are not acceptable in marriages and women are not supposed to be seen bringing condoms home (HCW 2)

4.5.4 Facilitators of Dual Protection Use among HIV-Positive Women

The HCWs identified HIV testing and counselling and male involvement as important factors that promote use of dual protection by HIV-positive women.

4.5.4.1 HIV Testing and Counseling

The information that women received during HIV testing and counselling was perceived as a facilitating factor of dual protection use. The HCW reported that women who received HIV counselling are more likely to use dual protection as compared to those who did not. The HCWs perceived the knowledge and understanding of the virus, its mode of transmission and treatment as important in making decision to use DP.

I think it comes back to the issue of HIV testing and counselling. If someone received proper counselling from the start, she is mostly likely to use DP because all the important issues on HIV such as transmission, discordant couples, mother to child transmission are discussed (HCW 2).

4.5.4.2 Couple HIV Testing and Counseling

Couple HIV testing and counselling was also considered as factor that contributed to contraceptive and particularly condom use by the HCWs. Both the HCWs reported believe that couple counselling helps couples to understand the importance of protection and thus promoting dual protection use. They further commented that women who are counselled alone may have challenges convincing their partner's to use condoms due to the power dynamics that women and men have in a patriarchal society.

Again men involvement is essential. Women who got testing and counselling as a couple are more likely to use DP (HCW 1).

Women who are counseled alone without their husbands normally have challenges to convince their husband to use condoms. Here a woman cannot tell her husband to use condoms (HCW 2)

In addition the HCWs also described disclosure status and timing or reason for testing as factors that influence dual method use in a bi-directional way as follows:

4.5.5 Disclosure Status

The health care worker viewed disclosure status as a contributory factor that influence women to either discuss the issue of using condoms with their sexual partners citing that some women are afraid to discuss their HIV status with their partner due to fear associated with risk of blame and consequently influencing use of dual protection.

It starts from the disclosure itself, some women are not able to disclose their HIV status to their husband due to fear. In some cases the husband will accuse her of bringing the virus and this risks their marriages, so she cant talk of condoms without disclosing her status (HCW 2)

4.5.6 Time/Reason for Testing

Reason and for knowing one's HIV status was perceived as an important factor influencing the decision to use dual protection or not. The HCW highlighted that women who got tested for the sake of knowing their status are more likely to use dual protection as compared to women who here at the clinic because they have registered for antenatal care. Here we test every pregnant women its mandatory.

Also timing or reason for testing can be a facilitator or a barrier for DP use. If someone got tested for the sake for knowing her status is more likely to use DP than someone who is told to get tested because she is pregnant during ANC or because she is sick (HCW 2)

4.5.7 Health Care Worker Recommendations on Dual Protection

The HCWs were asked to give recommendation on how HIV-positive women uptake of dual protection could be improved. Both the HCWs suggested that there is need for training HCWs on the needs of HIV-positive women to emphasise the importance of dual method use in fighting HIV

I think first and foremost, there is need to train HCWs on DP, what it is and why it is important, Like what is happening now, we [HCW] are not giving hormonal contraceptives to HIV positive women, we [HCW] keep talking about condoms, condom only. Even myself I can't remember the last time I discussed contraception issues with HIV-positive women (HCW 1)

The HCWs highlighted the importance of involving men when offering sexual and reproductive health services such as antenatal care, family planning and child growth monitoring to encourage use of dual protection, since men are the decision makers.

Women should be encouraged to come with their husbands when seeking sexual and reproductive health services (HCW 2)

4.5.7 Summary

In summary, both the interviewed HCWs felt that dual method use by HIV-positive women receiving care at the facility is very low and a few are using contraceptives. The interview identified five important factors influencing dual protection use by HIV-positive women receiving care at the facility. Cost, long queues, non availability of a wide range of contraceptives, judgemental attitude of HCWs and socio cultural factors that influence contraceptive use including condoms.

On the facilitating factors, HIV testing and counselling and male partner involvement were reported as factors that promotes dual protection use. In addition disclosure status was also mentioned, women who disclosed their HIV status were reported to be more likely to use dual protection as compared to those who did not.

4.6 Findings from the In Depth Interview with the Community Member

The key informant displayed general knowledge and understanding on contraception in general. She mentioned some common used methods of contraceptives.

... pills, injections and norplant (CM)

When describing the community perception on the use of contraceptives by HIV-positive women, the key informant (KI) emphasised that HIV positive women should use condom, to prevent transmission of infection.

They [HIV-positive women] should use condoms to prevent transmission of infection. This is the most important thing that they need to consider otherwise they will continue to re-infect each other. (CM)

However she went on to describe that condom use is very low among the group and some HIV-positive women uses other methods commonly the pill and depo provera.

Very few uses condoms, some use the pill and depo provera and some don't even use anything, They always come here crying that their husbands are refusing to use condom especially when they are pregnant (CM)

The KI described condom use as the most difficult thing to do in marriage because men refuse to use condoms. HIV-positive women are always complaining that their partners refuse to use condoms and it is one of the most important factors that cause some HIV-positive women not to use condoms.

They [the men] say they can't eat a sweet in the wrapper, they refuse. Women are in trouble because there are the ones that get pregnant. (CM)

The KI felt that the refusal by men to use condom is beyond the HIV-positive's control because of the socio cultural religious beliefs that calls for women to submit themselves to their husbands by referring to the bible.

... biggest problem, you wonder how best we can advise these women. ... because ... she also needs to submit herself to her husband, it's in the bible (CM)

Commenting on the men's refusal to use condom, the KII felt that women are not doing enough to protect themselves by asking why women do not use the female condom.

I also think the women are a problem too; they also don't like to use female condoms, why? Why? You her them complaining that its [female condom] difficult to use (CM)

4.6.1 Community Perception on the Use of Contraceptive by HIV-Positive Women

According to the KI, people are still ignorant on the disease HIV. She described how HIV-positive women are being stigmatised in the community and people have mixed view on their use of contraceptives. Some community members do not expect HIV-positive to get pregnant fearing death of mother or poor child growth due to the virus but at the same time they don't expect to see an HIV-positive woman taking contraceptives and she reported it as 'confusing'

This issue of HIV is not well known in this community. Most people here don't understand this disease and we hear people whispering if there saw an HIV-positive women pregnant, 'why is she getting pregnant; she is positive who will take care of the baby. At times we hear others saying why cant she have another child who will take care of her when she gets ill and to carry forward the family name when there are gone (CM).

