

PERCEPTIONS OF ADOLESCENT GIRLS AND YOUNG WOMEN
REGARDING HIV PRE-EXPOSURE PROPHYLAXIS USAGE AT PUBLIC
HEALTH FACILITIES IN KATIMA MULILO, ZAMBEZI REGION,
NAMIBIA

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ABSTRACT

Zambezi population and most especially adolescent girls, and young women are at high risk of HIV infection. This is evidenced by the prevalence of HIV among adults aged 15 to 64 in Zambezi region at 22.3 %. Among this percentage, the number of new infections among adolescent girls and young women was at 2,323 in 2016 to 2017. The Ministry of Health and Social services has the HIV preventative guidelines in place which provides free HIV Pre-Exposure Prophylaxis (PrEP) to the high-risk population as a preventative measure. The data shows only 147 people initiated on PrEP in Zambezi health facility between August 2017 and July 2018. The number of new infections outweigh the PrEP initiations per year. Therefore, the study titled “perceptions of adolescent girls and young women regarding HIV pre-exposure prophylaxis usage at public health facilities in Katima Mulilo, Zambezi region, Namibia” was conducted. This qualitative exploratory descriptive design study utilised the socioecological model to explore and describe the perceptions of adolescent girls and young women aged 18-24 years regarding HIV PrEP usage at public health facilities in Katima Mulilo, Zambezi region. The study was conducted at three health facilities that are offering HIV PrEP. Twelve (12) face-to-face semi-structured interviews were conducted with adolescent girls and young women aged 18-24 years who visited the health facility for an HIV test or presented with signs and symptoms of a sexually transmitted infection and tested HIV negative during data collection process. Purposive sampling technique was used on participants who met the inclusion criteria. Participants were employed until data saturation. Four (4) themes and several subthemes emerged from the data collected and formed part of the findings of this study. The identified themes were; participants perceived factors that influence the usage of HIV pre-exposure prophylaxis, providers and health facilities factors that influence the usage of HIV pre-exposure prophylaxis among adolescent girls and young women.

Furthermore, participants also perceived health policy factors that influence the usage of HIV pre-exposure prophylaxis among adolescent girls and young women. Participants recommended solutions to facilitate the provision of HIV pre-exposure prophylaxis among adolescent girls and young women. The study concluded that adolescent girls and young women decision on using HIV PrEP from health facilities in Katima Mulilo is influenced by social factors based on individual, interpersonal and society. Furthermore, the results also indicated that there is poor awareness and education on HIV PrEP usage as well as poor HIV PrEP services at health facilities. Therefore, the study recommends the establishment of functional and well supervised adolescent friendly corners to increase HIV PrEP usage among adolescents' girls and young women. In addition, the study suggests reviewing the HIV PREP policies to strengthen and decentralize the HIV PrEP awareness campaigns. Finally, further methodologically sound research is needed to investigate the experiences and influences of HIV PrEP usage among adolescent girls and young women.

Keywords: Perceptions, Adolescent Girls and Young Women, HIV Pre-Exposure Prophylaxis usage, Public health facilities included in abstract

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DEDICATION

I firstly dedicate this study to my God, thank you almighty for the gift of life and strength.

Secondly I dedicate this study to my husband Christopher, my two beautiful children, Christopher (Jnr) and Anna. I was able to complete this study through your encouragement.

Thirdly, I dedicate this study to my parents Mr and Mrs Mombela, your encouragement and dedication towards my education is much appreciated, continue sending your blessings and prayers for they fortify me to be able to face any challenges which comes my way.

Finally, I dedicate this study to all the Adolescent Girls and young Women who took part in this study, your experiences and struggles regarding HIV PrEP usage are acknowledged. Continue supporting and encouraging each other to create a HIV/AIDS free generation.

DECLARATION

I, Miliko Fortune Sisamu, declare that the study titled “PERCEPTIONS OF ADOLESCENT GIRLS AND YOUNG WOMEN REGARDING USAGE OF HIV PRE-EXPOSURE PROPHYLAXIS AT PUBLIC HEALTH FACILITIES IN KATIMA MULILO, ZAMBEZI REGION, NAMIBIA” is my own work. The researchers or authors who have contributed to this study have been duly recognized within the text and in the reference list. This work is original and has not been previously submitted for a degree at another university, in part or in full. Reproduction, storage, or transmission of this thesis in any form, known or unknown, is prohibited without prior permission from the author or the University of Namibia. If this thesis is published by any publishers, I, Miliko Fortune Sisamu, grant the University of Namibia the right to reproduce it wholly or partially in any format deemed suitable for educational or research purposes. However, this right will be waived if the thesis is published in a manner approved by the university.



Signature of student

October 2024

Date of signature

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE PROBLEM.

1.1 INTRODUCTION AND RATIONALE

According to the World Health Organization (2017), HIV Pre-Exposure Prophylaxis (PrEP) is a medication that contains antiretroviral drugs used to prevent HIV infection in individuals who are not already infected. People who are at a high risk of contracting HIV are offered PrEP, which consists of the antiretroviral medications tenofovir disoproxil fumarate (TDF) and emtricitabine (FTC), as a prevention option (World Health Organization, 2017). Furthermore, when taken as directed on a daily basis, PrEP has been proven to reduce the risk of HIV infection by about 99% (WHO, 2017). It is recommended by the World Health Organization that, for individuals at high risk of HIV infection to use PrEP, as it prevents the virus from establishing itself in the body and spreading. While PrEP is highly effective in preventing HIV when used correctly, its effectiveness decreases significantly when not taken as prescribed (World Health Organization, 2017; Fonner et al., 2016).

Adolescent girls and young women (AGYW) between the ages of 15 and 24 are considered to be at a heightened risk of contracting HIV (Fonner et al., 2016). In Eastern and Southern Africa, AGYW aged 15-24 make up 68% of young people living with HIV (WHO, 2017). AGYW are twice as likely as their male counterparts to acquire HIV, and in 2020 alone, they accounted for 26% of new HIV infections in Africa (WHO, 2017).

In the United States in 2014, women represented nearly one-fifth (19%) of new HIV infections. Additionally, among women diagnosed with HIV about 1/4 were women aged 13-24, while approximately 11% unaware of their infection status (Mameletzis et al., 2018). Women

comprised 25% of the estimated 20,792 AIDS diagnoses among adults and adolescents in 2014 and represented 20% of the approximately 1.2 million cumulative AIDS diagnoses from the beginning of the epidemic through the end of 2014 (Gisslen et al., 2017).

The World Health Organization recommends the use of HIV PrEP as a preventive measure. However, studies have shown low demand and suboptimal adherence to PrEP among AGYW due to challenges such as accessibility issues, poor interactions with healthcare providers, including judgmental attitudes and lack of confidentiality (WHO & UNICEF, 2021). AGYW may also be hesitant to start PrEP due to perceptions of low HIV risk, concerns about side effects, fear of stigma associated with multiple sexual partners or being HIV positive, and lack of support from partners or parents. Even after starting PrEP, many AGYW struggle to use it correctly and consistently, sometimes discontinuing it while still at risk of acquiring HIV. Therefore, this study aimed to explore and describe perceptions of adolescent girls and young women regarding the use of HIV pre-exposure prophylaxis at public health facilities in Katima Mulilo, Zambezi region, Namibia.

1.2 BACKGROUND TO THE STUDY

Globally, PrEP has been on demand as a recommended prophylaxis medication (Fitch et al, 2018). According to a global analysis conducted by AIDS Vaccine Advocacy Coalition (AVAC) and the Clinton health access initiative, at least 381,580 people started to take PrEP in 68 countries, whereby, 5% of PrEP users are in North America (Fitch et al., 2018). A study conducted in America found barriers to PrEP awareness among AGYW. The study suggested that there is a lack of PrEP education in school HIV curriculum and failure of community leaders to sensitize and engage AGYW (Begnel et al., 2019). The same study suggested that, low uptake is associated with PrEP myths, confusion between PrEP and HIV treatment, and inaccurate understanding of who could benefit from PrEP and duration of use. Furthermore, AGYW in the study believed that PrEP is only for married/pregnant women or must be taken

for life. To add on, PrEP use was viewed as unacceptable for AGYW in some communities because PrEP would increase “promiscuous” behaviour, leading to decreased use of condoms and contraception, and increased STI incidence and pregnancy rates (Begnel et al., 2019).

There has been a scale up of PrEP in several African countries, while relatively few people are taking PrEP in Europe, Asia, and other parts of the world. Similarly, during a conference on HIV research for prevention, Fitch et al., (2018) from AVAC shared findings indicating that 103,000 individuals in sub-Saharan Africa (constituting 27% of the total) are currently using PrEP. However, this figure falls below the ambitious goal of 142,000 that was initially established. Additionally, the use of PrEP is overwhelmingly concentrated in a handful of countries like Kenya, South Africa, Uganda, Zimbabwe, and Lesotho. Most African PrEP users are adolescent girls and young women whereby much of this PrEP is delivered as part of research studies or non-governmental organizations as a rapid scale-up. Adherence to the prescription might be difficult due to limited or lack of the supply. (Fitch et al., 2021).

In another study conducted in Malawi, results showed that about 68% high-risk AGYW were interested in PrEP. 26% of the AGYW expressed a high level of perceived HIV risk (Maseko et al., 2020). In May 2017, the Namibia Medicine Regulatory Council (NMRC) granted approval for the use of PrEP as a preventive measure against HIV transmission among individuals who are sexually active and HIV negative, or who engage in high-risk sexual behaviors such as inconsistent condom use (Ministry of Health and Social Services, 2017). Two drugs were approved for PrEP namely TDF (Tenofovir) and FTC (Emtricitabine). The Ministry further emphasised that it launched a project to combat the spread of HIV infection among AGYW called; President Emergency Plan for AIDS Relief (PEPFA), Determined, Resilient, Empowered, AIDS-free Mentored, and safe (DREAMS). This program is a combination of biomedical, social and economic interventions offered to adolescent girls and young women

aged 10 to 24 years under (I-TECH). The project was piloted in Khomas and Zambezi regions with an objective to decrease new HIV infections among adolescent girls and young women using evidence-based interventions, which includes offering HIV PrEP (Ministry of Health, and Social Services, 2019).

In Namibia, a study conducted by Vasco and Crowley (2022) showed that young women were aware of their risk of acquiring HIV. Risks such as lack of awareness of their partner's HIV status, a lack of trust in their partners, or being in a sexual relationship with a partner living with HIV which prompted them to use HIV PrEP. On the other hand, this could be due to awareness of information provided by healthcare workers, peers, and the media. Furthermore, the same authors observed that using PrEP empowered young women for self-care by enabling them to make choices about managing their risk. Moreover, some women persisted using PrEP despite several challenges, including the lack of privacy, stigma, and inadequate support.

1.3 STATEMENT OF THE PROBLEM

Findings from a survey carried out by the Namibia Population Based HIV Impact Assessment (NAMPHIA) between June and December 2017 revealed that the Zambezi region had the highest HIV prevalence among adults aged 15 to 64 in 2017. The HIV prevalence rate in the Zambezi region was recorded at 22.3%. Additionally, the incidence of HIV was higher among adolescent girls and young women aged 15-24 years (0.99%) compared to young men in the same age group (0.03%). The number of new infections among adolescent girls and young women was 2,323 in 2016. Additionally, it was reported that from August 2017 until July 2018 there has been a total number 147 people both female and male initiated on PrEP - this number is less compared to the number of new infections diagnosed in that same year (Ministry of Health and Social Services, 2019). Despite the availability and free provision of PrEP in health facilities, the number of new HIV infections continues to rise among adolescent girls and young

women (Ministry of Health and Social Services, 2019). On the other hand, the increasing cases of HIV infections, data indicates that AGYW are poorly using the available HIV preventive measures in Zambezi region (Columbia, 2017). As a result, the researcher became concerned about the data indicating increasing number of new HIV infections among AGYW. Therefore, the researcher became interested in exploring the perceptions of AGYW regarding HIV PrEP usage at public health facilities in Katima Mulilo, Zambezi region and to offer suggestions or advice based on the results.

1.4 AIM OF THE STUDY

The aim of the study was to explore and describe the perceptions of adolescent girls and young women regarding PrEP usage at public health facilities in Katima Mulilo, Zambezi region.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were to:

- Explore the perceptions of adolescent girls and young women regarding PrEP usage at public health facilities in Katima Mulilo, Zambezi region.
- Describe the perceptions of regarding PrEP usage at public health facilities in Katima Mulilo, Zambezi region.
- To develop recommendations concerning the perceptions of adolescent girls and young women on PrEP usage at public health facilities in Katima Mulilo, Zambezi region.

1.6 SIGNIFICANCE OF THE STUDY

The results of this study aimed at informing the management of primary health care facilities and other decision-making bodies about the perceptions of female use regarding HIV PrEP usage at public health facilities in Katima Mulilo, Zambezi region. The findings in this study might then influence policy makers and the authorities to develop inventive approaches that

would be effective in increasing HIV PrEP usage at public health facilities in Katima Mulilo, Zambezi region. Furthermore, this study could provide some form of baseline data for further and broader research in Zambezi region.

1.7 PARADIGMATIC PERSPECTIVE OF THE RESEARCH

For the community that shares them, a paradigm is a set of presumptions, concepts, values, and behaviours that define how they see the world. (Matthews and Ross, 2014). Matthews and Ross (2014), further describe a paradigm as a map, pointing one in the direction of the issues that need to be addressed, the theories that are reasonable and the steps required to resolve the issues. Roles of a paradigm are defined as how the world operates, how knowledge is derived from it, and how people should think, write, and discuss it (Brink, 2018). Furthermore, paradigms preserve study consistency by aligning with theory, design, and findings, for instance (Brink, 2018).

It is against these reasons that in this study, a constructive paradigm was used to guide the researcher. Constructive paradigm is a method that proposes that through experiencing things and thinking back on them, humans create their own knowledge and understanding of the world (Adom et al., 2016). It depends on the analogy or assumption that most of what people learn comes from experience (Adom et al., 2016). The approach applied in this study is based on the ontological and epistemological, rhetorical, axiological and methodology assumptions which are separately described below.

1.7.1 ONTOLOGICAL ASSUMPTIONS

The perspective on the social world and social phenomena is known as ontology. (Matthews and Ross, 2014). Ontology is further defined as an area of philosophy that examines the composition and nature of "reality" (Brink, 2018). Furthermore, according to Matthew and Ross (2014), ontology is associated with a question of whether the social world or phenomena

should be perceived as objective or subjective. According to Cresswell, (2014) there is a fundamental question that should be asked to understand each assumption in research. Thus, for ontological assumptions, the researcher should ask, *what is the nature of reality in this study?* In this study, the reality was the perceptions of adolescent girls and young women who have experienced using HIV PrEP from public health facilities. The participants in this study had different perceptions of usage of HIV PrEP and made significant contributions to the research topic regardless of them coming from or living under different conditions in society. Therefore, this study assumed that by conducting face-to-face semi-structured interviews, the perception of adolescent girls and young women regarding usage of HIV PrEP would provide understanding to the problem statement.

1.7.2 EPISTEMIOLOGICAL ASSUMPTIONS

A theory of knowledge called epistemology offers an explanation and a viewpoint on what is considered to be knowledge. (Matthews & Ross, 2014). In other words, humans cannot be divorced from their knowledge in epistemology since epistemology serves as a bridge connecting the researcher and the topic or issue under investigation. (Mathews & Ross, 2014). Hence, in order to grasp the epistemological presumption, the researcher needed to comprehend the connection between themselves and the phenomenon. The researcher, who is a nurse, had previous experience working with the study population and had engaged with participants before conducting semi-structured interviews. These interviews encouraged subjective interaction, ultimately leading to enriched knowledge in the findings. Additionally, insights into the perceptions of adolescent girls and young women regarding the utilization of HIV PrEP at health facilities were uncovered. Thus, by conducting semi-structured interviews, the researcher gave the participants an opportunity to share their perceptions on usage of HIV PrEP at public health facilities and to suggest recommendations to address the problem.

