SCHOOL OF MEDICINE AND HEALTH SCIENCES

FACTORS INFLUENCING PrEP RETENTION AMONG ADOLESCENT GIRLS AND YOUNG WOMEN AT KAPATA URBAN CLINIC

BY

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A Dissertation submitted to the University of Lusaka in partial fulfilment of the requirements of a Degree in Bachelor of Science in Public Health

DECLARATION

Name of student and ID:

I declare that this dissertation is my creative work and to the best of my acquaintance has not been presented for a degree in any other institution.

Signature:_____ **Date:** 05/06/2023.

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This dissertation has been submitted with my approval as a University of Lusaka (UNILUS) supervisor.

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Signature:_____ **Date:** 05/06/2023.

DEDICATION

I dedicate this piece of work to my mother and brother, Mary Milanzi and Maymaba Lunda for the endless moral support given to me during my education period. My friend Josephine Nyendwa for her backing and encouragement.

Thank you very much and may the good Lord bless you.

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Foremost, I would like to extend my gratitude and appreciation to my school, University of Lusaka and its' all-weather lecturers who have provided the needed support and guidance during my education. Special thanks to my research supervisor Mr. Bwalya Chiti for making it possible for me to produce this research document. My appreciation also extends to all other personages from the community, Kapata Urban Clinic, and different office barriers who helped in this study.

Without these people and their active guidance, outmost help, co-operation and encouragement, I would not have come this far.

To God be all the Glory.

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LIST OF ACRONYMS

AGYW	ADOLESCENT GIRLS AND YOUNG WOMEN
AIDS	AQUIRED IMMUNODEFICIENCY SYNDROME
ART	ANTIRETROVIRAL THERAPY
AYP	ADOLESCENTS AND YOUNG PEOPLE
DHIS-2.0	DISTRICT HEALTH INFORMATION SYSTEM VERSION 2.0
DREAMS	DETERMINE, RESIELIENT, EMPOWERED, AIDS-
DSD	DIFFERENCIATED SERVICE DELIVERY
FGD	FOCUSED GROUP DISCUSSIONS
HIV	HUMAN IMMUNODEFICIENCY VIRUS
IDI	IN-DEPTH INTERVIEW
IEC	INFORMATION, EDUCATION AND COMMUNICATION
IPV	INTIMATE PARTNER VIOLENCE
PrEP	Pre-EXPOSURE PROPHYLAXIS
SDG	SUSTAINABLE DEVELOPMENT GOAL
UHC	UNIVERSAL HEALTH COVERAGE
UNAIDS	THE JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS
USAID	UNITED STATES AGENCY FOR INTERNATION DEVELOPMENT
VMMC	VOLUNTARY MEDICAL MALE CIRCUMCISION
W.H.O	WORLD HEALTH ORGANIZATION
ZCG	ZAMBIA CONSOLIDATED GUIDELINES

ABSTRACT

Introduction

In 2020 alone, The Joint United Nations Programme on HIV/AIDS (UNAIDS) reported that, 410,000 young people between the ages of 10 to 24 were newly infected with HIV, of whom 150,000 were adolescents aged 10 and 19. However, biomedical approaches to HIV prevention offers new opportunities for slowing the HIV/AIDS epidemic among populations at risk of contracting HIV. In sub-Saharan Africa, PrEP has been accepted as a biomedical intervention for HIV prevention and is being offered as combination with other prevention interventions. Therefore, this research stresses to determine factors influencing PrEP retention among adolescent girls and young women at Kapata Urban Clinic of Chipata in Eastern Province of Zambia.

Methods

Based on the literature on PrEP uptake and adherence and the socioecological model theory, explorative qualitative research was done at Kapata Urban Clinic in Chipata District of Eastern Province. A semi-structured interview guide was administered using Focus Group Discussion and Individual interview of Adolescent Girls and Young Women, Facility Based Volunteers and the Health Providers.

Results

The results gathered from the focus group discussion and individual interview was analysed and categorised into three major themes Individual Factors which includes, education, stigma, preference of HIV prevention method, and side effects; Socioeconomic Factors that included, Social Cash Transfer, Intimate Partner Violence (IPV), and Discrimination; Institutional Factors, Confidentiality, Client Waiting Time, Integration of Services, Customer Care Services, Provider Competency, and Differentiated Service Delivery Models.