The KI further commented on the community distributors and reported that the community distributors don't visit HIV-positive women saying these are *HIV positives they don't need pill they use condoms* thus reducing access of contraceptives to HIV-positive women.

4.6.2 Economic Dependency

The KI described the economic dependence that most women have on their husbands/partners as an important factor that influences use of condoms. Some women lack power to convince their partners to use condoms due to fear of being left alone by her partner, thus making them more vulnerable. She described the dilemma that HIV-positive face when they insist on condom use: some face divorce or separation or more poverty due to inability to provide for themselves and children. She went on to describe an incident were an HIV-positive woman was left by her husband because of insisting on condom use.

She came crying and when we called her husband he frankly told her that let your condom take care of you. I am gone. (CM).

4.6.3 Recommendation

When asked on suggestion on how contraceptive use should be promoted among HIV-positive women, the KI expressed the need for government to educate women on the use of female condoms and to introduce programs involve man in promoting condom use among.

I think women don't know much about the female condom. Government should have programme to empower women on the use of female condom, it would help to reduce problems in the homes.



CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter discusses the findings of this study. The discussion is on the HIV-positive women knowledge and experiences of using contraceptives and there perceived barriers and facilitators of dual protection use among HIV-positive women from all the three data sources, focus group discussion with HIV-positive women, individual interview with HIV-positive women, health care workers at the facility and a community representative. It also discussed the key informants: health care workers (HCWs) and community member's perception on the use of dual protection by HIV-positive women.

The study documented barriers and facilitators of dual protection use among HIV-positive in Harare. Three major groupings of potential barriers of contraceptive use were noted by the participants; personal factors, socio-cultural factors and health system factors. Facilitators of dual protection use are grouped thematically as follows; health related factors such an increase in the women's CD4 count result and fear of vertical transmission including couples HIV testing and counselling and HIV sero-discordant couple.

5.2 Knowledge on Dual Protection from the Participants.

The findings of this study showed some knowledge and understanding on contraceptives use by HIV-positive women on reducing risk of transmission of infection and prevention of unintended pregnancies. The main methods of contraceptives mentioned by all participants were mainly the pill, depo provera, and condoms. The term dual protection was not familiar among HIV-positive women. However, contrary to the knowledge that HCWs have on dual protection, HCWs were not encouraging the use of non barrier contraceptives to the women. This reluctance seem to be derived from the perceived medically eligibility reasons for contraceptive use. None of the women during focus group discussion mentioned female condoms but the HCWs and the community representative discussed the issue of female condom possibly suggesting that female condoms are not widely known.

5.3 Current use of Contraceptives among the Women.

All the three data sources: HIV-positive women, health care worker, and community representative perceived that contraceptive use by HIV-positive women seemed quite low. The HCWs believed that most HIV-positive women do not use contraceptives at all and this was confirmed by some interviewed HIV-positive women who reported absolute non use of

contraceptives at all. Most of the few women who reported using contraceptive were using the pill, which may not be the ideal method because of its inability to prevent transmission of infection. Inconsistent condom use was described among the few women who reported using condoms. Very few women reported using both condoms and an effective hormonal contraceptive in the study, suggesting that dual method use was low among the group. Similar findings of low dual method use was reported in Kenya, India and Zambia among people living with HIV in clinical care (Chakrapani et al., 2011; Chibwesha et al., 2011; Roxby et al., 2016), suggesting that HIV-positive women have reduced protection against unintended pregnancies. The non-use of contraceptives reported is of great concern because of the dual risk of re-infections and unintended pregnancies. This was confirmed by reports of women describing unintended pregnancies in the study. These unintended pregnancies are an important aspect to recognise, because an unmet need for contraceptive among HIV-positive women can result in an HIV-positive birth which is contrary to the WHO PMTCT strategies of reducing new HIV-positive birth (WHO, 2012).

5.4: Factors Influencing Contraceptives Use among HIV-Positive Women

The study findings revealed that contraceptive use among HIV-positive women is influenced by various factors which include the social, economic and cultural aspects of the society. Barriers in this study are factors that negatively influence use of dual protection whilst facilitators promote use of dual protection among HIV-positive women. All the participants reported various factors that potentially influence contraceptive use among HIV-positive women. The bulk of the factors were barriers associated with personal preferences, sociocultural influences, and the health system delivery and with very few facilitators, positively influencing dual protection use.

5.4.1 Barriers of Dual Protection Use among HIV-Positive Women.

The barriers of contraceptive use including dual method use identified in this study are grouped thematically in to four groups: personal factors, social- cultural factors, health care worker related factors and service delivery process factors.

There were concordances on some of the barriers that influence use of contraceptives including dual protection use from the HIV-positive women and HCWs. The issue of cost, non availability of wide range of contraceptives, long waiting times at the facility, influence of men on deciding the contraceptive choice and the negative perception of both women and men on the use of condoms were reported. Both the HIV-positive women and HCWs reported HCWs related factors and health system delivery processes as important factors influencing contraceptive use among HIV-positive women including dual method use. Men's decision on contraceptive use was mentioned by both the women and KII, especially condoms.

5.4.1 Personal Factors

Contraceptives Method Side Effects.

Contraceptive method side effects worried some women causing them not to use contraceptives completely. It emerged from both the HCWs and HIV-positive women during focus group discussions. The experience of method side effects reported by some women may have contributed to them stopping using certain non-barrier contraceptives, negatively influencing dual method use. Irregular menstrual cycles caused by depo provera were the main reason why some women stopped the three months injection. This finding is consistent with the qualitative findings among HIV-positive couples in Kenya and Uganda where perceptions of side-effects are critical factors in contraceptive use decisions (Roxby et al., 2016; Nattabie et al., 2011).

5.4.2 Socio-Cultural Factors

Gender dynamics

Partner refusal to use condom described by all the three data sources in this study affirms women's position in a patriarchal society pointing on the importance of male involvement in dual protection use discussions. The study finds out that men were the decision makers on whether to use condoms or not. Although women in this study were aware and some willing to use condoms, men were reported to have the final decision whether to use it or not. This could also be influenced by the woman's inability to pay for contraceptive services causing men to make decision on their behalf. Hence male involvement in reproductive health issues

is of paramount importance in many societies and should not be under estimated (Nattabi et al., 2011).