1.7.3 RHETORICAL ASSUMPTIONS

Rhetorical analysis addresses the issue of research language (Kaushik & Walsh, 2019). Informal, plain language was employed in face-to-face interviews for this investigation. Additionally, the data were physically translated, explained, and the main theme and its sub-themes were produced. Exact quotes from the study's participants were used to present the findings.

1.7.4 AXIOLOGICAL ASSUMPTIONS

Axiological assumptions relate to the ways in which a researcher's values and presumptions drive their methodology and the steps they take while conducting the study. (Mathew & Ross, 2014). Concerning this assumption, in this study, the researcher asked this question, *what is the role of values or ethics in this research study?* To answer to this, in this study, the ethical principles of autonomy, beneficence, non-maleficent and respect were applied during the research process to make sure that no one who participated in the study is harmed, physically or emotionally (Brink, 2018)..

1.7.5 METHODOLOGY ASSUMPTIONS

A well-planned study strategy, method, approach, or procedure used to investigate anything is called methodology (Kivunja & Kiyuni, 2017). According to Kivunja and Kiyuni, (2017), methodology brings together the flow and logic followed when conducting research. The researcher asked the question, *how should the researcher obtain knowledge during this research process?* The researcher gained knowledge through reviewing different literatures and articles. Moreover, the study employed a qualitative, explorative, and descriptive method. Thus, participants shared their perceptions regarding HIV PrEP usage at public health facilities in Katima Mulilo through face-to-face semi-structured interviews.

1.8 THEORETICAL FRAMEWORK

A theoretical framework is a structure for organising ideas and hypotheses that have been produced through previous studies. (Swanson, 2013). The theoretical framework is then synthesised to develop a theoretical background, how data analysis and interpretation will be done as well as the meaning of the data (Swanson, 2013). This means that without theoretical framework a research study would not have a great support in being conducted.

1.8.1 THEORETICAL RESEARCH AS THE BASIS FOR THE STUDY

In this study, the Socio-Ecological Model was used to develop the theoretical framework. Thus, for this model to be effective, individuals and their relationship with other people, organisations, and their community where they live should be included in the model. There are five (5) stages in the socio-ecological model as illustrated in the diagram below and then discussed further below.

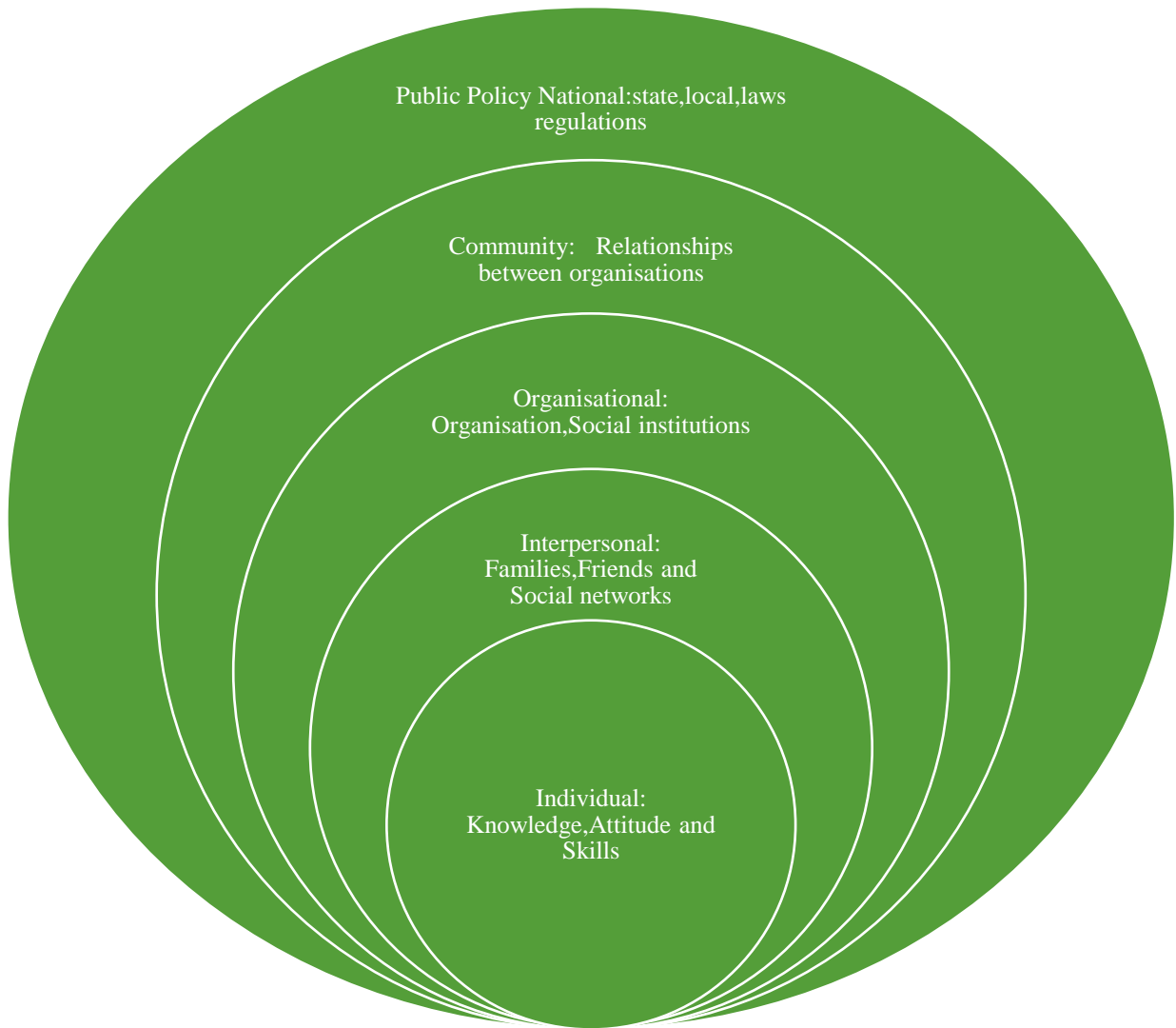


Figure 1 Socioecological Model

Adopted from Seetharaman et al., (2016)

On the individual level, the individual knowledge and skills is considered. Moreover, knowledge about HIV PrEP helps the individual understand more about it. In the same vein, it helps them know about the benefits of using HIV PrEP, side effects involved in using HIV PrEP and who is eligible for using HIV PrEP. Thus, this reduces the number of psychological and socio-economical related factors and challenges influencing HIV PrEP usage among AGYW. Knowledge alone is not enough to change individual attitude towards somethings, but it helps in influencing key attitudes and decisions individuals make (Seetharaman, et al., 2016).

On the interpersonal level the relationship an individual has with different people are discussed. These includes their friends, family members and even their sexual partners. Sexual partners of the individuals can have regular talks regarding HIV PrEP and go for sexual reproductive health services (HIV PrEP) included. Sexual partners can help with reminding their partners on when to take PrEP which help in adherence. Therefore, by doing this, interpersonal and community related factors and challenges influencing HIV PrEP usage among AGYW as well as negative information regarding HIV PrEP can be reduced (Seetharaman, et al., 2016).

On the organisational level, the community at large is involved and this includes organisations like institutions of learning and health facilities. HIV PrEP services should be made available in schools and clinics to reduce negative provider and public health facilities challenges experienced by AGYW when seeking HIV PrEP services at public health facilities, as well as improve the quality of services offered at such places (Seetharaman, et al., 2016).

Community level is the fourth level where different organisations can come together in order to improve community health. A good initiative would be nurses giving health talks in schools on HIV PrEP as well as offer HIV PrEP to those individuals at risk of acquiring HIV. Organisations in the community could coordinate health events or campaigns to educate people about HIV PrEP (Seetharaman, et al., 2016).

Lastly, at the final level is the national/ public policy. Thus, at this level, the government is in charge of initiatives to educate community members regarding PrEP. This can be done by funding for trainings and research on HIV PrEP, provide policy guidelines on HIV PrEP usage as well as setting out laws and enforcing them.

In conclusion, a good initiative would be including HIV PrEP education for every individual seeking HIV testing service as well as family planning services. This level of the socio-

ecological model is important because it affects many people compared to other levels (Seetharaman, et al., 2016).

1.9 DEFINITION OF KEY TERMS USED IN THE STUDY

The following key words were used in this study and defined as follows:

Perception

Perception refers to the way something is regarded, understood, or interpreted by a certain individual (Oxford Dictionary, 2014). Furthermore, perception is the way one ponders about or understand someone or something, the ability to understand or notice something easily, and the way that you notice or understand using your senses (Oxford Dictionary, 2014). In this study, perceptions of adolescent girls and young women regarding HIV PrEP usage at health facilities included the thoughts, views and experiences.

Adolescent girls and young women

An adolescent girl and young woman is a young woman or a girl in a transition from the dependence childhood to adulthood independence (Oxford Dictionary, 2014). In this study, adolescent girl and young woman were women or girls aged 18 to 24 years old.

Usage

Usage is the action of using something as means of accomplishing or achieving something (Oxford Dictionary, 2014). In this study, the usage means uptake of HIV PrEP at health facilities.

Human Immunodeficiency Virus (HIV)

According to WHO, (2017), Human Immunodeficiency Virus (HIV) is an infection that attacks the immune system of the body, specifically the white blood cells called CD4 cells. In this study, HIV the definition of HIV is utilised in the same context.

Pre-Exposure Prophylaxis

Pre-Exposure Prophylaxis or PrEP is antiretroviral medication used to prevent the acquisition of HIV infection by uninfected people (WHO, 2017). In this study, Pre-Exposure Prophylaxis (PrEP) the definition of HIV is utilised in the same context.

Health facilities

Health facilities are places that provides health care. They include hospitals, clinics, outpatient care centres, and specialized care centres such as birthing centres and psychiatric care centres. (WHO, 2017). In this study, health facilities includes Ngweze clinic, Katima Mulilo clinic, and Mavuluma clinic respectively.

1.10.1 OUTLINE OF CHAPTERS

In this section, the outline of the chapters is stipulated.

Chapter one: Background and introduction. This chapter outlines the goals of the study as well as the researcher's reasons for doing it. The chapter also described the limitations and importance of the research. Ultimately, the paradigmatic viewpoints brought the research to an end.

Chapter two: Literature review. A variety of literatures are read and used as a guide for the research.

Chapter three: Research design and Methodology that the researcher followed during the study, along with information on the procedures, ethical issues, and data gathering techniques are described. It also includes the steps used to guarantee trustworthiness throughout the research.

Chapter four: Results of the study and Literature control. In this chapter, data was analysed, and the results are presented. Furthermore, this chapter outlines the themes and sub-themes that surfaced during the study. This chapter considers several related results from other researchers and incorporates the literature as extra support for the study's conclusions in the discussions.

Chapter five: Conclusion, Recommendations, and Limitations. This final chapter of the study presents a condensed overview of the findings within a contextual framework. It also includes information on constraints and recommendations related to the attitudes of adolescent girls and young women towards the use of HIV PrEP at public health facilities in Katima Mulilo, Zambezi region.

1.10.2 SUMMARY

This chapter introduced the background of the study, problem statement of the research, purpose and objectives of the study. This chapter included the theoretical framework of reference, significance of the study and the definition of terms used on the study. In chapter two, literature review to the study is discussed.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

According to Garrard (2020), literature review puts the research project in the context of what is known. The literature review displays the strengths and weaknesses of preceding studies in terms of designs and methodology, which the researcher can integrate in one's own study. The purpose of literature review is to give the researcher a background of the proposed study, as well as the justification for the proposed study (Polit & Beck, 2018). The literature review was done using a variety of academic materials that were published in ten years below from the time of the study proposal. The literature review in this study was done using the following keywords: HIV PrEP trend among AGYW, HIV prevention interventions among AGYW and factors contributing to AGYW HIV vulnerability

2.2 HIV PrEP trend among AGYW

The incidence of HIV infection in women is highest between the ages of 15 and 49 age groups respectively (Kufa et al., 2018). According to a recent survey, the percentage of AGYWs among all women infected with HIV in sub-Saharan Africa is between 15 and 80 percent (age 15 to 24 years) (Kufa et al., 2018). Moreover, since people between the ages of 15 and 24 who identify as AGYW make up such a small percentage of the world's total adult population, the likelihood of HIV infection among this age group is quite high. In a study conducted in 2017, people belonging to this specific demographic category were responsible for 20% of all new HIV infections that were diagnosed in the year 2015 (Inwani et al., 2017).

In addition, a study done by Mavhu et al., (2018) showed that the estimates rates of HIV infection among AGYW anywhere from five to seven times higher than that of males of the same age. However, HIV infection rates are much higher among AGYW than they are among men of the same age. Besides, they are doubly susceptible to HIV infections because they fall into both the category of women who already have HIV as well as the category of women who are statistically most likely to contract HIV in their early 20s or 30s. Thus, the fact that both categories apply to these women makes them doubly vulnerable to HIV infections and because of this, the likelihood of their becoming infected with HIV has increased by a factor of two (Mavhu et al., 2018).

In 2015, South Africa reported the highest number of new cases of AGYW anywhere in the world, with 102 000 cases. This marked the first time that this distinction was achieved (Mabaso et al., 2018). To add on, because the AGYW population is such an important demographic to target in the endeavor to reduce the number of new HIV infections, efforts should be made to meet the requirements of this population. Thus, to have a better understanding of the AGYW population's susceptibility to HIV infections, the first step is to locate the risk factors that are responsible for the increased infection rates (Mabaso et al., 2018).

According to Murewanhema, (2021), there are numerous factors that contribute to AGYW's susceptibility to HIV infection. The same author states that are many other factors that need to be taken into account, such as the biological, behavioural, economical, and cultural factors. Furthermore, the interaction of all of these factors has resulted in an increase in the likelihood of HIV infection among women, and among AGYW in particular, throughout a significant portion of southern Africa (Murewanhema, 2021). In addition, these components differ from

region to region and nation to country, and their meanings shift depending on the setting (Mabaso et al., 2018).

2.3 HIV PREVENTION INTERVENTIONS AMONG AGYW

HIV prevention strategies have played a role in reducing the incidence of new HIV infections (Aronowitz et al., 2019). Despite efforts to curb the spread of HIV among adolescent girls and young women (AGYW), the rate of HIV incidence remains high, despite the availability of condoms for family planning and testing for other sexually transmitted diseases like tuberculosis (Minnery et al., 2020). The development of oral PrEP by the World Health Organization (WHO) in 2015 was a response to the increasing number of HIV infections. Oral PrEP was primarily designed to prevent new HIV infections in individuals at high risk of contracting the virus. Given the high HIV infection rates among AGYW, it is crucial to investigate their perspectives and support systems regarding the use of oral PrEP (Minnery et al., 2020).

In the same vein, some of the HIV preventive techniques that are now available include using pre-exposure prophylaxis (PrEP), abstinence, condoms, regular testing and treatment for sexually transmitted infections (STI), clean syringes while administering intramuscular injections, and intravenous services programmes (Mistler et al., 2021). Consequently, even though the Centres for Disease Control and Prevention (CDC) has deemed each of these approaches to be helpful, many women still struggle to put them into practice. Additionally, it was shown that condoms are efficient in preventing HIV and other sexually transmitted infections (STIs), despite the fact that the majority of the women who took part in the study stated they did not want to use condoms (Wiyeh et al., 2020). In the same context, in a study of preventative coverage conducted among Zimbabwe's female sex workers indicated that

more than half of those who used contraceptives and/or pre-exposure prophylaxis (PrEP) needed extra strategies to protect themselves against HIV (Wiyeh et al., 2020).