Conclusion

The majority of the findings from the research and related studies were institutional factors for example limited PrEP access points, compromised confidentiality, and Intimate Partner Violence. Therefore, additional studies are needed to address research gaps including client care services and Intimate Partner Violence.

CHAPTER ONE

1.0 INTRODUCTION

Adolescents and Young People (AYP) represent a significant share of people living with HIV worldwide. In 2020 alone, The Joint United Nations Programme on HIV/AIDS (UNAIDS) reported that, 410,000 young people between the ages of 10 to 24 were newly infected with HIV, of whom 150,000 were adolescents aged 10 and 19. However, adolescent girls and young women (AGYW) represent a disproportional burden of the HIV epidemic. Nevertheless, current standard approaches and initiatives to pre-exposure prophylaxis (PrEP) delivery have not yet t met their needs. (UNAIDS, 2008). Biomedical approaches to HIV prevention offers new opportunities for slowing the HIV/AIDS epidemic. One of the promising strategies currently being implemented is the provision of oral pre-exposure prophylaxis (Oral-PrEP). Oral-PrEP refers to taking of effective antiretroviral medications before HIV exposure using oral pills by uninfected persons as a means of preventing HIV acquisition. The World Health Organization (W.H.O, 2015) recommends daily oral-PrEP using Emitricitabine to be offered as part of the biomedical services to individuals at substantial risk to HIV infection.

The gender disproportion in HIV infection is predominantly prominent amid the young people. In some parts regions within the sub-Saharan Africa, the incidence of HIV infection among women aged between 15-24 is two to eight-fold that of men in the same age group (Laga 2001; UNAIDS, 2004; Clerk et al, 2006; Madkan et al, 2006). Gouws et al, (2008) reported that women from 15 to 24 years in nine southern Africa nations greatly impacted by HIV were on average approximately three-folds more likely to be infected than men of the same age. In a review led in Kisumu, Kenya, and Ndola, Zambia, Glynn et al. (2001) saw that in the two destinations the HIV power in ladies was multiple times more than that in men among 15 - long term olds that answered to be physically dynamic; multiple times that in men among long term olds; and identical to that in men between the ages of 25-49. Such imbalances in illness designs have been generally credited to financial well-being framework and individual variables (Rosenthal et al, 1999; UNAIDS, 2003), and to some degree to ladies participating in sexual activities sexual with more established accomplices who have more sexual openness (MacPhail et al, 2002; WHO, 2003; Sa and Larsen, 2008), particularly in social orders where accepted practices order relationships at an early age for ladies. Research from 16 nations in sub-Saharan Africa demonstrates that accomplices of 15-19-year-old young ladies are on normal 10 years more established than their spouses (WHO, 2019). AGYW are considered to be a group at

substantial risk of HIV acquisition due to several factor including poverty, early sexual debut, early marriages, social harms like intimate partner violence, and lack of negotiation power to condom use. Additionally, there is a notable number of AGYW engage in high risk sexual activities such as having multiple sexual partners and engaging in intergenerational sex. All these factors put this particular population type to be a priority for PrEP.

In sub-Saharan Africa, PrEP has been accepted as a biomedical intervention for HIV prevention and is being offered as combination with other prevention interventions like HIV testing, sexually transmitted infection screening, testing and treatment, modern family planning, condom, and voluntary medical male circumcision (VMMC). This intervention is coupled with information education and counselling (IEC) in order to curb the myths and misconceptions about HIV infection and the existing prevention interventions that are deep rooted cultures and traditions practices.

In 2016, the Zambian Ministry of Health (MOH) adopted the 2015 W.H.O guidelines by incorporating PrEP to its Consolidated Guidelines for HIV management. The Zambia Consolidated Guidelines 2020 recommends daily oral PrEP as a fixed dosed combination using Tenofovir Alafenamide Fumarate combined with Emitricitabine as a preferred PrEP regimen or Tenofovir Disoproxil Fumarate combined with Lamivudine as an alternative for HIV Prevention which should be taken as part of the combination for people at substantial risk of HIV infection including AGYW. Additionally, the Ministry with its partners has ensured that PrEP is made available in all health institution even those providing primary health care services like Kapata Urban Clinic in Chipata District of Zambia.