The negative perception on condom use reported in this study could be rooted from the social cultural norms in Zimbabwe were condoms are associated with casual sex and regarded as a prevention tool for sexual transmitted infections rather as a method of contraception. In this study, both HCWs and the HIV-positive women reported socio risks as having an influence on condom use. Initiating or negotiating condom use by women could possibly lead to violence. Women experienced physical, verbal and emotional abuse for initiating condom use in their homes. Condom use was associated with casual sex and regarded as a prevention tool for sexual transmitted infections rather than as a method of contraception (Cates & Steiner 2002). Some women thinks that condoms are for people who are unfaithful, thus reducing their interest or focus on using condoms. Some women even expressed fear or unwillingness to collect condoms from the health facility and or to ask their partners to use condoms because of the risk of being labelled unfaithful. Hence fear of social risk could lead to non use of condoms or could prevent women to discuss condom use with their partners.

A similar study among HIV sero-discordant couples in Kenya reported negative perceptions about condoms, and was reported as a barrier to dual protection (Roxby et al., 2016). Some women also reported that their partners complain that condoms reduce their sexual sensation due to various reasons, causing non-use of condoms, lowering dual protection. Similarly the issue of reduced sexual pleasure reported in this study have been reported by Ugandan men in HIV care. The men described condom use as "you don't enjoy your sweet when it is wrapped" (Nattabi et al., 2011).

Partner refusal to use condom

Partner refusal to use condom was reported by all the three sources of data as an important factors that prevent use of condoms by HHIV-positive women. Partner refusal to use condoms could have an impact on whether women are able to use dual protection or not. In addition male condoms are normally the norm and are male controlled, hence affecting their use. Although female condoms are available its use was very low with some women complaining that it is noisy and uncomfortable further limiting women's access to dual protection. Similar findings were observed in Kenya where it was found that men play a dominant role in decision-making about condoms use (Roxby et al., 2016).

Religious Beliefs

The significant role of culture and its associated religious beliefs plays a crucial role in determining contraceptive use by some HIV-positive women. In this study some women reported non compliance to dual protection because of believing in being healed of HIV. These beliefs set expectations of what women can and cannot do. Christianity calls for women to submit themselves to their husbands and to respect the decision of her husband which includes contraception use decisions.

Community stigma

HIV positive women still face and experience stigma if there contraceptive use status becomes known in the community. As expressed by the community representative, people do not expect HIV-positive women to use other methods of contraception besides condoms thus limiting dual method use among the group.

5.4.3 Health Systems Factors

The focus group discussions and the individual interviews revealed health systems factors that influence the use of dual protection by HIV-positive women. These factors could be classified into health care worker related factors and service delivery processes factors.

Health Care Worker Related Factors

According to both focus group discussion and individual interviews, health care workers were not discussing the additional benefits of dual method use with HIV-positive women thus exposing them to the risk of unintended pregnancies. Discussions around use of hormonal contraceptives seems to be completely absent between HCWs and the women in this study. From what many women said, it seemed like the message of exclusive condom use from HCWs made the women feel that they should not use any other method of contraceptive beside condoms, reducing dual method. Likewise HCWs further confirms that they do not communicate the use of hormonal contraceptive with the woman arguing that condoms on its own offer dual protection. This could be reflective of knowledge gaps and HCW's incompetence in providing good quality and comprehensive sexual reproductive health services for HIV-positive women.

Similar findings reporting lack of discussion around other contraceptives besides condoms by HCWs have been reported in Mozambique and India suggesting that HCWs prioritise sexual transmission of infections over the reproductive health needs of women (Chakrapani et al., 2014). However it is important for HCWs to know that offering HIV-positive women

condoms only, severely limits women to prevention of unintended pregnancies. This is an important aspect to note in the provision of HIV care; it can be used as useful evidence for service provision planning.

The Health care worker's interactions with HIV-positive women play an essential role in influencing dual protection use by HIV-positive women. Some HCWs possibly feel that HIV-positive women should not use non-barrier contraceptive because of their negative and judgemental attitude they show towards HIV-positive women when seeking non-barrier contraceptives. As such HIV-positive women expressed fear of being subject to stigma and thus some decided not to discuss contraceptive issues with the HCWs, hence risking unintended pregnancies. In addition, these negative experiences could suggest that HIV-positive women in Zimbabwe still face and experience stigma from HCWs, thus negatively influencing contraceptive use by the women. Similar reports about negative attitude of HCWs have been reported in Uganda (Wanyenze et al., 2011). Yet it is well known that treating clients with respect, dignity and ensuring privacy and confidentiality is a significant factor that influences uptake of contraceptives use among HIV-positive women (WHO, 2012a).

Information gaps

The study revealed some information gaps or bias of importance particularly in a high HIV prevalence and high fertility rate setting were DP plays a crucial role in reducing both transmission of infection and unintended pregnancies. The issue of potential drug interactions between hormonal contraceptives and antiretroviral therapy (ART) mentioned by both HCWs and some women during interviews is not supported by literature. The WHO medical eligibility criteria recommend use of hormonal contraceptives with ART without restriction (WHO, 2015). However, various studies in Zimbabwe, Uganda and South Africa have reported similar concerns (Kaida et al., 2010; McCoy et al., 2014; Nattabi et al., 2011). However, the WHO does recommend use of non-barrier contraceptives together with condom since there is no single method either condom or hormonal contraceptive that can completely reduce the dual risk of pregnancy and infections faced by HIV-positive women, thus promoting dual protection.

Health Service Delivery Process

Availability of a wide range of contraceptive methods

On the supply side, non-availability of a wide choice of non-barrier contraceptive at the facility was perceived as a health system barrier severely limiting women's choice of

contraceptives. Women, who mentioned non-availability of their preferred method of non-barrier contraceptive at the facility, reported no contraceptive use at all, potentially risking unintended pregnancy and infections.

Cost of Services

Another important health system barrier described in the study by both HIV-positive women and HCWs was the cost associated with transport to and from the health facility and service charges at the clinic. High poverty levels in the country meant that some women were not able to use contraceptives because of their inability to pay, consequently causing non-use of certain contraceptives. The situation is different for some countries, in India contraceptives are free and the Indian government provides incentives for tubal ligation, and intrauterine device insertion (Chakrapani et al., 2011) thus removing cost as a barrier to contraceptive use.