Moreover, the individual who provided the condom had a significant influence on the extent to which they were used (Wiyeh et al., 2020). Consequently, for instance, male customers had a higher prevalence of condom use in comparison to female peer instructors. However, this was not the case when the condoms were purchased from a separate consumer (Wiyeh et al., 2020). Furthermore, testing for sexually transmitted infections is a potential option to HIV prevention and in addition, testing and treatment can be obtained at no cost or for a very cheap price at clinics like planned parenthood and other similar centres. However, most women are still discouraged from being tested for HIV and other sexually transmitted diseases (STIs) due to the stigma surrounding these conditions (Peragallo Montano et al., 2019). In a study that focused on chlamydia testing found that women "highly connected chlamydia and chlamydia testing with stigma" and "considered that only reckless, promiscuous risk takers were at risk of infection." This finding was based on the findings of a study that was conducted specifically on chlamydia testing (Peragallo Montano et al., 2019). Moreover, a clean needle and syringe service is provided for anyone who are looking for an additional HIV prevention technique. In the same context, according to the findings of a research study, the most common obstacles that stand in the way of syringe service programmes are "fear of being recognised or reporting drug use"; "being mistaken about the presence"; "never having a problem acquiring clean needles"; and "being mistaken about the presence (Peragallo Montano et al., 2019).

Undoubtedly, young African women are at a greater risk of contracting HIV due to the patriarchal social structure that is still prevalent throughout the continent (Mabaso et al., 2018). As a result, women lose the power to make sexual decisions in their relationships when they

are taught that they should not challenge the males who are in their relationships as a kind of respect and obedience to them.

Furthermore, due to this, men are frequently in the position of having to make sexual choices for their female partners, which, depending on the circumstances, may be detrimental to the health of the female spouse (Ranganathan et al., 2017). Additionally, as a result of the "lobola" bride payment, as it's often known, also contributes to the entitlement mindset that some males have toward women. On the other hand, this line of thinking might not sit well with everyone. In the same vein, Yaya et al. (2020) claims that the practice of paying women "lobola fees" contributes to a society that views women as objects and puts women's health rights in jeopardy since they rely on their spouses to make health-related choices for them.

Subsequently, women are also at a higher risk of contracting HIV due to cultural practises such as the tradition of marrying widows to a brother of their late spouse. This practise is carried out regardless of the potential adverse effects on the woman's health (Murewanhema, 2021). Thus, the cultural behaviours that are outlined here are only a few examples of the many that put women's health at jeopardy and increase their likelihood of becoming infected with HIV. Therefore, it is of the utmost importance that, when considering HIV preventive strategies for AGYW, these cultural aspects be examined. Furthermore, by so doing this will ensure that these interventions continue to be as comprehensive as possible while also considering the specifics of the context in which they are implemented.

2.4 FACTORS CONTRIBUTING TO AGYW HIV VULNERABILITY

PrEP utilization has been hindered by a multitude of issues, one of which being the diversity that exists within the female population (Rael et al., 2018). Furthermore, some of the challenges that were brought up most frequently contributing to the dissemination of HIV were, lack of trust in providers, locations that offer treatment and prevention services, an aversion to safer

sexual practises, intimate partner violence (IPV), challenges related to sex-based authority, culture, and a stigma associated with HIV and women's sexual behaviour, and a dearth of identification. On the other hand, other factors that contribute to the spread of HIV include a shortage of identification (Rael et al., 2018). Additionally, Obstetrics and Gynaecology clinic patients who used PrEP reported daily adherence difficulties as well as short-term adverse effects and a long-term risk of kidney illness and lower bone density. Furthermore, it was discovered that key obstacles include the requirement to pick up monthly medicine and visit a health care professional four times each year (Bradley et al., 2019). Moreover some, women who inject drugs, victims of intimate partner violence (IPV), black women, women who work in the sex industry (FSW), as well as adolescent girls and young women, were all grouped together in the research (AGYW). In another study that was carried out on women who inject drugs, to investigate potential barriers to the broad utilisation of PrEP, the researchers categorised these potential barriers as personal, interpersonal, clinical, and structural (Willie et al., 2021). In the same vein, a number of variables affected individuals, including a lack of awareness about PrEP, concerns about the potential adverse effects of the medication, and competing objectives and expectations as a result of their drug use and reliance.

On another level, individuals discussed the negative experiences they had with medical personnel and the HIV stigma they faced in their social groups. Furthermore, among the clinical and structural level barriers to PrEP use for women who inject drugs were, a lack of infrastructure for PrEP delivery and a lack of provider capacity or willingness to prescribe PrEP, homelessness, involvement in the criminal justice system, a lack of money or identification needed to fill prescriptions, and transportation difficulties (Biello et al., 2018).

To add on, some researchers that conducted a study on the use of PrEP in women who inject drugs in Washington, DC came to the conclusion that, the expertise and willingness of

healthcare practitioners to give PrEP were important barriers to the drug's widespread adoption (Yang et al., 2023). Consequently, numerous studies have been conducted to evaluate the barriers that prevent women who have been the victims of domestic abuse from using PrEP. It was reported that, fear of HIV therapy's adverse effects, low risk perceptions, partner interference, and a general disregard for HIV were among the factors that hampered PrEP usage efforts (Braksmajer et al., 2019). In the same vein, it was revealed that women who had been victims of intimate partner violence and were seeking treatment at a family planning clinic experienced a number of hurdles to access PrEP. Thus, these barriers included a lack of understanding, misconceptions regarding PrEP, and distrust of healthcare practitioners (O'Malley et al., 2021).

2.5 CURRENT HIV PREP GAPS AMONG AGYW

There has been many studies done on PrEP therapy for women, but there are still some gaps in the knowledge. The first problem is that, young women who are of reproductive age have limited understanding of HIV and PrEP (Tao et al., 2021). In the same context, researchers who studied how to make future PrEP interventions more effective believe that the use of observational learning, also known as "behaviour change from watching role models perform desired behaviours," aid raise knowledge of PrEP through better outreach, enhanced marketing and instructional initiatives carried out by peers or other trustworthy persons (Tao et al., 2021). Another study discovered that, heterosexual individuals seeking treatment for sexually transmitted illnesses at a STI clinic had a sense of a low degree of risk when it came to contracting the infections. The study hypothesized that the number of people using pre-exposure prophylaxis (PrEP) would likely remain low until efforts are taken to "increase risk perception, education about PrEP, and safe sex procedures (Storholm et al., 2017). A study that primarily targeted black women observed that, there was interest among women in utilizing

PrEP (Tekeste et al., 2019). Nonetheless, in another study, many were dissatisfied that PrEP was not being made available to them or marketed to them (Kyle-Lion, 2021). Additionally in the same study, the women felt as though their voices are being ignored in regards to an issue that could have a significant impact on their lives. It was reported in the same study that this contributes to the growing level of distrust that black women have for medical institutions, despite the fact that there is a preventative approach that could help them but that it is not made available to them (Powell et al., 2019).

Consequently, if ads are geared on the requirements that are specific to women, it will be easier for them to comprehend and adopt PrEP women commonly hold the misconception that PrEP does not apply to them since it is not extensively publicised to them, which may have implications for how they perceive their level of HIV risk (Kyle-Lion, 2021). Furthermore, PrEP advertising were not successful, according to women who stated they saw them, since they were not directed toward women in their communities. In addition, these women also suggested three areas in which the commercials may be improved: information about PrEP being disseminated to the public through social media, community events, and peer support groups. the enhancement of communication between various medical specialists on the application of the medication (Hirschhorn et al., 2020).

In the same context, multiple studies have found that, this may be one of the reasons why women, particularly African American women, fail to place a high priority on their own health. It is critical to address Black women's misconceptions about PrEP before it is too late. According to a study done across 12 distinct social media sites. In another context, the reproductive health of certain women may be a worry for some women who are concerned about the possible negative implications (Nobles et al., 2020). Additionally, to deliver therapy that is sensitive to the needs of the patient's culture, it is imperative that the appropriate person

be the one to bring up the subject of PrEP. According to the results of a poll that inquired about the various persons' most trusted sources of information regarding PrEP, the majority of respondents stated that a health care practitioner was their top pick (Nobles et al., 2020).

On the other hand, women in the city of Atlanta, Georgia, asked questions regarding PrEP by reading educational materials and making direct contact with specialists in the field of family planning. In addition to this, the most effective locations for the dissemination of information on PrEP were clinics (Piper et al., 2021). In a different study carried out in Philadelphia Pennsylvania, urban obstetrics and gynaecology showed that, female participants thought it was extremely important for their OBGYN or primary care physician to open the discussion with PrEP even still. 14% of the women said they were nervous about discussing PrEP with a healthcare practitioner, and 20% of the women said they were not sure if they would feel comfortable doing so (Koren et al., 2018). In the same vein, even while some data suggests that women believe their healthcare professionals when they describe the facts of PrEP, it is essential that we acknowledge the influence that medical scepticism has on the decision-making processes of women in general and black women. Furthermore, researchers observed that when the focus was moved to empowerment rather than HIV prevention, black women's interest in PrEP increased. This was discovered while the researchers were studying the anxiety and preparedness of black women to take PrEP "Interventions that promote empowerment via cultural or racial pride," as the authors put it, may assist raise participation rates among these groups (Hirschhorn et al., 2020) .

2.6 SUMMARY

Studies in some countries have been done on PrEP usage among key populations. Thus, from the literature review done, few studies have been done related to usage of HIV PrEP among

adolescent girls and young women. To be specific no study has been done in Namibia regarding HIV PrEP usage at public health facilities in Katima Mulilo Zambezi region.

Furthermore, the reasons why there is few adolescent girls and young women go for HIV PrEP is related to different types of perceptions regarding socio-economic factors, psychological factors and community and health related factors. Strategies to initiate HIV PrEP to people at risk of acquiring HIV so that the number of new infections is reduced to zero have been put in place, but there are still low numbers of HIV PrEP usage among AGYW. Additionally, while these studies on HIV PrEP usage among AGYW are done in other countries, it is against this reason that these perceptions are explored and described to AGYW in Katima Mulilo, Zambezi region. This study therefore, sought to determine the perceptions of adolescent girls and young women regarding HIV PrEP usage at public health facilities in Katima Mulilo in Zambezi region.

CHAPTER THREE

RESEARCH DESIGNS AND METHODOLOGY

3.1 INTRODUCTION AND RATIONALE

In the previous chapter, literature review on this study was discussed. In this chapter, details of the research design and methodology were discussed. The researcher also explained the sampling methods used, and how data was collected. Furthermore, the researcher explained ethical aspects taken into consideration during the research investigation. The rationale of the research design and methodology adoption is to develop practical guidance on the building of data (evidence) to act as a guide for PrEP introduction for Adolescent Girls and Young Women. The primary audience for the research investigation were Namibian program planners and health policy makers who ultimately decide on how PrEP is introduced to Adolescent Girls and Young Women, not only in Katima Mulilo, but also within the broader spectrum of the entire nation of Namibia.

3.2 LOGIC OF RESEARCH AND REASONING STRATEGIES

Logic and reasoning in research focus on the skills the researcher has in order to identify problems and how to solve them (Brink, 2018). Logical reasoning is a form of thinking in which premises and relations between variables are used in a rigorous manner to infer conclusions that are implied by the premises and the relations. In this logical reasoning process, arguments, statements, premises, and axioms are used to define whether a statement is false with the purpose of establishing whether the reasoning is logical or illogical (Brink, 2018). In research there are three types of reasoning namely, inductive reasoning, deductive reasoning, and adductive reasoning.

To get at a logical assumption during a study, a good and correct reasoning should be applied with the aim of validating the research findings. In this study, inductive reasoning was used.

3.3 INDUCTIVE REASONING

Inductive reasoning is a type of logical thinking which involves forming generalization based on specific incidents experienced, observations made, or facts known to be true or false (Doyle, 2020). Researchers or scientists using inductive reasoning begin by immersing themselves in the data because they think it is good to know the subject and situation well and from there gradually build up explanations of what is going on (Brink, 2018). Moreover, inductive reasoning moves from immersing oneself in the data, specific observations to broader generalisation and theories. In other words, a “bottom-up” approach is applied (Trochim, 2016). In inductive reasoning the researcher or scientist starts with specific observations and measures, begins to detect patterns and regularities, formulates hypothesis which can be explored and end up developing general conclusions (Trochim, 2016). Moreover, inductive reasoning is about collecting data and seeing what patterns or meaning can be extracted from the data collected. In this study the researcher observed the population being studied (AGYW) and had individual interviews with the participants to get to know the population she was examining better. Furthermore, conclusions related to the perception of adolescent girls and young women regarding usage of HIV PrEP were drawn from views the participants expressed during the interviews.

3.4. RESEARCH DESIGN

A research design is a framework of research methods and techniques which the researcher chooses (Blanche et al., 2016). The same authors went on to postulate that the research design refers to the overall strategy chosen by the researcher to integrate the various research components in a coherent and logical structure, thereby effectively addressing the research problem (Blanche et al., 2016). The research design establishes the design for data collection, measurement and analysis. Furthermore, the research design is used to assemble the research in a way that all the major parts of the research project, samples or groups, measures, treatments

or programmes and methods of assignment complement one another with the aim of addressing the central research question. In this study a qualitative, exploratory and descriptive research design was applied.

3.5 QUALITATIVE RESEARCH DESIGN

Research design, according to Blanche et al., (2016) is a strategic framework that links the research questions to its implementation or application. The three essential elements of research designs, which are plans of study, are specific research procedures, inquiry strategies, and philosophical assumptions. A qualitative research design was employed for this investigation. The study of phenomena using a qualitative method helps determine why a certain phenomenon is not noticed as well as evaluating multi-component interventions and progress (Dean et al., 2020). This design was suitable for the research under study because it allowed the researcher to explore the participant's perceptions regarding HIV Pre Exposure Prophylaxis usage and to describe the findings. Moreover, in this study a qualitative design was used to enable the researcher to develop the understanding of adolescent girls and young women perceptions with regards to HIV Pre Exposure Prophylaxis and to describe the findings.

According to Martyn (2018), qualitative research design is a method used expansively by experts and researchers when studying human behaviour, opinions, themes and motivations. Similarly, Mathew and Ross (2014) further described qualitative research design as primarily concerned with stories and accounts of events, feelings, principles, opinions and subjective understating. In relation to the research investigation, it aimed to obtain full understanding of the perception of AGYW in the Katima Mulilo area of Namibia regarding PrEP usage. Moreover, the creation of knowledge and phenomenon and situational interpretation were basically imperative in obtaining knowledge pertaining to the role of the community in the

promotion of oral PrEP, as well as gaining acceptability of this prevention method amongst AGYW.

3.6 EXPLORATORY RESEARCH DESIGN

Exploratory research is used to investigate a problem which is not clearly defined. This design is used when the problem being investigated has not been studied or thoroughly investigated in the past. Furthermore, exploratory designs aim at discovering what participants perceive to be important about a particular phenomenon (Matthew and Ross, 2014). The same authors, went on to state that exploratory research allows an approach of the investigation in an inductive manner, whose purpose is to investigate areas of potential research interest remaining, mainly or totally unexamined within the scientific health fraternity. Furthermore, semi structured interviews and purposive sampling were adopted as means of undertaking the exploratory research related to PrEP usage amongst AGYW within the area of Katima Mulilo.

According to Mathew and Ross (2014), the key steps followed by the research under this design included: problem identification, hypothesis generation, and further research. The researcher adopted this research design premised primarily on the following strengths:

- ✚ The researcher has flexibility allowing adaptation to change as the research progresses.
- ✚ Low-cost research design.
- ✚ Foundational research which can lead to further research.
- ✚ Enables researcher to fully understand whether the topic is researchable at an early phase/stage. Moreover, it helps other researchers to identify possible causes for the problem.

However, there are some weaknesses associated with this research design for instance, inconclusiveness, it might also provide biased data, the sample might be small etc. Thus, for this study, the researcher used an exploratory design to enable her to collect various ideas about

the perception of adolescent girls and young women regarding utilization of HIV PREP at public health facilities.

3.7 DESCRIPTIVE RESEARCH DESIGN

According to Gray and Grove (2020), descriptive design is the exploration and description of phenomena in real life situations and provides an accurate number of characteristics of a particular individual, situation, or groups. Furthermore, according to Loraine et al, (2020), descriptive research has been identified in the literature to have several definitions or purposes, which are described systematically and accurately. In this study, the researcher found new meaning and described the findings of the study to provide deep understanding of the perceptions of adolescent girls and young women regarding usage of HIV PrEP at public health facilities.

Furthermore, descriptive research describes the characteristics of the population or phenomenon under research. In the vein, the focus is more on the ‘what’ of the research subject as compared to the ‘why’ of the research subject under investigation. Moreover, the key characteristics of this research design include it being involved in the application and adoption of uncontrollable variables, application in cross-sectional studies, and it being used as a basis for further research. In relation to the thesis framework, this research design was suited because, for instance clearly defining respondent characteristics in relation to PrEP uptake by a clearly defined population segment made up of AGYW within the Katima Mulilo area.

3.8 RESEARCH SETTING

The term "research setting" describes the location where data are gathered (Brink, 2018). In this study, data was collected from three health facilities that are situated in Katima Mulilo in the Zambezi region. Katima Mulilo clinic was one of the data collection sites. This clinic is situated in the heart of Katima Mulilo town. Health providers at this health facility offers health

services at primary health care level. The second health facility where data was collected was Mavuluma clinic. Mavuluma clinic is situated in the informal settlement of Katima Mulilo town. This clinic also offer health care at primary health care level. The last area were data was collected is Ngweze clinic. This clinic is also situated in one of the informal settlements found in Katima Mulilo, offering care at a Primary health care level as well. Katima Mulilo is the main town of the Zambezi Region in Namibia. It is situated within the Caprivi Strip and has a population of approximately 46 401 inhabitants as at the end of 2023 (Namibia statistic Agency, 2023). According to a MOHSS, (2017), HIV prevalence remains high in the Zambezi region, with over 20% of its population aged between 15 to 49 years being HIV positive. Moreover, the Katima Mulilo community is characterized by high levels of poverty, high unemployment, and it is still relatively under-developed in comparison to other urban settings in Namibia. To add on, it is also serviced by a busy national route, the Trans-Caprivi highway/network, which facilitates high traffic movement within the town. This community is a hotspot in relation to HIV/AIDS prevalence as an epidemic within the region.

3.9 STUDY POPULATION

A population is a universe of units which the sample is to be selected (Bryma, 2008). In this study, the population included adolescent girls and young women who visited the health facilities during the data collection period. Three public health facilities are offering HIV PrEP in Katima Mulilo, namely; Katima Mulilo Clinic, Mavuluma Clinic and Ngweze Clinic. All three-health facilities were selected as data collection sites. Based on the HIV testing registers and outpatient registers at all three (3) health facilities, an average of 10 AGYW visit the clinic every day either for HIV testing or seeking treatment for an STI. According this, the target population for this study was 60 AGYW with 20 AGYW from each health facility. Data was collected for two days from each clinic, on 23 and 24 March Ngweze Clinic, 25 and 28 March Mavuluma Clinic, and 29 to 30 March 2022 Katima Mulilo Clinic respectively.

3.9.1 SAMPLING CRITERIA AND SAMPLES

Sampling is a process of selecting units such as individuals, organizations, or people from a population of interest that fairly generalized the results of the sample to the population it represents (Trochim, 2016). In this study purposive sampling technique was used on participants who met the inclusion criteria. In the same vein, purposive sampling in research is a non-random sampling technique in which the researcher selects a sample from a population based on their judgment and their prior knowledge of the research topic. Furthermore, the researcher aims to choose a sample that is most likely to provide useful information or a deeper insight into a specific theme, concept, or phenomenon. Face-to-face semi-structured interviews were conducted until data saturation occurred. Data saturation means that no new information or themes are observed in the data being collected (Saunders et al., 2012). In this study, the sample contained 4 participants from Ngweze clinic, 6 participants from Mavuluma clinic and 2 participants from Katima Mulilo clinic. Selection of participants was based on these criteria:

3.9.2 THE INCLUSION CRITERIA

- ✚ Adolescent girls and young women aged 18-24 years who visited the health facility for an HIV test or presented with signs and symptoms of a sexually transmitted infection and tested HIV negative during data collection process.
- ✚ Able to speak English which is the official language.

3.9.3 THE EXCLUSION CRITERIA

- ✚ The adolescent girls and young women aged 18 to 24 years who visited the health facility but had no signs and symptoms of a sexually transmitted infection and had not request an HIV test during data collection,
- ✚ AGYW who tested HIV positive.
- ✚ The AGYW who could not speak English.

3.9.4 PREPARATION OF THE RESEARCH FIELD

The researcher visited the three health facilities selected for data collection, (Katima Mulilo Clinic, Mavuluma Clinic and Ngweze Clinic) before data collection day to brief the Head of the health facility on the nature of the study as well as to familiarize herself with the environment. The researcher prepared a quiet room at each facility. Additionally, the researcher took into consideration that the local Katima Mulilo community has reservations about HIV prevention issues, especially amongst the targeted AGYW. Consequently, the researcher then had to sought assurance from the sisters in charge of the clinics and relevant health authorities that community cooperation could be attained to facilitate credible data collection. The assurance by relevant authorities made it possible for the researcher to gather data credibly.

3.9.5 PROCEDURE OF DATA COLLECTION

Permission to conduct the study was obtained from the University of Namibia, Ministry of Health, and social services. Informed consent was sought from each participant before the interviews. Face-to-face semi-structured interviews were conducted with adolescent girls and young women (aged between 18 to 24 years) who were willing to participate in the study. Face-to-face semi structured interviews were used to allow the researcher to collect unbiased data ((Mathews and Ross, 2014). During the interviews, Probing questions were used to gain understanding from the participant responses and get clarity to avoid misunderstanding or misinterpretation. Furthermore, as a way of preparing for data collection, the researcher developed an interview guide with the main question and probing question. The researcher audio-recorded the interviews with the permission of the participants. During the interview, the researcher used an interview guide and was taking notes of facial expression and other non-verbal communications and gestures from the participants to capture the mood and help in data analysis. Lastly, data collection was undertaken over a period of one week having commenced on 23 March until 30 March 2022.

3.9.6 INDIVIDUAL INTERVIEWS

Face to face semi-structured interviews were conducted by the researcher. The central or main question was “What are your perceptions regarding usage of HIV Pre-Exposure Prophylaxis (PrEP)?”, to ensure that all participants were asked from the same aspect of the research topic. Additionally, the researcher introduced herself and before the interview, participants were given information about the purpose of the study. Moreover, written consent was explained to participants, and if they agreed to participate the informed consent form was given to them to sign. Interviews took an average of 15 to 20 minutes each. Participants were informed that they could withdraw from the study at any stage and were also informed that during the interview, the conversation was being recorded on an audio or voice recorder. Twelve adolescent girls and young women were interviewed. Among the twelve who were interviewed five refused to be voice recorded. However, participants who refused to be recorded, notes were written during the interview. After each interview within forty-two to seventy-two hours, the researcher transcribed the voice recording into a word document or a paper copy, this was sent to the participants via social media platforms or hand delivered to verify the information on the paper. The participants were informed that if there was no feedback from them regarding any changes within forty-eight hours, the researcher will assume that the initial information collected was correct. Furthermore, the adoption of semi-structured interviews was necessary for this research because since it was a qualitative investigation, it permitted for a subjective exploration of the role of the community in the preparation of AGYW for the usage of HIV PrEP. The perceptions shared by participants were at the core of the data collection process, thereby allowing for introspective comprehension of the subject under research from the participants’ point of view. This data collection method allowed participants to narrate their own experiences and perspectives, in opposition to the categorization of responses under a quantitative research design. Hofisi et al., (2016) note that semi-structured interviews allow

participants to shape their own responses as they reflect actual experiences, not subjected to any predetermined responses. This was mainly the essence regarding how participants related to the usage of HIV PrEP amongst AGYW, and the captured data provided detailed first-hand information from a personal perspective.

3.9.6.1 FIELD NOTES

The researcher undertook and recorded data in notebooks to supplement the audio recordings that were undertaken during the data collection phase. This mainly applied to those interviewees who were not willing to be recorded digitally (on audio). As a result, the researcher had to note their responses manually through taking relevant field notes. To add on, the recorded data was then transcribed with the rest obtained from audio recordings accordingly.

3.9.6.2 PILOT TESTING

A pilot study is a small-scale version or dummy run of the study to determine the feasibility of the study and pretest the instruments to be used for data collection tool for its refinement, identification of flaws and assessment of time frame (Brink, 2018). In this study, a pilot study was conducted at Katima Mulilo Clinic to determine the feasibility of the instrument. Thus, four adolescent girls and young women were interviewed during the pilot study and they did not take part in the main study to avoid biased results. In addition to this, the pilot study revealed that the questions were clear and data collection instrument remained the same. To add on, the pilot study used the same setting/environment which was to be adopted in the actual research. Moreover, the researcher mainly focused and emphasized on the reliability of the use of the semi-structured interview tool to ensure that data collected was credible and would not affect research findings. Furthermore, this pilot project was compatible with all research requirements thus provided a foundation for the execution of the actual research investigation.

3.9.7. DATA ANALYSIS

Data analysis refers to the process of working with the data to describe, discuss, interpret, evaluate, and explain the data in terms of research questions or hypotheses of the research project (Mathews and Ross, 2014). In addition, a thematic data analysis approach was adopted to maintain validity and reliability of research findings. The following are the steps from Creswell (2014) which were applied to aid data analysis. Thus, the first step was to organize the information at hand, which includes grouping together similar raw data, sorting field notes and transcribing the data. The researcher had to familiarize herself with collected data and therefore developing a deeper understanding of the research investigation. The researcher had to immerse herself in the data in search of data meanings emanating from the study. Secondly, the researcher read and tried to generally understand the information at hand. The researcher had to familiarize herself with the data and develop codes for the data. Moreover, data coding allowed the researcher to group the transcribed interviews into sensible and meaningful sections. On third step, coding was done, which meant tagging or highlighting group of words with a word usually used by the participant. In social sciences, researchers should use emerging codes (Creswell, 2014). On the fourth step, themes and subthemes were generated using the codes. Step five involved a discussion of themes taking place and a link between themes and subthemes was created. Moreover, thematic analysis involved reviewing the identified themes. Furthermore, this was undertaken by ensuring that identified themes had sufficient evidence to support them and make valid arguments. Moreover, it also ensured that there was compatibility in terms of chosen themes. The last step dealt with interpreting the results.

3.9.8. ETHICAL CONSIDERATIONS

For research to produce reliable knowledge for practice, ethics must be followed. Research ethics refer to the generally acceptable principles that guide research from its inception up to the completion and publication of results and beyond (Mathew and Ross, 2014). This is to

make sure that in the process, participants are not harmed and to minimize the risks involved in the research, and most importantly for the participants to understand the risks in the study. Thus, the following ethical measures were applied during this study.

3.9.8.1 PRINCIPLE OF RESPECT FOR PERSON

According to Brink et al. (2018), the participants' right to self-determination is referred to as the principle of person. Furthermore, the needs of participants should always come before those of society or science. If not, participants ought to be courteous and respectful, and they ought to consent to the research voluntarily and with sufficient knowledge.

3.9.8.1.1 INFORMED CONSENT

Written consent is a must in research as it allows the participants to understand what they are allowing themselves to undergo during the research. Thus, by so doing, participants rights are respected and acknowledged. In this study, the objectives and purpose of the study were verbally shared with the participants before the interview. Moreover, two written consents were used in this study, one to agree to be part of the study and the other one for the participants' HIV results to be published with the results of the study. Furthermore, emphasis on that their participation in the study was voluntary and that they could withdraw from the study at any stage was shared with the participants.

3.9.8.1.2 RESPECT FOR AUTONOMY

Regarding their treatment, patients have a right to self-determination and choice also known as autonomy (Greaney & O'Mathuna, 2017). The researcher respected the patients' decisions rather than compel them to take part in the study. The researcher informed participants that their participation was entirely voluntary and that they are free to discontinue at any moment without consequence. Moreover, the researcher informed the participants that the information

they provided would only be utilized for research purposes only and that it was held with strict confidentiality.

3.9.8.2 PRINCIPLE OF BENEFICENCE

It's the principle of providing care, doing good to others, and being protected from harm either emotionally or psychologically (Polit & Beck, 2018). The participant's welfare must be ensured by the researcher by enhancing their understanding of and perceptions towards usage of HIV PrEP medication. Accordingly, researchers must act for the good of the participants all the time to maximize the benefits and minimize harm to the research participants. The participants for this study did not encounter any physical harm from the study as it involved recording of their responses prior to obtaining their full consent. There were no personal benefits from the study to participants.

3.9.8.2.1 NON-MALEFICENCE

This is a process of not inflicting harm on others (Polit & Beck, 2018). In this study, participants were not exposed to any harm as the research had no experiments involved. The researcher avoided deceptions in the content of the semi structured interview guide and items that could mislead participants' responses. The benefits of the study were explained to the research participants. Moreover, principle of non-maleficence compels researchers not to cause any harm to study participants. To adhere to non-maleficence, informed consent, confidentiality, and anonymity were observed by the researcher. Consent was renegotiated in case of any emotional distress by participants (Babbie & Mouton, 2016).

3.9.8.3 PRINCIPLE OF JUSTICE

The terms "principle of justice" relate to the rights of participants to privacy, anonymity, and confidentiality, as well as to fair selection and treatment (Brink, 2018). The researcher made sure that the study was fairly performed and that no patients were taken advantage of (Nurmi

et al., 2020). According to Hofisi et al., (2014)(2016), informed consent formalizes the ethical principles of safeguarding individuals from harm and voluntary involvement. Moreover, the principle of justice means that the research strategies and procedures must be fair and just. To uphold this principle, the researcher applied the principle of justice by fairly treating all participants equally without discrimination by giving all participants an equal chance to participate in the study and not because they were easily available or could be manipulated. The principle of justice was ensure through fair selection and treatment, right to privacy, confidentiality and anonymity that are fully discussed below.

3.9.8.3.1 FAIR SELECTION AND TREATMENT

According to Brink et al. (2018), the researcher needs to choose the population and participants fairly. The participants in this study were adolescent girls and young women who had been chosen by purposive sampling because they somehow had knowledge of the problem being studied.

3.9.8.3.2 RIGHT TO PRIVACY

Privacy is another aspect of autonomy and respect (Brink, 2018). In this study, interviews were performed in private rooms where only the researcher and the participants were present. Before data was collected the researcher made sure that the participant had given both verbal and informed consent. All data collected in this study were kept private by making sure that all instruments and materials used were locked away after data analysis.

3.9.8.3.3 CONFIDENTIALITY AND ANONYMITY

Confidentiality involves not revealing participant information without permission, whereas anonymity means being anonymous (Brink, 2018) .To ensure confidentiality throughout the study, all participants identity was anonymous. Moreover, during the interview, participants were requested and informed that their names were not to be used. In the same vein, interview

guides had no questions revealing participants' names or identity. Additionally, assurance was given to participants that no one apart from the researcher would listen to the recorded interviews and that the data from the study would only be used for the research purposes.

3.9.10. ETHICAL APPROVAL

This study was approved by the School of Nursing and Public Health Research Committee of the University of Namibia (UNAM) and the UNAM Post Graduate Committee. Ethical clearance certificate was obtained from UNAM Research Ethics Committee, Reference number SON/563/2020. The proposal of this study was then submitted to the Ministry of Health and Social Services Research Department to seek for approval to conduct the study at the proposed health facilities and approval was granted.