Long waiting times

Long waiting times at the facility was reported by both HIV-positive women and HCWS discouraged women to seek services including contraceptives consequence causing women to report an unmet need for contraception.

5.5 Facilitators of Dual Protection Use among HIV-Positive Women.

With regards to facilitating factors, the study found few factors that promote use of contraceptives by HIV-positive women with more focus on dual protection. Health related factors, HIV sero-discordant status and couples' HIV testing and counselling were perceived as important factors promoting contraceptive use, in particular condoms.

An increase in the woman's CD4 count was identified as a potential facilitator of dual protection use. Women used their increasing CD4 results to convince their partners to use condom thus encouraging dual protection. Similar findings were observed in Uganda and India (Nattabi et al., 2011; Suryavanshi et al., 2008; Wanyenze et al., 2011). However, contrary to other studies Antelman et al. (2015) reported that clinical factors such as ART treatment status and CD4 count results were not associated with dual protection use among HIV-positive couples in Tanzania, Kenya and Namibia. Another important factor that women considered, when making decisions about whether to use condoms or not, was fear of vertical transmission when pregnant and or breastfeeding. Women in the study were concerned about the potential risk of vertical transmission and expressed a feeling that they would do anything within their power to prevent this.

Being in an HIV sero-discordant couple seemed to positively potentially influence use of condoms. A possible explanation to this could be power dynamics in this patriarchal society where men often make decisions on behalf of women (Kurewa et al., 2011). However, no previous studies have reported similar findings.

The last important potential facilitator of condom use reported by the women was couples' HIV testing and counselling. Women who mentioned having tested for HIV as a couple, reported condom use. This could be due to the fact that both parties could have some knowledge and understanding about the importance of dual protection from the counselling session and were motivated to practice it. This could demonstrate the effectiveness of couples' counselling in this context. Similar findings were reported in India among married men and women living with HIV (Chakrapani et al., 2011).

5.6 HIV-Positive Women's Experiences of Contraceptives Use

The phrase 'what do we do as women' mentioned by some of the women during the discussions speaks of the limited autonomy that women have in decision-making with regards to contraceptive use in particular condoms because of their dependence on men and its demand for men's support for consistent use. However other hormonal contraceptives are women controlled and does not need men's support in use but women reported not using them, reflecting on the fact that men are the decision makers with regards to contraception use (Nattabi et al., 2011).

5.7 Study Limitations

The limitations of the study are recognised. The data discussed in this study is derived from a limited sample of HIV-positive women, two HCWs and one community representative at a health facility in Harare and therefore cannot represent the whole HIV-positive women in Zimbabwe.

The study focused on HIV-positive women in clinical care, participating in HIV support groups who might be more knowledgeable about contraception issues because of their regular contact with the service providers as opposed to other HIV-positive women not in support groups.

In addition, all the data collected for this study was self reported and was collected from women only with no male informants interviewed. This potentially introduces bias in to the study. Inclusion of men in the study would have made the findings richer since men have been shown to have control on reproductive issues of women.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS 6.1 Conclusion

In conclusion, based on the research findings, this qualitative study explored use of contraceptives among HIV-positive women and has described the barriers and facilitators that influence dual protection use. The study findings are consistent with reports from other studies regarding low usage of dual methods and inconsistent dual protection use among HIV-positive women (Antelman et al., 2015; Chakrapani et al., 2011; Roxby et al., 2016) suggesting that the call by the WHO for preventing unintended pregnancy among HIV-positive women is not prioritised. Use of dual protection, both exclusive condoms and dual method use, among HIV-positive women use has been described. The fact that some HIV-positive women reported non-use of contraceptive suggests that HIV-positive women in Zimbabwe may face dual risks of unintended pregnancy and re-infections. Use of hormonal contraceptives alone risks transmission of infection or re-infection whilst exclusive condom use does not always ensure full protection of the women against unintended pregnancies. Therefore, dual method use is preferred over a single non-barrier contraceptive method or condom use alone, for added protection against both pregnancy and infections.

The study highlighted the major factors that influence contraceptive use among HIV-positive women within this context. Most the barriers that were reported by HIV-positive women during focus group discussions were confirmed by health care workers working at the facility confirming their existence. Barriers and facilitators to contraceptive use among the women were described, with more potential barriers than facilitators identified. Health system factors related to health care provider related services and service provision factors and sociocultural factors were the major barriers associated with contraceptive use. The few facilitators revealed in this study were couples' HIV testing and counselling, an increase in CD 4 count results and fear of vertical transmission. Of note HIV sero-discordant couple was also perceived as a facilitator to condom use.

We know of no previous studies that have qualitatively described the barriers and facilitators of dual protection use among HIV-positive women in Zimbabwe. Findings from this study can be used by policy makers and health district health management team to guide future public health programs in the planning and provision of sexual reproductive health needs of HIV-positive women. The results of this study could also be used in other similar settings to improve service delivery among HIV-positive women.

The findings from this study add to the scientific body of evidence of dual protection use and factors influencing the use of non-barrier contraceptives and condoms among HIV-positive women. Findings of this study should be used to address barriers to dual protection use in the population, guiding future public health programs. The facilitating factors identified should be promoted to increase dual protection use among the women. Health system changes that address the critical barriers to dual protection use among HIV-positive women should be prioritised by strengthening health services provision. Of importance HCWs should treat HIV-positive women with dignity and respect to reduce the stigma. The role of men in dual protection use cannot be undermined. It will be injustice to focus on the woman alone in promoting dual protection use, yet it is evident that there are several factors that influence use of contraceptives are beyond the woman's control.

6.2 Recommendations

The low dual protection use and the more health system barriers revealed in the study is a reflection of the challenges in the health system with regard to contraception service provision targeting HIV-positive women, therefore should be prioritised.

6.2.1 Health service provider related services.

The information gaps in the provision of hormonal contraceptives to HIV-positive women should be evaluated on a large scale and suggest training of HCWs in sexual reproductive health needs of HIV-positive women addressing the traditional value systems which prevents HCWs from providing comprehensive good quality contraceptive services to HIV-positive women to help change the negative attitude and increasing knowledge and skills in contraception services.

HCWs need to build a relationship of trust and mutual respect with HIV-positive women to enable them to freely discuss their contraceptive needs without fear or risk of stigma. The health system should ensure policies that guarantee confidentiality, privacy and respect of HIV-positive women by empowering clients to know their rights in health.