3.9.11. DATA PROTECTION

The devices on which interview recordings were saved was locked away in a safe place where only the researcher had access to. Moreover, a password only known by the researcher was used on all electronic devices which contained all data collected during the study. Moreover, after two years from when the results of the study shall be published, all data shall be destroyed and deleted.

3.9.12. TRUSTWORTHINESS OF DATA COLLECTED

The reliability or thoroughness of a study pertains to the level of confidence in the data, interpretations, and methodologies employed to ensure the study's quality (Polit and Beck, 2018). Researchers must establish specific protocols and procedures to ensure that a study is deemed credible by readers. Despite the consensus among most researchers on the importance of trustworthiness, ongoing debates persist in the literature regarding its definition (Leung, 2015). Additionally, qualitative researchers are expected to adhere to criteria outlined by

Lincoln and Guba in 1994, which include credibility, dependability, confirmability, and transferability. These criteria were applied in the current study to assess its trustworthiness.

3.9.12.1 CREDIBILITY

According to Polit and Beck (2018), credibility of the study or the confidence in the truth of the study and therefore the findings of the study is most important criterion of all. Credibility is tested by the interpretation and transparency of the analysis of data, for example, by testing the interpretation of the data and comparing the interpretation of data with existing data. Credibility is increased by researchers by spending more time with participants in order to understand them better. In this study credibility was ensured as follows: **prolonged engagement**, the researcher spent some time with the participants before and during the interview. Thus, by so doing the researcher got time or an opportunity to understand the participants better in the same way, participants also got time to ask questions and provided adequate information towards the study.

Data triangulation, interpretation of data was compared with existing data. Furthermore, similar sources on adolescent girls and young women behaviour towards usage of HIV PrEP were read by the researcher to get a better understanding on participants and therefore verified details that the participants had provided.

3.9.12.2 TRANSFERABILITY

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents (Brink, 2018). To add on, transferability is established by providing the readers with evidence that the findings in a particular study can be applied to other contexts, situations, times, and populations. In qualitative research, the researcher cannot prove that the findings on a particular study will be applicable instead; the researcher provides evidence that it could be applicable. Furthermore, the person who wishes to transfer the results to a different context is then responsible for making the judgment on how

sensible the transfer would be (Trochim, 2016). The researcher gave a thorough explanation of descriptive data, including the setting, inclusion and exclusion criteria, sample size, sampling technique, clinical features, interview process, and passages from the interview guide, in order to guarantee transferability.

3.9.12.3 DEPENDABILITY

Dependability underscores the importance of researchers acknowledging the dynamic nature of the research context. Therefore, researchers are tasked with detailing any changes that occurred during the study and how these alterations influenced their approach to the research (Du-Plooy-Cillers, et al, 2014). Dependability also pertains to the quality of the integration process between data collection methods, data analysis, and the theories derived from the data (Du-Plooy-Cillers, et al, 2014). In this investigation, dependability was upheld by meticulously documenting all activities and recording all data collected and analytical procedures employed throughout the study. Additionally, the collected data was shared with two research supervisors who evaluated and assessed the appropriateness of the processes and methodologies utilized in the study.

3.9.12.4 CONFIRMABILITY

Confirmability pertains to the extent to which external subject matter experts can validate the outcomes of the research Trochim, (2016). The researcher followed all decisions made during the research process, research team meetings, sampling, and research materials adopted while attending seminars at the University of Namibia.

3.9.12.5 AUTHENTICITY/VALIDITY

Research validity refers to how accurately a method measures what it is intended to measure (Trochim, 2016). Thus, if a research study has high validity, this implies that it produces results that correspond to real characteristics and variations in the physical world. In this study, the

participant consent was obtained and the researcher selected them fairly. Through self-awareness of their own perceptions, perceptions of others, and data obtained from many literatures, this research helped participants and readers realise the usage of HIV PrEP.

3.9.13 SUMMARY

Chapter Three focused on research methodology and research ethics that were used in this study. Moreover, population of the study included adolescent girls and young women aged 18 to 24 who visited the three health facilities and met the inclusion criteria during the data collection process. Purposive sampling was used in this study. Additionally, face to face interviews/semi-structured interviews were conducted to collect data. To add on, data collected was transcribed into themes and subthemes which were created and then analyzed.

Furthermore, to ensure trustworthiness on collected data, credibility, dependability, transferability and confirmability were used. In the following chapter, results of the study and literature control were presented.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF THE FINDINGS OF THE STUDY

4.1 INTRODUCTION

The previous chapter discussed the research methodology and design used in the study. In this chapter, findings of the study incorporated with literature control and data analysis were discussed. Findings were presented based on themes and sub-themes that came up during data analysis process. Data was presented verbatim, and discussions were made in references to participants direct narrations.

4.2 OVERVIEW OF DATA COLLECTION, ANALYSIS AND PRESENTATION OF THEMES AND SUB-THEMES

The aim of this exploratory descriptive qualitative study was to explore and describe perceptions of adolescent girls and young women regarding HIV Pre-Exposure Prophylaxis in Katima Mulilo, Zambezi region. Twelve (12) semi-structured face-to-face interviews were conducted and transcribed for the purpose of this study. Participants were selected by purposive sampling considering the inclusion criteria for the study. The main question was “What are your perceptions or thoughts regarding PrEP usage at health facilities?” which was posed to each participant. The researcher was able to provide a conducive and comfortable environment to the participants for credible and reliable data collection. To add on, the socioecological model was used to interpret the themes and subthemes that emerged during the data analysis process.

Themes are patterns in the data underpinned by a central concept that organises the analytical observation (Connelly and Peltzer, 2016). Subthemes are themes that are secondary to a larger theme (Connelly and Peltzer, 2016). Figure 2. Serves as evidence based on the socioecological model illustrating themes and sub-themes that emerged during data analysis.

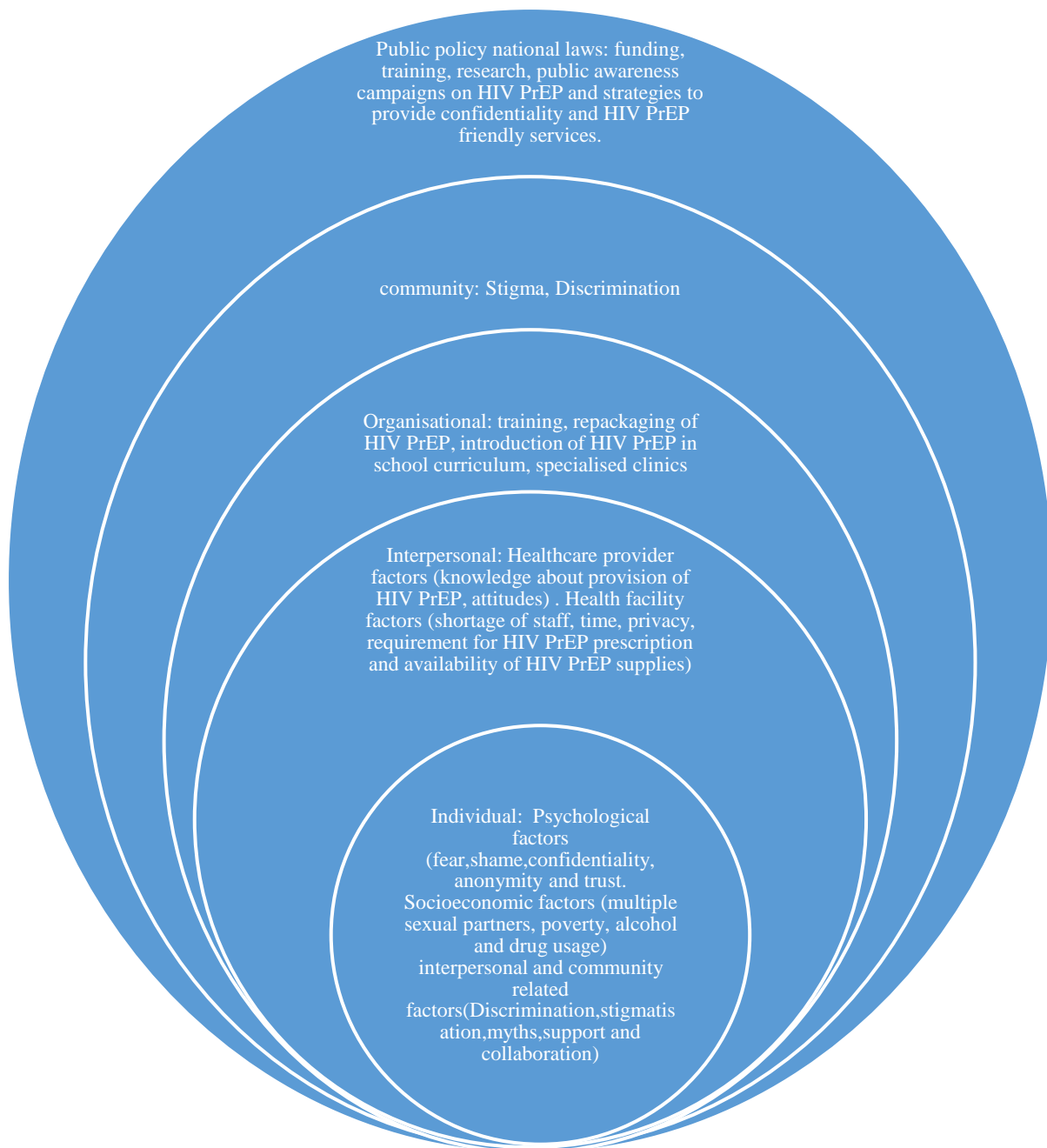


Figure 2: Socio-ecological model illustrating the findings of the study.

These above-mentioned themes and sub-themes are clearly stated in table 1 and are further discussed fully in relation to the actual analysis associated with each theme. The themes will provide a framework on the data analysis guiding the thesis.

Table 1: Study themes and sub-themes

Themes	Subthemes
THEME 1: PARTICIPANTS PERCEIVED INDIVIDUAL FACTORS ON THE USAGE OF HIV PRE-EXPOSURE PROPHYLAXIS	<p>Psychological factors</p> <ul style="list-style-type: none"> • Fear • Shame • Confidentiality • Trust <p>Socio economic factors</p> <ul style="list-style-type: none"> • Multiple sexual partners • Poverty • Alcohol and drug usage <p>Interpersonal and community related factors</p> <ul style="list-style-type: none"> • Stigma and discrimination • Myths • Support and collaboration
THEME 2: PARTICIPANTS PERCEIVED HEALTHCARE PROVIDERS AND HEALTH FACILITIES FACTORS THAT INFLUENCE THE USAGE OF HIV PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN	<p>Providers factors</p> <ul style="list-style-type: none"> • Knowledge about provision of PrEP • Attitude towards the users <p>Health facilities factors</p> <ul style="list-style-type: none"> • Shortage of staff • Time • Privacy • Requirement for PrEP prescription

- Availability of PrEP supplies

THEME 3: PARTICIPANTS PERCEIVED NATIONAL, PUBLIC POLICY FACTORS AND CHALLENGES THAT INFLUENCE THE USAGE OF HIV/AIDS PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

- Funding
- Training
- Research
- Policy guidelines on PrEP
- Public awareness campaigns on PrEP
- Law about the access and use of PrEP

THEME 4: PARTICIPANTS PERCEIVED RECOMMENDATIONS TO FACILITATE THE PROVISION OF HIV PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

- Specialised clinics
- Repackaging of HIV/AIDS PrEP Pills
- Public awareness campaigns
- Introduction of HIV/AIDS PrEP in school curriculum
- Potential strategies to provide confidentiality and friendly HIV/AIDS PrEP services.

THEME 1: PARTICIPANTS PERCEIVED INDIVIDUAL FACTORS ON THE USAGE OF HIV PRE-EXPOSURE PROPHYLAXIS

4.2.1. Psychological factors

Psychological factors are elements of personality that enhance or limit the way someone thinks or reasons (Sam, 2016). Psychological factors are crucial because every person has a brain that control human functions and direct behaviours and experiences. In this study, the perceived psychological factors include fear, shame, confidentiality, and anonymity as well as trust. These factors are discussed further in detail.

4.2.1.1. Fear

According to Rael et al., 2018, fear is a feeling that arises with a threat of harm either emotional, physical, or psychological. This feeling can be either real or imagined. Even though, some participants recognized the effectiveness of HIV PrEP pills in HIV/AIDS prevention, majority of the participants verbalized fear of possible side effects associated with HIV/AIDS PrEP usage. In this study, participants specified lived experienced side effects, while others, learnt side effects through peer associations. Fear of side effects such as vomiting, diarrhoea, liver and kidney dysfunction, body rash and fatigue came up during interviews. On the other hand, participants who previously used PrEP and experienced side effects patronized the therapy because they were afraid for side effects to worsen and cause life threatening conditions. This is evidenced by the participants' expression below

“PrEP pills are good because they help you not to get HIV, but I am scared of using them because they make you vomit and have diarrhoea” P3

“I heard when you take PrEP it will damage your liver and kidneys, because of that I will not take PrEP” P8

HIV PrEP providers are usually more concerned about the long-term side effects of PrEP which are risk of compromising kidneys or depleting bone mineral density if PrEP is taken for two

years or more Rael et al., 2018. Both PrEP providers and PrEP users should be aware that PrEP pills have short-term effects including nausea, abdominal cramps, vomiting, dizziness, headache and fatigue (Koren et al., 2018). Moreover, these side effects typically arise in the first or second week of using PrEP and often disappear in the weeks that follow Rael et al., 2018. Additionally, according to Koren et al., (2018), side effects or problems experienced during the first two weeks of taking PrEP compares to the “start-up syndrome” seen when people start antiretroviral for treatment (Koren et al., 2018). Thus, because of these side effects, PrEP users often decide to skip doses of PrEP pills or stop taking PrEP pills at all. Moreover, it is of importance that the PrEP provider alert users about these problems that may arise and that they usually resolve on their own without stopping PrEP intake. This element of fear contributed to poor or minimal uptake of PrEP, as this was also based on the mythical accusation that it promotes promiscuity amongst AGYW. Furthermore, the fear was further compounded by religious and cultural factors which promoted further phobia amongst AGYW. Religion premised on abstinence made it difficult for the young women and adolescent girls to openly use HIV PrEP as this would lead to stigmatization within the local community, which would then be equated to promotion of promiscuity and the females would be classified as ‘Jezebels’ in society. The same also applied in relation to cultural belief, whereby females are expected to be submissive in traditional patriarchal society, and PrEP uptake would be associated with acting against the norm in such societies such as within the Zambezi region which was under study.

4.2.1.2. Shame

Shame is defined as the perceived emotion arising from the sense that something is fundamentally wrong (Rael et al., 2018). In this study, participants reported that AGYW are shy to go and get HIV PrEP pills from health facilities because other people will see that ‘they are taking PrEP’, therefore their shame becomes one of their barriers from using PrEP.

Consequently, this shame hinders AGYW from getting PrEP from health facilities. In a study done in Malawi regarding perceptions and interest of adolescent girls on PrEP showed that adolescent girls were ashamed to ask about PrEP at health facilities because they felt they would be judged by the Health Providers (Maseko et al., 2020).

Here are some of the responses from the participants in this study:

“People are shy that they will be said to be having HIV if seen taking those pills” P8

“I am shy because the nurse will think I like to have sex without condoms” P2

In line with this study, the researcher noted that the element of shame was rooted in the element of stigmatisation associated with HIV/AIDS related issues in general within the Zambezi Region. To add on, participants were of the perception that in general the aspect related to open discussion regarding this area was basically considered taboo. Consequently, most AGYW felt embarrassed to openly make use of PrEP as this led to them being rejected within the society. Thus, this would ultimately lead to shaming amongst the AGYW and would resultantly lead to labelling and derogatory personification resultantly. Furthermore, this shaming of AGYW actively taking their PrEP is mainly related to limited educational awareness amongst societal members, deep rooting of obsolete cultural and religious beliefs, as well as limited parental, peer, and overall societal support for the AGYW. Thus, this general lack of awareness has led to many young females feeling uncomfortable and being unable to fully complete their dosages related to PrEP

4.2.1.3. Confidentiality

Confidentiality is the long-standing obligation that requires health professionals to keep any personal information about their patients and clients private (Oxford Dictionary 2018)., In this study, participants verbalised confidentiality compromise in a way that they felt that if they came to a health facility to collect PrEP medication, they are likely to meet people whom they

know at the clinic and these people would ask many questions regarding their visit to the clinic.