HCWs should recognise that the information they give to women is important and has a great influence on the women's reproductive health decisions. Hence accurate messages should be given to the women to increase awareness and knowledge about dual protection. Also health managers should continuously monitor and supervise HCWs on the ground to ensure that the women receive relevant adequate information regarding dual protection.

6.2.2 Access to Contraception Services

The unavailability of wide choice of contraceptives and the service fee charges reported by the women as a barrier to contraceptive use needs to be prioritised and addressed. A wide range of non-barrier contraceptive options should be available at the facility to increase utilization.

6.2.3 Side effects of non-barrier contraceptives

The known possible contraceptive method side effect of each contraceptive should be discussed by the HCWs to help the women prepare themselves for the side effects, to avoid method side effect becoming a barrier to contraceptive.

6.2.4 Promoting Male Involvement in Sexual Reproductive Health Services

The fact that male involvement was reported to be an important factor in promoting dual protection use among the women should be noted. More active role for male partners should be encouraged. Couple counselling should be encouraged and the health system should put strategies in place that promote male involvement in sexual and reproductive health activities and services through distribution of information and education materials, advertisements and drama.

6.2.5 Community involvement

Community leaders and religious leaders are key players in promoting dual protection use addressing the myths and misconceptions around condom use and use of non barrier contraceptives by HIV-positive women.

6.2.6 Future Research

More research is needed to explore how socio-cultural and religious beliefs may act as either a barrier or promoter of dual protection use by HIV-positive women. Also further research is needed in different settings to establish whether the findings can be generalized to other settings. Finally, the nature of the study being a mini thesis, no further data collection was done due to limited resources in terms of funding and time. The researcher suggests further research that includes additional respondents, service providers from the Ministry of Health family planning clinic, Spilhaus, where women were referred for long acting methods.

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8.0 APPENDICES

Appendix 1. Focus Group Discussion Participant Information Sheet (English).



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Revised: September 2014

PARTICIPANT INFORMATION SHEET FOR THE FOCUS GROUP DISCUSSION

Project Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

What is this study about?

This is a research project being conducted by Precious Chandiwana an MPH student at the University of the Western Cape. We are inviting you to participate in this research project because you are a woman, HIV-positive participating in this PMTCT program at this clinic which is one of the study site.

The purpose of this research project is to have an in-depth understanding of the factors that are either barriers to or facilitators of family planning use by HIV-positive women participating in a prevention of mother-to-child transmission program in an urban setting in Zimbabwe. The findings from this study will help to inform policy makers and City of Harare health management team to development family planning programs which are tailored to the needs of women living with HIV thus promoting sexual and reproductive health of the community at large.

What will I be asked to do if I agree to participate?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

The FGD will be conducted at the clinic in a closed room that offers privacy. The focus group discussion will explore on the family planning use by HIV-positive women and also to assess the facilitators and barriers of family planning from your perspective. The focus group discussion will be conducted using 8-12 participants. A tape recorder will be used, with your permission, to record the discussion and I will also write down some notes to ensure that I capture all the discussion. The total time to conduct the discussion is approximately 45 to 60 minutes. The interview will take place in July and the study will be completed by December 2015.

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, all information collected will be password protected and each member will assign herself pseudonyms during focus group discussion and we will use identification codes only on data forms for the interview. The researcher will be the only person able to link your data form to your identity. All data forms will be kept under lock and key. All forms on computer will be protected through use of password-protected computer files. If we write a report or article about this research project, your identity will be protected. The extent to which your identity will remain confidential is dependent on participants in the Focus Group maintaining confidentiality.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning or potential harm to you or others.

What are the risks of this research?

There may be some risks from participating in this research study.

All human interactions and talking about self or others carry some amount of risks. The sensitivity of HIV and FP means that a participant's emotional response is a potential risk. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary provision for further counselling and support services will be available at the clinic if need arises, including referrals for FP.

What are the benefits of this research?

Participation in this study is entirely voluntary. There is no remuneration for taking part in the study. This research is not designed to help you personally, but the results may help the investigator learn more about sexual and reproductive health of HIV-positive women. We

hope in the future, other people might benefit from this study through improved understanding of sexual and reproductive needs of HIV-positive women.

Describe the anticipated benefits to science or society expected from the research, if any.

Findings from this study will help to inform policy makers and City of Harare health management team to development family planning programs which are tailored to the needs of women living with HIV thus promoting sexual and reproductive health of the community at large.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is entirely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Precious Chandiwana*, *Master of Public Health student* at the University of the Western Cape. If you have any questions about the research study itself, please contact Precious Chandiwana, 17236 Eland close, Harare, or +263775495566 and pure.chandiwana@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact: Director Prof Helene Schneider, UWC School of Public Health hschneider@uwc.ac.za

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research participant or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe (MRCZ) on telephone (04)791792 or (04) 791193 and cell phone lines 0772 433 166 or 0779 439 564. The MRCZ Offices are located at the National Institute of Health Research premises at Corner Josiah Tongogara and Mazowe Avenue in Harare.

Appendix 2. Focus Group Discussion Participant Information Sheet (Shona).



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Revised: September 2014

PARTICIPANT INFORMATION SHEET FOR THE FOCUS GROUP DISCUSSION:

SHONA.

Project Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive

Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban

setting in Harare, Zimbabwe.

Nhanganyaya

Makadiii zvenyu? Zita rangu ndinonzi muzvare Precious Chandiwana mudzidzi paUniversity

of Western Cape, South Africa. Ndinokukokaiwo muongororo yandiri kuita sechikamu

chezvidzidzo zvangu iyo irikutarisa kushandiswa kwenzira dzokuronga mhuri (family

planning) nemadzimai arikurarama nehutachiona hwe HIV wanobatsirwa paclinic yemuguta

reHarare. Imi masarudzwa kupinda muongororo ino nokuti murikurarama nehutachiona

hweHIV uyezve murikurapwa pakiriniki ino inowa imwe yekiriniki dzemuguta reHarare.

uyezve munobatsitsirwa pachipatara pano panowa ndipo parikuitirwa ongororo iyi.

Chinagwa chetsvakiridzo ino kuda kunzwisisa zvakadzama mashandisirwe ezvekuronga

mhuri nemadzimai arikurarama nehutachiona hweHIV. Zvinofungidzirwa kuti madzimai

mazhinji arikurarama nehutachiona wanoita pamuviri wasina kupatarisira.