A participant said this:

“Katima Mulilo is a small town, you bump into people here and there, I once went to the clinic to get my family planning injection and I met my aunt there, she saw me coming from the family planning room and she asked me what I was doing there, next thing I know she told my mom about it”. P2

Such scenarios have negatively influenced PrEP usage within the area which was under study. The perception associated with limited confidentiality emanates from the initial lack of privacy from some unethical medical health practitioners themselves (Maseko et al., 2020). Additionally, eight participants were of the perception that the nurses and other healthcare workers at various clinics and health institutions in the town, in some instances, leaked confidential medical information to unauthorised parties such as the parents of the AGYW. As quoted participant number two above noted, the size of the town makes it easy for information to easily leak and spread within the environment within a very limited timeframe. Therefore, this results in many AGYW being sceptical with regard as to whether their medical records would be kept in a confidential manner, without compromise of leakages. This element of patient confidentiality also affects the entire community through gossip and grapevine communication. Resultantly, many AGYW prefer to seek PrEP medication at NGOs that are adolescent focused.

4.2.1.4. Trust

Trust may be defined as ‘a belief that something or someone is reliable, good, honest and effective.’ (Oxford dictionary, 2014). In this study, participants verbalized lack of trust in both the pill self and the health care providers. In a study done in Malawi on perceptions and interest of AGYW to use PrEP showed that, AGYW would be more interested to take PrEP if they built a trustful relationship with the provider (Maseko et al., 2020). It is through this relationship

built on trust, where they would share their fears and concerns regarding the pill and get reassurance from the experienced provider. In this case, participants in this study had these to say:

“It was going to be better if the nurses would be friendly enough to us because we have a lot of questions to ask about these pills” P 3

“I got my first PrEP pills at DREAMS project, those nurses were friendly, I did not know about these pills, but after talking and chatting to that nurse, I made a decision to start drinking the pills, she gave me all the information I needed” P 2

This element of trust is an extension of that of confidentiality. In this study, these two factors had a negative impact on how usage of PrEP was viewed by most AGYW. The lack of trust was compounded by myths such as PrEP medication causes infertility, usage of patients as ‘guinea pigs’ in ‘government sponsored clinical trials’, birth of deformed children, causing chronic diseases such as cancer, and other related myths. As a result, eight study participants noted that because of the mythical attachments to the PrEP medication, the level of trust amongst AGYW was generally low. This was further compounded by lack of effective educational and awareness campaigns related to PrEP uptake within Namibia as a whole.

4.2.2. Socio economic factors

Socio economic factors are factors attributed to an individual based on their education, source of income, social status, and occupational background (Sam, 2016). In this study, the following was said by the participants. In a study conducted by Cahill et al., (2020) on factors affecting HIV PrEP, participants expressed lack of education and unemployment as a factor that prevented them from adhering to HIV PrEP. Participants said that unemployment caused housing instability; as a result, there would be poor storage of the PrEP medication (Cahill et al, 2020).

4.2.2.1. Multiple sexual partners

Multiple sexual partners mean that having more than one sexual partner over a period (Mutinta, 2019). In this study, participants verbalized concern of being seen taking PrEP at health facilities as they felt they were being perceived as prostitutes or having multiple sex partners, which collaborates by the community members in the health facility. However, when PrEP was rolled out in Sub-Sahara Africa countries in 2015 after the World Health Organisation recommended it, it was meant for populations at high risk of getting HIV (key population). The population included HIV-sero discordant couples, Adolescent Girls and Young Women, female sex workers and men who have sex with other men. On the other hand, due to lack of resources, some countries only offered it to specific groups like sex workers. Moreover, due to this PrEP usage is mostly associated to sex work and therefore stigmatisation (WHO, 2015). Here are some of the responses from the participants:

“Aaah....imagine, walking out of the nurse room with a container of PrEP and a lot of people looking at you? Those people will just think you are having many boyfriends, or you are a prostitute or maybe you are HIV positive because those pills look like ARVs, and they make noise when in a bag” laughs P2

“People at home say those PrEP pills are for prostitutes, if you are seen taking them, people will think you are one”. P12

This perception of PrEP usage being equated with number of sexual partners also created stigmatisation amongst AGYW attempting to focus on the latter. Thus, participants noted that such stigmatisation led to low and limited public usage of PrEP as AGYW did not want to be perceived as prostitutes or females of ‘loose’ morals. Resultantly, such societal perceptions negatively impacted on the overall uptake of PrEP accordingly.

4.2.2.2. Poverty

Poverty refers to a state or condition in which a person or a community lacks financial resources to maintain a minimum standard of living (Oxford dictionary, 2014). The subtheme related to poverty came up when participants were asked what they think could be stopping AGYW from collecting HIV PrEP from the health facility. In a study by Maseko et al., (2020) shows that, participants verbalised that having HIV PrEP dispensed in places such as institutes of learning would ease access to PrEP rather than walking long distances going to health facilities. In this study, participants verbalised that, they would have to walk long distances to get to health facilities and that was discouraging. Furthermore, they also said taking PrEP would require them to at least have food, which they said they sometimes do not have. These are the responses recorded:

“The clinic is so far from where I stay, for me to come here, I need transport. Today I just came because I need to follow up for my HIV results”. P 14

“Those pills are very strong; a person has to eat first before taking them. It is difficult for me and maybe others because sometimes we just eat one in a day”. P 2

“I stay here in cowboy, my mother sells at the market to provide for us. Sometimes we just sleep without eating. If I take PrEP it will make me very hungry”. **P2**

“The medicine that they give us at the hospital says keep in a cool dry place. Looking at my parent house made out of mud, the PrEP will get damaged”. **P4**

Such responses indicated that poverty in the Katima Mulilo area exacerbated the limited usage of PrEP as these restricted society members, especially the vulnerable AGYW from accessing the PrEP medication when needed.

4.2.2.3. Alcohol and drug usage

Alcohol and drug usage simply means taking alcohol and drugs (Sahu, 2022). According to Sahu (2022), in a study done on substance abuse, individuals who get high on alcohol or drugs

forget to take medication (HIV PrEP included). Moreover, they forget to keep doctor and clinic appointments. In this study, participants verbalized that alcohol and drug usage could be one of the factors prohibiting AGYW from getting PrEP at health facilities. This was part of the responses:

“Alcohol abuse could be the reason why because in this town we drink too much”. Laughs. P2
Such excessive abuse of drugs and alcohol would thereby lead to limited usage of PrEP, especially amongst the vulnerable AGYW living within the Katima Mulilo area. In this study, participant admitted having abused drugs and/or alcohol which had an impact on their uptake of relevant PrEP medication as it fell due.

4.2.3. Interpersonal and community related factors

Interpersonal factors are of, pertaining to, involving, or being relation between persons (Oxford dictionary, 2014). Community factors refers to the immediate physical and social surrounding of individuals or families (Rael et al., 2018). In this study interpersonal and community factors included discrimination, stigmatisation, myths support and collaboration. These factors are discussed independently below.

4.2.3.1. Stigma and Discrimination

Rael et al., (2018) note that stigma is “a social process or personal experience characterised by exclusion, rejection, blame or devaluation that results from experience or reasonable anticipation of an adverse social judgment about a person or group”. Moreover, according to oxford dictionary (2018), discrimination is the ‘unfair treatment of people or group from other people or group.’ In this study, participants mentioned that they would not use PrEP because of how the PrEP pill similarly looks like Antiretroviral Drugs. Moreover, participants mentioned that people in the community mistakenly identify PrEP pill to Antiretroviral Drugs and because of the stigma associated with being HIV positive, AGYW fear using PrEP. Here are some of the responses when participants were asked if they were offered HIV PrEP:

“People are scared that they will be said to be having HIV if seen taking those pills” P8

“The moment the nurse notice that you are not married, they will look at you somehow, like judging you that you like to have sex without condoms” P1

These statements were supported by a study that was done among young people aged 13 to 24 in Uganda, Zimbabwe and South Africa to explore perceived barriers and facilitators among them. According to the findings, stigmatisation and discrimination was one of the key barriers to uptake or usage of PrEP (Muhumuza, et al, 2021). Moreover, participants linked taking PrEP pill to people on ARV drugs because it was to be taken on a daily basis, this would be sending a wrong message especially to their peers or community members labelling them to be HIV positive. As a result, they would hide their PrEP pills to avoid being talked about in their communities (Muhumuza, et al, 2021).

4.2.3.2. Myths

A myth is a traditional story originating in the preliterate society, dealing with supernatural beings, ancestors or heroes that serves as primordial types in a primitive view of the world (Oxford dictionary, 2014). Participants in this study mentioned different types of myths when they were asked about their perceptions regarding PrEP and mentioned that these could be reasons why they may not consider using HIV PrEP. The myths mentioned included, no need to use condoms when taking PrEP, PrEP can make someone resistant to HIV medication if they do become infected with HIV in future and, PrEP causes infertility and makes women give birth to abnormal children. Here are some of the responses to recorded:

“I think it’s nice because when I am taking it, I don’t have to use condoms”.

“Those PrEP pills will make your body reject ARVS when you are HIV Positive”, they will make your body weak”. P5

“I heard that those pills cause you not to have children if you take them when you are young and if you get pregnant, your children will be abnormal”. P7

Some of these myths were also observed in a study done in Kenya among AGYW where they expressed fear regarding using PrEP because of the resistance it might cause when they contract HIV. In the same study, participants verbalised fear of being barren and giving birth to physically disabled children (Escudero, 2020). Katima Mulilo has deep roots in traditional belief, as a result, myths are easily believable within this area. Many amongst the AGYW age group base their decisions considering mythical notions as well. Therefore, the respondents in the study noted the impact that myths play in relation to PrEP usage amongst themselves.

4.2.3.3 Support and collaboration

According to the Oxford Dictionary (2018), support is defined as ‘to aid the cause of something by approving, favouring or advocating’. Collaboration is working together especially in a joint intellectual effort (Oxford dictionary, 2014). In this study, participants verbalised lack of support from community members regarding HIV PrEP. Participants said that they feel, as outcasts because of being involved with that has to do with PrEP or HIV/AIDS. On the other hand, their partners usually give negative support as well as their family members and community at large, some participants had this to say:

“If people find out you are taking PrEP, they treat you like you are an outcast, just like they treat HIV positive people”. P8

“My boyfriend was so angry when he heard I joined DREAMS project, because he thought I was going there to get PrEP, but I was going to get family planning injection. He told me we don’t need PrEP and doesn’t even want to hear anything about it”. P7

A similar group of AGYW in Kenya who participated in a similar study experienced, negative to no support at all by their sexual partners while they were taking PrEP. Furthermore, their sexual partners discouraged them to use HIV PrEP on reasons based on misconceptions and myths (Escudero, 2020). In the same vein, participants in this study also verbalised lack of collaboration when it comes to reducing HIV cases in the region. Participants had this to say:

“If only we worked together to fight HIV/AIDS through such programs maybe the number of HIV would reduce. But now there is no togetherness, instead of getting support when people hear you are taking PrEP all they do is gossip about you”. P7

Such responses and analysis accordingly resulted in limited usage of HIV PrEP by most AGYW because participants in the research did not want to be stigmatised within their local society. Therefore, most stopped oral uptake of PrEP medication, or did so clandestinely.

THEME 2: PARTICIPANTS PERCEIVED PROVIDERS AND HEALTH FACILITIES FACTORS AND CHALLENGES THAT INFLUENCE THE USAGE OF HIV/AIDS PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

4.2.4. Providers factors and challenges

According McGinty et al., (2017), provider factors include all things the service provider do to contribute to the client’s care. In this study, the factors and challenges associated with PrEP uptake amongst AGYW within the Katima Mulilo area of the Zambezi Region in Namibia. The key factors to be focused on relate to knowledge about provision of PrEP amongst AGYW and the attitude of users of PrEP amongst within the Katima Mulilo area.

4.2.4.1. Knowledge about provision of PrEP

Knowledge is defined as awareness or familiarity gained by experience of a fact or situation (Oxford dictionary, 2014). The World Health Organisation (2015) notes that HIV PrEP is targeted at specific population groups perceived to be at substantial risk of HIV acquisition. Additionally, Cowan, et al (2016) note that these population groups mainly include sex workers, as well as homosexual men. However, limited attention is given to the provision of oral PrEP to AGYW who are also at a huge risk of being infected by HIV/AIDS. As a result, this study noted that initially participants in this research had limited knowledge of PrEP. To add on, this was evidenced by the fact that most of them failed to grasp the key objective(s) associated with its usage. However, knowledge was only enhanced especially within the

Katima Mulilo area through the introduction of such programmes such as the 'DREAMS' Project, which was initiated to promote sexual health awareness amongst community members.

Responses obtained from participants in this regard included:

"I did not know anything related to PrEP since there was basically no information provided to us in the local communities we live in." P 8

"The DREAMS Project which has been running in the Katima Mulilo area for the past three years has raised awareness related to PrEP amongst the young females within the area." P 7

The above responses indicate that although the reactions are different, they have a significant bearing on the result ultimately obtained from the study. However, awareness and appreciation amongst the AGYW have been increasing over the years.

4.2.4.2. Attitude towards the users

Oxford dictionary (2018) defines attitude as a settled way of thinking or feeling about something. Participants in this study viewed HIV PrEP uptake as a good intervention benefitting AGYW in the challenge of increased HIV infections amongst the society members. These participants noted that oral PrEP usage served as a best alternative for condom usage, since condoms were at times unreliable and not always readily available. Moreover, it can also be noted that issue related to abstinence was raised but participants concurred that it is a practical option related to practicability in this scenario. Participant said that:

"Amongst us girls, most are sexually active, and some do not use condoms for protection on a regular basis. So, maybe PrEP would help to reduce the rate at which HIV is spread within the town of Katima Mulilo." P6

On the other hand, there were also those participants who expressed reservations associated with fellow users of PrEP medication. Society members were also quite sceptical and generally negative in relation to PrEP usage. As indicated earlier in the research findings, this was

reflected by the level and element of stigmatisation associated the uptake of PrEP These reservations were mainly premised along religious and cultural frameworks, related to mythical connotations accordingly.

4.2.5. Health facilities factors and challenges

The research also considered factors and challenges around the health facilities within the Katima Mulilo area. These considerations have a bearing on the research outcome and therefore the researcher had to consider them for the credibility and reliability of investigation outcomes.

4.2.5.1. Shortage of staff

The shortage of health personnel had a negative impact on PrEP usage amongst AGYW as they may not receive prompt attention when they visit the health facilities. Moreover, participants noted that from the three health facilities that were used for the study, Katima Mulilo Clinic, Mavuluma Clinic and Ngweze Clinic reflected staff shortages at different periods of the year. In the same vein, each of these health facilities, on average should have a doctor on rotation and an average of five full-time nurses. However, the study showed that the numbers were below the threshold, averaging five (5) nurses per clinic, with doctor availability being scares throughout the course of the year. Resultantly, participants were of the perception that this trend negatively impacted on the consistency associated with their PrEP uptake. The participants felt this was the case as was indicated by some of the responses obtained in the course of data collection:

“At times when I visit the local Mavuluma Clinic, I am sent back home because the nurse(s) responsible for providing PrEP might not be present. This now affects me negatively, considering the financial and time resources I would have used.” P8.

“There are few nurses in the clinic. Sometimes you just want to passby the clinic from school and just get your HIV test or PrEP but you are told to wait in the long queues”. P5.

Such responses illustrated that staff shortages contributed by occasional staff absenteeism negatively affected the participants. Furthermore, this was supported by the fact that they were mainly unemployed AGYM, having financial resources, dependent mainly on parental or partner support and generally economically inactive.

4.2.5.2. Time

Time is the measured or measurable period during which an action, process, or condition exists or continues (Oxford dictionary, 2014). The time aspect was also a factor considered when considering the uptake of PrEP by AGYW within the Katima Mulilo environment. In this study, participants noted that in some instances they are unable to fulfil their obligation of PrEP uptake in accordance with medical requirement guidelines. In the same vein, this factor was also supported by the shortage of adequate financial resources to ensure timely visits for their PrEP uptake (Saul et al., 2018). Participants provided the following responses related to the time factor in relation to PrEP uptake:

“I am single young mother taking care two children below the age of nine years. I have to cook for them, prepare them for school, wash their clothing and help out with school activities. These activities keep me busy and leave me with limited time to be able to always attend to my PrEP.” P8

“I am very busy with school now, I really don’t have enough time PrEP and sexual health overall, but I really wish I could.” P5

These responses show that time may be limited for those within the AGYW age group to adequately perform the task of juggling and fulfilling obligations affecting their health.

4.2.5.3. Privacy

Privacy is the “right to be free from unwarranted intrusion and to keep certain matters from public view” (Richards & Hartzog, 2015). This aspect of privacy was already alluded to earlier on in this study findings, and it was noted that trust and confidentiality issues are some of the

aspects which participants expressed concern pertaining to these aspects. Therefore, the element of patient privacy can therefore be considered under the fore mentioned of factors related to trust and confidentiality resultantly.

4.2.5.4. Requirement for PrEP prescription

PrEP prescription is regarded eligible for anyone who is HIV negative but at substantial risk of being exposed. The key target groups are those having an HIV positive partner, or gay and bisexual men having anal sex without usage of condoms. Additionally, it is also targeted at men or women who do not regularly use condoms during sex with partners whose HIV status is unknown. On the other hand, HIV PrEP prescription requires a lengthy engagement at a local health facility, blood testing for HIV and related sexually transmitted infection, as well as general physical examination (Vasco et al., 2022). Participants had this to say related to this aspect:

“There are long queues at the clinic, seating at waiting is too much”.P5

“When I started PrEP I had to go through a long process, it is too long”P6

Therefore, the main reason for undertaking this study was delve on the research gap in existence with regard to PrEP usage amongst AGYW especially within the developing world. Thus, the researcher focused on the gap within the Zambezi Region as a case. However, the participants were rather sceptical in relation to the PrEP prescription as they related to the element of stigmatisation being subjected to rigorous testing regime. This in turn resulted in some AGYW within the Zambezi Region showing indifference in relation to the overall PrEP prescription procedure.

4.2.5.5. Availability of PrEP suppliers

PrEP supply in Namibia is mainly foreign sourced. Most of it is obtained from South African suppliers, as well through public-private partnership between the Namibian government and international private suppliers (Saul et al., 2018). In addition, joint cooperation with

organisations, such as US AID has led to PrEP supply being fairly constant within the country of Namibia. In this study participants had this to say:

“There was a time I went to the clinic to ask about PrEP when I first heard about it, but I was told they didn’t have it”.P6

However, the Covid-19 pandemic has had a negative impact on the supply line since 2020, and this has also affected those requiring PrEP medication. As a result, the supply of PrEP medication has been low not only within the Zambezi Region, but within the entire country of Namibia accordingly.

4.5 THEME 3: PARTICIPANTS PERCEIVED NATIONAL, PUBLIC POLICY FACTORS AND CHALLENGES THAT INFLUENCE THE USAGE OF HIV/AIDS PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

This theme of the research focused primarily on how participants perceived national/public policy related to factors and challenges influencing the usage of PrEP among AGYW within the Katima Mulilo area of Namibia. In the same vein, it is evident that national or public health policy is not clearly comprehended by all stakeholders. The research also attempted to gauge comprehension of such policy amongst AGYW within the Namibian environment.

4.5.1 Funding

Funding is money which a government or organization provides for a particular purpose (Oxford dictionary, 2014). Participants were partially aware of the funding allocated to the PrEP project(s) in Namibia. Thus, participants noted that such initiatives were government sponsored with input from private players as well. In the same context, the ‘DREAMS’ Project is a good example whereby participants demonstrated an understanding related to project sponsorship (Saul et al, 2018). To add on, participants provided some of the following responses regarding this issue:

“The DREAMS Project is a joint partnership between our government and USAID joint partnership between our government making organisation involved in social development in different developing countries, mainly in Africa.” P4.

interviewee 8 noted that, *“I know that government helps out in the provision of PrEP medication in the fight against HIV/AIDS in the Namibian environment.”*

This illustrated that awareness was there amongst the participants within the Katima Mulilo area in relation to PrEP funding programmes amongst the AGYW and other age and gender groups accordingly.

4.5.2 Training

Training is defined as a planned activity aimed at modifying skills through the application of experience and education (Milhem et al. 2014). In this study, the element of training in relation to PrEP programmes seems minimal amongst the general societal members, instead concentrating mainly on health practitioners. Additionally, participants amongst the AGYW under study expressed ignorance regarding any available training opportunities for them. In line with the above, the participants indicated in the premise that most of them had never been invited for any formal training programmes, or those related to the PrEP initiative.

“After being exposed to other regions, I think here in Zambezi region we are still behind, sometimes programs are introduced to train youth but here we are not serious. I haven’t heard any training offered based on PrEP”. P5

4.5.3 Research

Research is simply defined as a search for knowledge (Milhem et al. 2014). This aspect outcome is like that related to training opportunities within the Katima Mulilo Region as well. On the same note, although notable research is being conducted worldwide regarding HIV/AIDS related issues, the public seems not fully updated on these research initiatives on HIV PrEP (Saul et al, 2018). To add on, participants within the AGYW grouping under study

demonstrated limited comprehension of the research work being undertaken to uplift societies in relation to the HIV/AIDS pandemic. Participants had this to say:

“I am sure these projects are coming because of the research done. Only a few of us know those things. I am advantaged because I am a nursing student” P7

Furthermore, participants noted that they were not fully conversant about actual research programmes carried out in this regard. In the same vein, those with relevant information were in actively involved in the health sector.

4.5.4 Policy guidelines on PrEP

Guidelines surrounding PrEP usage seems unclear amongst general members of the society (Vasco et al., 2022). Participants amongst the AGYW group that were under study provided the following responses:

“I only know that I am supposed to take PrEP to protect myself from HIV but am not familiar with any law which encourage me to do so, I do this in my own decision.” P7.

“I have not been shown any clear guidelines or rules related to PrEP usage in case that I get sick or develop side-effects. Nothing has really been explained to me in black and white related to PrEP, they just tell us take PrEP, Take PrEP” P7.

Through such responses amongst the participants, Participants were not unaware of policy guidelines attached to PrEP usage and had limited access to relevant information. On the other hand, health practitioners at various institutions seemed to provide veiled reference toward this aspect to the patients, without detailed explanation on policies and guidelines.

4.5.5 Public awareness campaigns on PrEP

The Ministry of Health and Social Services has undertaken various awareness campaigns related to PrEP usage within the Zambezi Region over the past decade. Thus, participants noted that they had attended various educational and awareness campaign programmes in the Katima Mulilo area during the 2018-2021 period. In the same vein, these campaigns were solely

focused on developing initiatives in the fight against HIV/AIDS. Moreover, participants noted that they received information and got to know about PrEP uptake initiatives from these campaigns and they also acknowledged their relevance especially amongst AGYW within the Katima Mulilo area.

*“I attended a campaign where they educated us about PrEP I think two years back, after that there were no more campaign or even follow up on us who attended”.*P6

4.5.6 Law about the access and use of PrEP

Legal connotations and implications associated with access and usage of PrEP in Namibia can be deemed as not well publicised to the general population within the country. Moreover, AGYW in the study noted that although they had access to PrEP medication, they were not familiar with actual legal statutes which pronounce on access and use of this medication. To add on, the legal aspect pertaining to PrEP use and access can be related to unambiguity as it is not explicitly outlined to the general public. As a result, not all members of society within the Namibian society are fully conversant with relevant laws.

*“They just give us the PrEP when we ask for it, I am not aware of any legal law for using it”.*P5

THEME 4: PARTICIPANTS PERCEIVED RECOMMENDEDATIONS TO FACILITATE THE PROVISION OF HIV PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

This theme focused on proposed solutions and recommendations from participants themselves on the development and implementation of these in regard to improving PrEP uptake amongst AGYW within the Namibian setting.

4.5.7 Specialized clinics

Specialized clinics are health facilities providing specific type of care to patient (Oxford dictionary, 2018). Participants involved in the study proposed for the establishment of

specialised clinics targeting PrEP uptake programmes within the Katima Mulilo project. Furthermore, their argument was premised on the reduction of stigmatisation and improving efficiency in regard to service delivery (Vasco et al., 2022). Perspectives solicited from the participants included:

“Clinics just for us girls will help in helping us get the medication easily and reduces long queues at health facilities as well.” P8.

“If the government could build clinics for PrEP treatment only or just for girls, it would help us find it easy to able to collect our medication without being judged and discriminated in society.” P 5.

Besides these responses, other participants provided perspectives along the same line of thinking as well.

4.5.8 Repackaging of HIV/AIDS PrEP Pills

This pertains to changing the packaging of PrEP medication to make it more ‘user-friendly’ so as to detach the discriminatory and stigma-related elements currently associated with its packing. On that note, participants noted that current packaging of PrEP pills was similar to the ARV medication and society members at times tend to label inappropriately. Therefore, a conversion in the packaging strategy would ensure that such misconceptions are dispelled and reduce the stigma associated with PrEP (Vasco et al., 2022). This is what participant to say regarding repacking:

“Aaah....imagine, walking out of the nurse room with a container of PrEP and a lot of people looking at you? Those people will just think you are having many boyfriends, or you are a prostitute or maybe you are HIV positive because those pills look like ARVs, and they make noise when in a bag” laughs P2

Not just this participant mentioned about repacking. Some mentioned statement like: *“The pills look like ARVs, they make noise when in a bag”*. P4

4.5.9 Public awareness campaigns

The promotion of public awareness campaigns related to HIV/AIDS related programmes should be increased within the Katima Mulilo area. Thus, participants noted that an increase in such awareness campaigns would result in enhanced understanding and appreciation of initiatives such as those related to PrEP uptake. This resultantly would lower HIV/AIDS statistics especially amongst the AGYW (Vasco et al., 2022). Participants suggested:

“The government should bring more campaigns about PrEP, maybe people will learn about it”.P2

4.5.10 Introduction of HIV PrEP in school curriculum

Participants were of the view that HIV PrEP programmes should be integrated within the school curriculum starting at primary school level. Although, the Namibian educational curriculum embraces HIV/AIDS programmes, that is related to PrEP it is still low (Vasco et al., 2022). As a result, participants noted that if these programs are to be introduced at an early level within the school curriculum, this could be effective in the fight against the HIV/AIDS epidemic in Namibia as a whole. This is supported by a study by Mathews et al., (2016) where participants verbalised that if HIV PrEP would be introduced in school maybe the level of knowledge regarding the subject would be minimal. Participants said:

“If only we are taught about these programs in school maybe we would know better as a community”P7.

4.5.11 Potential strategies to provide confidentiality and friendly HIV/AIDS PrEP services

In this study participants were concerned with the aspect related to confidentiality associated with their medical information. Thus, they deemed it appropriate for relevant stakeholders to develop effective strategies which would not compromise on their confidentiality in relation to their health records. According to Vasco et al., (2022) the actual strategies would involve input

being elicited from all concerned stakeholders within the structural set-up in the Namibian health sector accordingly. Participants had this to say:

“Some times when you come to the clinic, you get PrEP from the same room where HIV positive people get their medication, already that makes people seating outside see that maybe you are also sick. And in most cases the nurses are always not friendly to us maybe we are wasting their time”. P2

4.7 SUMMARY

This chapter provided an in-depth discussion of research findings. This analysis was based on four primary themes, namely:

1. Participants perceived individual factors and challenges influencing PrEP uptake among AGYW.
2. Participants perceived providers and health facilities factors and challenges influencing the usage of HIV/AIDS PrEP among AGYW.
3. Participants perceived national, public policy factors and challenges influencing the usage of PrEP among AGYW.
4. Participants recommended solutions to facilitate the provision of HIV/AIDS PrEP among AGYW.

The next chapter provided relevant conclusions and recommendations associated with the case under study.

CHAPTER FIVE

CONCLUSION, LIMITATION AND RECOMMENDATIONS

5.1 INTRODUCTION

In the previous chapter, data analysis, presentation of the findings and literature control was discussed. Four themes were identified from perceptions of adolescent girls and young women regarding usage of HIV Pre Exposure Prophylaxis at health facilities in Katima Mulilo, Zambezi region. This chapter delved on the conclusion, limitation and recommendations based on the findings of the study.

5.2 SUMMARY OF THE FINDINGS

The following themes came up from this study.

- ✚ Participants perceived individual, challenging factors that influence the usage of HIV Pre - Exposure Prophylaxis among adolescent girls and young women.
- ✚ Participants perceived providers and health facilities factors and challenges that influence the usage of HIV Pre - Exposure Prophylaxis among adolescent girls and young women.
- ✚ Participants perceived national, public policy factors and challenges that influence the usage of HIV Pre - Exposure Prophylaxis among adolescent girls and young women.
- ✚ Participants recommended solutions to facilitate the provision of HIV Pre - Exposure Prophylaxis among adolescent girls and young women.

The findings of this study are discussed based on the objectives and aims of the study below.

5.3 Methodology

This study used a qualitative exploratory descriptive design to enable the researcher to meet the objectives and aims of the study. Data was collected using semi-structured face-to-face

individual interviews. Moreover, semi-structured interviews were used to enable the researcher to get detailed information from the participants. Furthermore, audio recorder was utilised to record the discussions in the interview as well as field notes to write down the participants expressions per observations of the researcher. Furthermore, the interviews were transcribed verbatim and analysed manually following the steps from Cresswell (2014). In the end, themes and subthemes mentioned above emerged and presented in chapter four.

5.4 Explore the perceptions of adolescent girls and young women regarding PrEP usage at health facilities in Katima Mulilo, Zambezi region.

Perceptions of adolescent girls and young women regarding usage of HIV at health facilities was described by analysing data using the steps for analysing qualitative data from Cresswell (2014). The data was divided into themes and subthemes. Additionally, the analysed data showed that participants perceived individual, factors and challenges that influenced the usage of HIV Pre Exposure Prophylaxis and almost every adolescent girl or young women interviewed mentioned factors such as fear, shame, and confidentiality. Furthermore, some participants' verbalised lack of trust from HIV PrEP providers and the PrEP pill itself. On the other hand, social economic factors such as multiple sexual partners, poverty and alcohol abuse were other negative factors hindering adolescent girls and young women from getting HIV PrEP from health facilities. Furthermore, participants verbalised interpersonal and community related factors such as discrimination, stigmatisation, myths and poor support and collaboration in their communities. Maseko et al., (2020), support these factors.

5.5 Describe the perceptions of regarding PrEP usage at health facilities in Katima Mulilo, Zambezi region.

Some participants perceived provider and facility factors and challenges that influence HIV PrEP usage at public health facilities. To add on, participants verbalised provider factors like lack of knowledge about provision of HIV PrEP and bad attitude towards the users of HIV PrEP. Moreover, these factors are supported by a study done in the United States that showed HIV PrEP providers who lack familiarity with the PrEP tools increases the barriers of clients to take HIV PrEP from health facilities (Henny, et al., 2019). In the same vein, facility factors and challenges that came up include shortage of staff, time, privacy, requirements for HIV PrEP prescription and availability of HIV PrEP supplies. To add on, Pillay et al., (2020) supports these listed factors. Results from that study indicated that, health care providers were asked to mention what could be the factors preventing or influencing adolescents to acquire HIV PrEP from a health facility and these barriers came up.