Zvichaitwa

Kupinda muongororo iyi kuri pachena. Munogona kuramba kupinda zvachose. Uyezve kana

mukabvuma kupinda mune kodzero zvakare yokuzobuda chero pachikamu chipi zvacho

chechirongwa. Hazvina mhosva kuti masarudzei, zvese hazvishandure marapirwe enyu

amagara muchiitwa pano.

71

Hurukuro iyi ichaitirwa pano pachipatara muimba yakavharika. Ichaitwa muzvikwata zvemadzimai anokwana kuita masere kana gumi nevaviri. Tichitapa zvose zvatichakurukura uyezve nokunyora zvose zvinenge zvichiitika pahurukuro iyi nemvumo yenyu. Tinotarisra kuti hukuro iyi inogona kutora 45 minitsi kusvika kuhour imwe chete (45-60 minutes)

Kana pachizenge paita vamwe madzimai vanenge waine dzakadzama zvakakasangana nazvo takarisana nezvekuronga mhuri tichawakumbira kuzoita imwe hurukuro nayo zvakare

Kuchengetedzwa kweumbowo huchabuda mutsvakiridzo (confidentiality)

Zvinobuda mutsvakiridzo ino zvichachengetedzwa pazvisingaonekwi uye pakakiyiwa. Pazvinyorwa zvinobuda mutsvakiridzo ino hapazonyorwi mazita enyu kana zvingaite kuti zvinongedzere kwamuri. Hakuna mumwe munhu anogona kubatanidza zvichabuda muongororo iyi kunze kwedu vanhu wari mutsvakiridzo chete. Zvakare kuchengetedzwa kwezvichabuda muhurukuro ino kunobatsirwa nekuchengetedza kuchaita madzimai ose ari pano hurukuro iyi.

Zvimhingamupinyi nekurwadziwa

Hapana zvimhingamupinyi zvinotarisirwa kana mada kupinda mutsvakiridzoo ino. Hongu tingangotarisira kuti pangangawa nokusagadzikana kungagnoitika kanowanzoitika panokurukura vanhu nezveupenyu hwawo. Kana zvikaitika tinokutumirai kune vana mukoti kana macounsellor epachipatara pano.

Zvinobatsira uye zvamunowana

Hapana zvamunotarisirwa kuwana kana mukapinda mutsvakiridzo ino, asi tinovimba kuti zvichabuda muhurukuro ino zvichabatsira kuwandutsa hutano hwemadzimai takatarisana nezvekuronga mhuri nehutachiona hweHIV.

Ndinotarisirwa kupinda muongoro iyi here uyezve ndinigona kuzobuda chero ipi nguva?

Kupinda muongororo iyi kuri pachena. Munogona kuramba kupinda zvachose. Uyezve kana mukabvuma kupinda mune kodzero zvakare yokuzobuda chero pachikamu chipi zvacho chechirongwa. Hazvina mhosva kuti masarudzei, zvese hazvishandure marapirwe enyu amagara muchiitwa pano.

Mibvunzo

Ongororo iyi iri kuitwa naPrecious Chandiwana, mudzidzi pachikoro che Public Health pachikoro che Western Cape, South Africa, Kana muine mubvunzo makasunguka kubvunza mibvunzo yose yamunawo kwaari, iko zvinokana mukave nemibvunzo pamberi mugona kubata panhamba dzerunhare dzinoti 0775 495 566. Zvakare munogona kutaura na Prof Helene Scheineider, anowa mukuru wechikoro chaaridzidza panhamba pakero inoti: UWC School of Public Health, hschneider@uwc.ac.za

Kana paine zvimwe zvamungade kanzwisisa kubva kune mumwe asiri muchikwata chetsvakiridzo ino makasununguka kutaura neve Medical Research Council of Zimbabwe (MRCZ) panhare dzinotevera 791792 kana 791193. Mahofisi awo anowanikwa pakero inotevera National Institute of Health Research Corner Josiah Tongogara. Mazowe Avenue muHarare.



Appendix 3. Focus Group Discussion Confidentiality binding form (English)



UNIVERSITY OF THE WESTERN CAPE

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e-mail: soph-comm@uwc.ac.za

FOCUS GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants' in the Focus Group maintaining confidentiality. I hereby agree to the following:

| I agree to uphold the confidentiality of the discussions in the focus group by not disclosing |
|--|
| the identity of other participants or any aspects of their contributions to members outside of |
| the group. |

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the researcher: Precious Chandiwana, 17236 Eland close, Harare, or +263775495566 and pure.chandiwana@gmail.com

| Participant's name | .Signature | Date |
|--------------------|------------|------|
| Researcher | Signature | Date |
| Witness | Signature | Date |

Version Date: 15 September 2014

Appendix 4. Focus Group Discussion Binding Form (Shona)



UNIVERSITY OF THE WESTERN CAPE

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E-mail: : soph-comm@uwc.ac.za

Version Date: 15 September 2014

FOCUS GROUP CONFIDENTIALITY BINDING FORM: SHONA

Title of Research Project: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

Tsvakuridzo iyi yatsanagurwa ndikaverenga ndikanzwisisa. Ndabvunza mibvunzo yose ndikapindurwa zvandigutsa. Ndazvipira kupinda mutsvakurudzo iyi uyezve ndanzwisisa kuti zita rangu nehurukuro dzose dzatichaita zvakachengetedzwa. Zvakare kuchengetedzwa kwehurukuro yedu kuri zvakare pakati pedu kugona kusabuditsa mazita evanhu nezvese zvawataura.

UNIVERSITY of the WESTERN CAPE

Naizvozvo ndabvuma kuti handisikuzokurukura zvose zvitakurukura pano kune vamwe vanhu.

| Zita | Runyoro | Date | |
|-----------------------|---------|------|--|
| | | | |
| | | | |
| Zita romutsvakuridzi. | Runyoro | Date | |

Focus Group Confidentiality Binding Form

Appendix 5. HCW Participant Information Sheet (English)



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Revised: September 2014

HEALTH CARE WORKER PARTICIPANT INFORMATION SHEET

Project Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

What is this study about?

This is a research project being conducted by Precious Chandiwana an MPH student at the University of the Western Cape. We are inviting you to participate in this research project because you are a health care provider working in this PMTCT program at the clinic where the research is being conducted. We would like to hear your opinion on the use of family planning among HIV Positive women in this area.

The purpose of this research project is to have an in-depth understanding of the factors that are either barriers to or facilitators of family planning use by HIV-positive women participating in a prevention of mother-to-child transmission program in an urban setting in Zimbabwe. Findings from this study will help to inform policy makers and City of Harare health management team to development family planning programs which are tailored to the needs of women living with HIV thus promoting sexual and reproductive health of the community at large.

What will I be asked to do if I agree to participate?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

The in-depth interviews will be conducted at this clinic at time that is convenient to you at a place that offers privacy. A tape recorder will be used with your permission to record the

discussion and I will also write down some notes to ensure that I capture all the discussion. The total time to conduct the discussion is approximately 30 to 45 minutes. The interview will take place in July and the study will be completed by December 2015.

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, all information collected will be password protected and each member will assign herself pseudonyms during the interview and we will use identification codes only on data forms for the interview. The researcher will be the only person able to link your data form to your identity. All data forms will be kept under lock and key. All forms on computer will be protected through use of password-protected computer files. If we write a report or article about this research project, your identity will be protected.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning or potential harm to you or others.

What are the risks of this research?

There may be some risks from participating in this research study.

All human interactions and talking about self or others carry some amount of risks. The sensitivity of HIV and FP means that a participant's emotional response is a potential risk. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary provision for further counselling and support services will be available at the clinic if need arises.

What are the benefits of this research?

Participation in this study is entirely voluntary. There is no remuneration for taking part in the study. This research is not designed to help you personally, but the results may help the investigator learn more about sexual and reproductive health of HIV-positive women. We hope in the future, other people might benefit from this study through improved understanding of sexual and reproductive needs of HIV-positive women.

Describe the anticipated benefits to science or society expected from the research, if any. Findings from this study will help to inform policy makers and City of Harare health management team to development family planning programs which are tailored to the needs of women living with HIV thus promoting sexual and reproductive health of the community at large.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is entirely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Precious Chandiwana*, *Master of Public Health student* at the University of the Western Cape. If you have any questions about the research study itself, please contact Precious Chandiwana, 17236 Eland close, Harare, or +263775495566 and pure.chandiwana@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact: Director Prof Helene Schneider, UWC School of Public Health hschneider@uwc.ac.za

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research participant or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe (MRCZ) on telephone (04)791792 or (04) 791193 and cell phone lines 0772 433 166 or 0779 439 564. The MRCZ Offices are located at the National Institute of Health Research premises at Corner Josiah Tongogara and Mazowe Avenue in Harare.

Appendix 6. Informed Consent form (English)



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959, Fax: 27 21-959

E-mail: : soph-comm@uwc.ac.za

CONSENT FORM

Title of Research Project: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

WESTERN CAPE

| Participant's name | Signature | Date |
|--------------------|------------|------|
| Name of Researcher | Signature | Date |
| Witness | .Signature | Date |

Consent Form Version Date: 15 September 2014



Appendix 7. Informed Consent form (Shona)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959, Fax: 27 21-959

E-mail: : soph-comm@uwc.ac.za

CONSENT FORM/GWARO REMVUMO

Title of Research Project: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

Tsvakuridzo iyi yatsanagurwa ndikaverenga ndikanzwisisa. Ndabvunza mibvunzo yose ndikapindurwa zvandigutsa. Ndazvipira kupinda mutsvakurudzo iyi uyezve ndanzwisisa kuti zita rangu nehurukuro dzose dzatichaita zvakachengetedzwa.

Consent Form Version Date: 15 September 2014

Appendix 8. Focus Group Discussion Guide

Guide to conduct Focus Group Discussion for the HIV-positive women

Study Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

Thank you for being willing to take part in this focus group discussion. Before we start the discussion, I want to confirm that you have read and understood the participant information sheet, all your question concerning the study has been answered and you have each signed the informed consent form and FGD confidentiality binding form and allowed us to record this discussion.

Do you have questions before we proceed?

Ndatenda zvikuru nokubvuma kupinda mutsvakiridzo yangu. Chokutanga ndinoda kuziwa kuti mose maverenga tsamba yetsvakiridzo here, uyezve mibvunzo yenyu yose yapindurwa mukagitsikana. Zvakare manzwisisa kuti hurukuro ino inenge ichitapwa.

Pane ane mubvunzo here tisati tatanga

Can we start by introducing ourselves, by telling us how do you want to be called during this discussion?

Tingatange here nokuziwana, udzai vadare wedu kuti munoda kusheedzwa sei muhurukuro iyi?

To start off our discussion can you start by telling what comes to your mind when we talk about FP?

Chokutanga mangandiudza here kuti ndezvipi zvinouya mundangariro menyu mukanzwa kuti kuronga mhuri (Family planning)

What is your understanding of dual protection?

Ndiudzei zvamunonzwisisa nezve dual protection?

What are the things that make it possible for you to access contraception if you want it?

Ndezvipi zvinhu zvinokuitirai nyore kuti mukwanise kuwana zvokuronga mhuri pamunenge muchizvida?

Are you using any method of contraceptive at present?

Muri kushandisa nzira yokuronga mhuri here parizvino?

If yes, what and why

Kana iri hongu, ipi nzira uyezve nemhaka yei?

What are some of your reasons for choosing /liking it?

Ndezvipi zvimwe zvinhu zvakaita kuti mude nzira iyi?

What are/would be the difficulties for you in sticking to the method you prefer?

Pane zvinhu zvamunofunga kuti zvinokutadzisai kushandisa nzira yekuronga mhuri yamunonyatsoda?

What would make it easier for you to stick to the method you prefer?

Ndezvipi zvinokuitira nyore kuti murambe muchishandisa nzira yenyu yokuronga mhuri?

Can you tell me more on your experiences of FP use since your diagnosis of HIV?

Mungandiudza here nhorondo yezvamakasangana nazvo maererano nokuronga mhuri kubva pamakaziwa kuti munehutachiona hweHIV?

• Has anything changed, how?

Pane zvakachinja here pane takatarisana nenzira dzekuronga mhuri, zvakazhinja sei?

• Whom did you consult?

Pane wamakabvunza here? Makabvunza ani?

What were you told by those people/ what advice on FP did you received?