Consequently, participants in the same study verbalized barriers that hindered them to collect HIV PrEP from health facilities that are coming from the PrEP provider self or the health facility. Moreover, participants verbalized lack of trust in providers, locations that offer PrEP and prevention, stigma associated with HIV, women's sexual behaviour, and a dearth of identification as factors contributing to low usage of HIV PrEP (Rael et al., 2018).

5.6 CONCLUSION

The conclusion of this study was based on the aim and objectives set at the beginning of the study. The objective of the study was to explore the perceptions of adolescent girls and young women regarding HIV pre-exposure prophylaxis and describe the perceptions of adolescent girls and young women regarding HIV PrEP usage at public health facilities in Katima Mulilo,

Zambezi region. Individual face-to-face interviews were conducted on the AGYW at the three (3) different health facilities offering HIV PrEP services so that aims and objectives of this study are met. Therefore, one central question was asked: what are your perceptions or thoughts regarding usage of HIV PrEP from health facilities? To add on, the study concluded that adolescent girls and young women have negative perceptions regarding HIV PrEP and these perceptions are related to different types of factors such as psychological factors, socioeconomic factors and interpersonal and community related factors such as fear, shame, confidentiality, alcohol abuse, discrimination and stigmatisation. Furthermore, participants verbalized provider factor challenges as well as facility factor challenges such as inadequate of knowledge about the provision of PrEP, attitude of PrEP provider to the user, shortage of staff, time, privacy, requirement for PrEP prescription and availability of suppliers.

5.7 LIMITATIONS

The limitations of the study refer to those characteristics of design or methodology that affected or influenced the interpretation of the findings from the research that the researcher cannot control (Tennant and Ross, 2020). The study had certain limitations. This study used a qualitative research design with 12 face-to-face interviews conducted on AGYW who visited the health facility during data collection period. It is against this reason that this data may not be generalised to the entire population or to other institutions. To add on, since data collection was self-reported data, it may be subject to recall bias and social desirability bias. Regardless of this, qualitative studies have a purpose of allowing the researcher to get detailed information from the participants rather than numbers. Moreover, time for data collection was minimal due to the researcher working condition and COVID-19 pandemic.

5.8. RECOMMENDATIONS

Recommendations that came up in this study are discussed in different categories as follows:.

5.8.1 Management

The results from this study showed that there was lack of knowledge about HIV PrEP, shortage of staff as well as lack of confidentiality and privacy for HIV PrEP services. Therefore, below are the recommendations for management.

- ✚ The management should recruit more nurses in the health facilities to render quality PrEP services. This should be services where AGYW feel free to use, where they do not feel discriminated or stigmatised, services where they can ask questions when the need arise.
- ✚ Adolescent friendly corners with ongoing supervision in health facilities or specialised clinics must be established and be functional to reduce issues related to confidentiality and privacy.
- ✚ providers are offering and practicing PrEP services in the correct way.
- ✚ Decision makers should peruse the data in this study to see what should be included in the HIV PrEP policies as they update them.
- ✚ Repackaging HIV PrEP medication should be considered to increase confidentiality, reduce stigmatisation and discrimination attached to the medication.

5.1.1. Education

According to the finding of this study, participants lack knowledge towards HIV PrEP medication. The following is recommended:

- ✚ Ministry of Health and Social Services should plan public awareness campaigns to educate the public on HIV PrEP medication. The education should focus on why AGYW should use HIV PrEP, who is eligible for HIV PrEP, what are the side effects involved in using HIV PrEP, both short-term and long-term.

- ✚ Clearly stipulated guidelines on HIV PrEP services should be shared with the providers so that they are able to render services to AGYW as per the guidelines.

5.1.2. Future Research

- ✚ More research is needed in the region and country at large to explore barriers to utilization of HIV PrEP among AGYW.
- ✚ Flow charts should be developed to assist in determining who needs HIV PrEP and how to go about the whole process when offering HIV PrEP to AGYW.

5.1.3. Contribution to the body of knowledge

This study might contribute to the body of knowledge for HIV PrEP providers by helping them understand the perceptions of AGYW regarding usage of HIV PrEP from health facilities. Furthermore, the findings of this study might create awareness of importance to HIV PrEP providers (nurses) in particular. Moreover, to adolescent girls and young women, a culture of encouraging and supporting each other in their communities to seek HIV PrEP services if the need arise will be built. Furthermore, this study might assist HIV PrEP providers to educate AGYW about HIV PrEP medication when they have discussions with them. Finally, an improvement in HIV PrEP services will be seen which will result in reduced HIV prevalence rates among adolescent girls and young women.

5.9. SUMMARY

This chapter discussed the findings related to the aims and objectives of the study. This chapter also discussed conclusion of the study as well as the limitations encounter during the study. Recommendations were finally suggested to the management, education, future research, and

contribution of the study to the body knowledge respectively. On this note, this is the conclusion of this study.

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APPENDICES

ETHICAL CLEARANCE CERTIFICATE



ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: SON /563/2020 Date: 9 June, 2020

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: Perceptions Of Female Youth Regarding Uptake Of Hiv Pre-Exposure Prophylaxis At Health Facilities In Katima Mulilo Zambezi Region

Researcher: SISAMU MILIKO FORTUNE

Student Number: 201075474

Supervisor(s): *Dr. H. J. Amukugo (Main) Dr. S. Kuugongelwa (Co)*

Campus: Main Campus **School of Nursing**

Take note of the following:

- (a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the HREC. An application to make amendments may be necessary.
- (b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the HREC.
- (c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by HREC.
- (d) The UREC retains the right to:
 - (i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
 - (ii) Request for an ethical compliance report at any point during the course of the research;
 - (iii) Cognizance and the observation of Namibia's Research Science and Technology Act, 2004 which makes it compulsory for Non-Namibian based researchers to obtain the compulsory Research Permit from the National Commission on Research Science and Technology (NCRST), FIRST, BEFORE the research can commence.

HREC wishes you the best in your research.

Dr. J.E. de Villiers : UREC Chairperson

Handwritten signature of Dr. J.E. de Villiers in black ink, written over a horizontal line.

Ms. P. Claassen: HREC Secretary

Handwritten signature of Ms. P. Claassen in black ink, written over a horizontal line.

RESEARCH PERMISSION LETTER FROM MINISTRY OF HEALTH AND
SOCIAL SERVICES



REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
Windhoek
Namibia

Ministerial Building
Harvey Street
Windhoek

Tel: 061 - 203 2507
Fax: 061 - 222558
E-mail: itashipu87@gmail.com

OFFICE OF THE EXECUTIVE DIRECTOR

Ref: 17/3/3 MFS

Enquiries: Mr. A. Shipanga

Date: 18 August 2020

Mrs. Miliko F. Sisamu
PO Box 992
Ngweze
Namibia

Dear Mrs. Sisamu

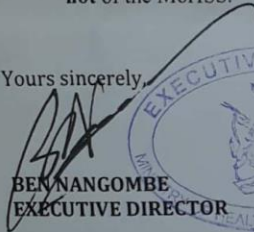
Re: Perceptions of female youth regarding uptake of HIV Pre-Exposure Prophylaxis at Health Facilities in Katima Mulilo Zambezi region.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
 - 3.1 The data to be collected must only be used for academic purpose;
 - 3.2 No other data should be collected other than the data stated in the proposal;
 - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

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- 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
 - 3.5 Preliminary findings to be submitted upon completion of the study;
 - 3.6 Final report to be submitted upon completion of the study;
 - 3.7 Separate permission should be sought from the Ministry for the publication of the findings.
4. All the cost implications that will result from this study will be the responsibility of the applicant and not of the MoHSS.

Yours sincerely,


BEN NANGOMBE
EXECUTIVE DIRECTOR



"Health for All"

INTERVIEW GUIDE

INFORMED CONSENT TO PARTICIPANT PERCEPTIONS OF ADOLESCENT GIRLS AND YOUNG WOMEN REGARDING USAGE OF HIV PRE-EXPOSURE PROPHYLAXIS AT HEALTH FACILITIES IN KATIMA MULILO, ZAMBEZI REGION.

RESEARCHER: MILIKO FORTUNE SISAMU

DEAR PARTICIPANT

I am Miliko Fortune Sisamu registered with University of Namibia doing a Masters Degree in Nursing Science. I wish to conduct a research project with the title above. The study will be conducted under supervision and guidance of Professor H. Amukugo and Dr S. Kuugongelwa in the school of Nursing, faculty of health sciences University of Namibia. The objectives of this study is to explore and describe the perceptions of Adolescent Girls and Young Women regarding usage of HIV Pre-Exposure Prophylaxis at health facilities in Katima Mulilo, Zambezi region.

Your participation will provide information that might assist policy makers or decision makers improving in this regard. Participation in this study will take approximately 1 hour. The procedure involves HIV counselling and testing session and interview thereafter where you will be responding to questions that I will be asking you. You are also welcome to ask for clarification or pose questions during the interview if the question is not clear. Your participation in this study is entirely voluntary and you have the right to withdraw at any time should you feel so.

The study data will be coded; no names will be used during this study. Your identity will remain anonymous during the whole study or when published with permission from Ministry Of

Health and Social Services to improve the quality of care. The researcher and the supervisor are the only people who will have access to the data collected. You are among the study population selected for this study. Should you agree to participate, please sign your consent with full knowledge of nature and purpose of the study.

If you have concern concerns or questions regarding the research, please feel free to contact Miliko Fortune Sisamu at 0814301288 or email at fmiliko@gmail.com or the main supervisor Professor H. Amukugo at hamukugo at hamukugo@unam.na.

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims or rights because of your participation in this study. Thank you for your participation.

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Participant Signature

Researcher sign

Semi structured interview guide

The following is questions that will be used in a semi-structured interview, this forms will include field notes that will be written by the researcher during the interview. The discussion will be audio recorded. The interview is part of the study being conducted about the perception of adolescent girls and young women regarding usage of HIV Pre-Exposure Prophylaxis at health facilities in Katima Mulilo, Zambezi region.

I would like to remind you of your written consent to take part in this study. You and I have already signed and dated each copy to show that we are going to continue with the interview.

After the interview, you will receive one copy and the other will be locked away together with the recording. Just a reminder that your participation in this interview is voluntary, if you feel a need to stop during the interview just tell me and we will do so without any penalties.

Do you have any questions or concerns before we start? If not we will start the interview.

1. What are your perceptions or thoughts regarding use of HIV Pre-Exposure Prophylaxis (PrEP) at health facilities?
2. Have you ever used HIV PrEP before?
3. Tell me your decision to use or not to use HIV PrEP
4. Are you aware of the benefits of HIV PrEP?
5. Do you think few or more adolescent girls and young women use HIV PrEP from health facilities?
6. Probing questions follows
7. What would you do differently to encourage more adolescent girls and young women at risk of getting HIV to use HIV PrEP?
8. Before we conclude this interview, is there anything else you would like to share with me regarding this topic?

Thank you for your participation.

TRANSCRIPTS OF AN INTERVIEW ON PERCEPTION OF ADOLESCENT
GIRLS AND YOUNG WOMEN REGARDING USAGE OF HIV PRE-
EXPOSURE PROPHYLAXIS AT HEALTH FACILITIES IN KATIMA MULILO,
ZAMBEZI REGION.

Interview no: 8

Date: 07 September 2021

Time: 12H00

Language: English

Place: Mavuluma Clinic

Researcher: my name is Miliko Fortune Sisamu, a student from the University of Namibia. I am studying for a Masters degree in nursing science that requires me to do a research. I am doing a research study on perceptions of adolescent girls and young women regarding usage of HIV Pre-Exposure Prophylaxis (PrEP) at health facilities in Katima Mulilo, Zambezi region. You participating in this study will help me continue with this study, collect and interpret the data I will collect. After I have done this, I will be able to make recommendations that might help in improving PrEP uptake from health facilities in Katima Mulilo, which could benefit adolescent girls and young women like you and also the community at large. With this being said I am asking permission to do an interview with you for this study. This study will not require you to identify yourself. Your identity will be kept confidential and anonymous during the whole study. Do you allow me to interview you?

Participant: yes

Researcher: wonderful, I will start with my first question, what are your perceptions or thoughts regarding usage of HIV Pre-Exposure Prophylaxis (PrEP)?

Participant: I have heard it prevents HIV especially if you have many boyfriends. It has many side effects. I heard it makes your liver weak. I heard it is for prostitutes and if someone is taking it they will be seen as prostitutes but people are scared that they will be said to be having HIV if seen taking those pills

Researcher: Have you ever used PrEP before?

Participant: No those pills are for people who are very busy...laughs. If people find out you are taking PrEP, they will treat you like an outcast, just like they treat HIV positive people.

Researcher: Tell me more what do you mean “people who are very busy?”

Participant: What I mean is, the pills should be taken by people with many boyfriends or prostitutes

Researcher: Tell me about your decision to use or not to use PrEP?

Participant participants: I did not know anything related to PrEP since there was basically no information provided to us in the local community. If people find out you are taking PrEP, they treat you like you are an outcast, just like they treat HIV positive people. I will not use PrEP because I do not want to look like a prostitute, aaah...imagine walking out of the nurse room with a container of PrEP and a lot of people looking at you? Those people will just think you are having many boyfriends or you are a prostitute or maybe you are HIV positive because those pills look like ARVs and they make noise when in a bag....laughs!

Participant: from what I have heard. Of all these, I am shy because the nurse will think I like to have sex without condom. I also do not want to my liver to be sick and my boyfriend might dump me because he will think that I have many boyfriends. Besides that, I only know that I am supposed to take PrEP to protect myself from HIV but am not familiar with any law which encourage me to do so, I do this in my own decision

Researcher: Are you aware of the benefits of using PrEP?

Participant: They say it prevents HIV but I am not sure about that because I did not know anything related to PrEP since there was no information provided to us in the local communities, we live in. People are also shy that they will be said to be having HIV if seen taking those pills

Researcher: You are saying you are not sure if PrEP prevents HIV tell me about that

Participant: I have never used it before so I do not more about it. I am single young mother taking care two children below the age of nine years. I have to cook for them, prepare them for school, wash their clothing and help out with school activities. These activities keep me busy and leave me with limited time to be able to always attend to my PrEP.

Researcher: Statistics show that there is quite a low number of PrEP uses from health facilities in this town, what do you think could be the reasons for this?

Participant: At times when I visit the local Mavuluma clinic, I am sent back home because the nurse responsible for providing PrEP might not be there. Besides that, the clinic is always full, the nurses take a lot of time to treat one person, at the end of the day, I cannot seat for long

waiting for PrEP There are DREAMS people who come to our houses to tell us about PrEP
Maybe the nurses should also come and tell us more about this PrEP

Researcher: You mentioned DREAMS, what is that?

Participant: DREAMS is a project for girls, where they test for HIV and give PrEP.

Researcher: What would you do differently to encourage more participant like you, I mean those at risk of getting HIV to use HIV PrEP?

Participant : myself I am a single I know that government helps out in the provision of PrEP medication in the fight against HIV/AIDS in the Namibian environment, its up to us to support this idea, my fellow girls must ask about PrEP at the clinic and the nurses must answer nicely. They can also join DREAMS, I want to join also. Clinics just for us girls will help in helping us get the medication easily and reduces long queues at health facilities as well.

Researcher: Is there anything else you want to tell me about this topic?

Participant: Yes, At times when I visit the local Mavuluma Clinic, I am sent back home because the nurse(s) responsible for providing PrEP might not be present. This now affects me negatively, considering the financial and time resources I would have used. The government must make the pills small so that it is easy to swallow and the pills in a plastic bag instead of the bottle so that it does not make noise.

Researcher: This was so insightful, I learned a lot from this interview, thank you very much for your time

Participant: Thank you very much for coming Ms.