Makaudzwa kuti chii?/ Nderupi rubatsiro rwamakapihwa?

• What is your interaction with the health services providers?

Muno wadzana zvakadii ne vashandi wehutano?

How do you feel about this experience?

Munonzwa sei nenyaya iyi?

Can I finally ask you if you think there is any aspect of your FP experience that has not been covered in this discussion?

Regai ndipedzise nokubvunza kuti zvinhu zvamunofunga kuti zvasara takatarisana nenyaya dzokuronga mhuri zvatisina kukurukura?

Thank you very much for your participation.

Ndatenda zvikuru nokukurukura kwaita.



Appendix 9. Guide to conduct In-depth Interview with Health Care Workers

Study Title: Exploration of Factors Influencing Contraceptive Use among HIV-Positive Women Participating in a Prevention of Mother-to-Child Transmission Program in an urban setting in Harare, Zimbabwe.

Thank you for being willing to take part in this interview. Before we start the discussion, I want to confirm that you have read and understood the participant information sheet, all your question concerning the study has been answered and you have signed the informed consent form and agreed to be audio taped.

Do you have questions before we proceed?

Can you start by telling me about yourself?

What is your experience of working with HIV-positive women?

What comes to your mind when we talk about contraception?

What do you understand by dual protection?

Tell me the types of FP method you offer at this clinic?

What is your experience regarding use of FP by HIV positive women?

Can you tell me about how you would respond to an HIV positive women who you encountered in the clinic that wanted FP or needed FP counselling?

Probes: what would you offer and why?

How would you treat then differently to other women and why?

What do you consider important when dealing with an HIV positive women and her contraception needs?

In your opinion what are the things that HIV positive women consider when choosing a family planning method?

What do you think are the contraception needs of HIV-positive women in this area?

Tell me how you feel about use of contraceptives by HIV positive women?

Thank you for all the valued information you have given me. Can I finally ask you if you think there is any aspect of use of FP by HIV positive women that has not been covered in this discussion?

Thank you very much for your participation



Appendix 10. UWC Ethics Approval



OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

29 January 2015

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by: Ms P Chandiwana (School of Public Health)

Research Project:

Exploration of factors influencing the use of family planning among HIV positive women participating in a prevention of mother-to-child transmission program in a peri-urban setting in Zimbabwe.

Registration no:

14/10/39

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

poies

Ms Patricia Josias Research Ethics Committee Officer University of the Western Cape

Private Bag X17, Bellville 7535, South Africa T: +27 21 959 2988/2948 . F: +27 21 959 3170 E: pjosias@uwc.ac.za www.uwc.ac.za

A place of quality, a place to grow, from hope to action through knowledge

Appendix 11. City of Harare Permission Letter



CITY OF HARARE

Director of Health Services

DR PROSPER CHONZI MBChB, MPH,MBA

23 June 2015

Precious Chandiwana 17236 Eland close Borrowable West HARARE All correspondence to be addressed to the DIRECTOR OF HEALTH SERVICES

Ref:----

Your Ref:----

DIRECTOR OF HEALTH SERVICES

Rowan Martin Building, Civic Centre, Pennefather Avenue, off Rotten Row, Harare, Zimbabwe.

F.O. Box 596 Telephone: 753326 753330/1/2 Fax: (263-4) 752093

Dear Madam

RE: PERMISSION TO CARRYOUT A RESEARCH AT POLYCLINICS

I acknowledge receipt of your letter in connection with the above

Permission has been granted for you to conduct carryout a research titled: "Exploration of Factors influencing use of family planning among HIV positive women participating in the PMTC program in Zimbabwe" at City Health Polyclinics.

For further assistance please liaise with the Sisters in Charge at City Health Polyclinics.

Yours faithfully

DIRECTOR OF HEALTH SERVICES

IM/rm

c.c.

Sisters in Charge Nursing Manager Ethics committee City Health Polyclinics

Appendix 12. Medical Research Council of Zimbabwe (MRCZ) Approval Letter

Telephone: 791792/791193 Telefax: (263) - 4 - 790715 E-mail: mrcz@mrcz.org.zw Website: http://www.mrcz.org.zw



Medical Research Council of Zimbabwe Josiah Tongogara / Mazoe Street P. O. Box CY 573 Causeway Harare

APPROVAL

REF: MRCZ/B/877

13 July 2015

Precious Chandiwana University of Western Cape P Bag X 17, Bellville 7535 Cape Town

RE:- Exploration of factors influencing the use of Family Planning among HIV positive women participating in the Prevention of Mother To Child Transmission program in an urban setting in Zimbabwe

Thank you for the application for review of Research Activity that you submitted to the Medical Research Council of Zimbabwe (MRCZ). Please be advised that the Medical Research Council of Zimbabwe has <u>reviewed</u> and <u>approved</u> your application to conduct the above titled study.

This approval is based on the review and approval of the following documents that were submitted to MRCZ for review:-

- a) Study proposal
- b) Questionnaire (English and Shona)
- c) Informed Consent form (English and Shona)

TYPE OF MEETING

: Expedited

• EFFECTIVE APPROVAL DATE

: 13 July 2015

EXPIRATION DATE

: 12 July 2016

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the MRCZ Offices should be submitted three months before the expiration date for continuing review.

- •SERIOUS ADVERSE EVENT REPORTING: All serious problems having to do with subject safety must be reported to the Institutional Ethical Review Committee (IERC) as well as the MRCZ within 3 working days using standard forms obtainable from the MRCZ Offices or website.
- •MODIFICATIONS: Prior MRCZ and IERC approval using standard forms obtainable from the MRCZ Offices is required before implementing any changes in the Protocol (including changes in the consent documents).
- •TERMINATION OF STUDY: On termination of a study, a report has to be submitted to the MRCZ using standard forms obtainable from the MRCZ Offices or website.
- •QUESTIONS: Please contact the MRCZ on Telephone No. (04) 791792, 791193 or by e-mail on mrcz@mrcz.org.zw

Other

- Please be reminded to send in copies of your research results for our records as well as for Health Research Database.
- You're also encouraged to submit electronic copies of your publications in peer-reviewed journals that may emanate from this study.

Yours Faithfully

MRCZ SECRETARIAT FOR CHAIRPERSON

MEDICAL RESEARCH COUNCIL OF ZIMBABWE

PROMOTING THE ETHICAL CONDUCT OF HEALTH RESEARCH