This study aims at assessing factors influencing PrEP retention among adolescent girls and young women at Kapata urban clinic. This vital information will provide insight on some of the root causes attached to poor retention of AGYW to PrEP services despite being at the greatest risk of HIV acquisition.

1.1 STATEMENT OF PROBLEM

The Ministry of Health of Zambia with support from different partners at community, national and international level have put up several initiatives tailored towards AGYW across the country and Kapata Urban Clinic has been a beneficiary overtime. These efforts have been implemented in order to increase the uptake of sexual reproductive health services (SHRS), provide economic and school support to vulnerable girls. For instance, The United States Agency for International Development (USAID through Pact Zambia is currently implementing Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS), an initiative that promotes Sexual Reproductive Health and empowers an AGYW with information skills and school and economic support and Grassroots Soccer a community-based organization that promotes linkage of AGYW to health services and keeping them preoccupied through sporting activities.

Despite the risks AGYW are exposed to which are associated with HIV infection and the initiatives that the Ministry of Health of Zambia together with different partners are implementing, there is a significant number of AGYW who are not adhering to PrEP after initiation. According to the District Health Information System (DHIS 2.0), AGYVs initiated on PrEP at Kapata Urban Clinic in a space of 1 year from October, 2019 to September, 2020, 608 out of 713 initiations stopped PrEP; 12% at 1 month, 68% at 3 months and 20% after 3 months but less than 9 months post initiations. Comparing retention of PrEP to Injectable family in same period, injectable family planning recorded a retention coverage of 86% at 9 months. This can be deduced that the number of AGYW retaining for injectable family planning services at Kapata Urban Clinic is overwhelmingly huge, otherwise, persistence on PrEP may not be compared on scale to that of injectable contraceptives.

Factors influencing retention of AGYW at Kapata Urban Clinic are not fully understood. Therefore, this study benefits the public to appreciate the common issues relating to PrEP uptake among adolescent girls and young women. It may also provoke policy makers to consider formulating deliberate measures that favour adolescent girls and young women.

1.1.1 General Research Objective

To determine factors influencing PrEP retention among adolescent girls and young women at Kapata Urban Clinic.

1.1.2 Specific Research Objective

1. To explore socio-economic factors influencing PrEP retention among AGYW
2. To understand health system factors influencing PrEP retention among AGYW
3. To identify individual and personal factors influencing PrEP retention among AGYW

1.1.3 Research Questions

1. Which socio-economic factors influence PrEP retention among AGYW?
2. Which health system factors influence PrEP retention among AGYW?
3. What are the individual factors that influence PrEP retention among AGYW?

CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter reviews of literature done by other scholars, writers and organizations related to the study topic and it provides support, criticism and it also highlights areas that are not fully understood or explored. It is organized in a way that summarizes the socioeconomic, health systems and individual factors that influence retention of PrEP among AGYW.

2.1.1 Risk of HIV Infection

Baral et al., (2013) in their study to assess the risks and risk context of HIV epidemics concluded that the factors that influence uptake of health services among AGYW are spread throughout multiple contexts. The risk of HIV and other health outcomes are linked to such factors that include social influence, social engagement, disease prevalence, and access to information, intimate contact and social networks. Moreover, Viner et al., (2012b) supported this assertion that social networks not limited to geography, socioeconomic status, culture and religious lines have a great association to HIV risk and adherence to medication including uptake of prevention interventions. They further suggested that protected and steady families, schools, along with positive and strong companions are essential to assisting youngsters to become their best as they transition to adulthood. Social networks comprised of relational communications that incorporate family, companions, neighbours, and others straightforwardly impact wellbeing and well-being ways of behaving by offering social help and building up to normal practices and conduct that act as defensive factors and decrease HIV transmission risk.

Emile, (2018) equally highlighted that lack of supportive structures can negatively influence health outcomes among adolescent girls and young women. This stretches from gender inequality in society that is deep-rooted in cultural practices to biasness in health service provision. He further indicated that there is high uptake of HIV prevention services in Sub-Saharan Africa that favour men compared to girls and women due to cultural practices and norms, lack of integration and provision of health services in a non-inclusive manner including the limited number of established adolescent friendly spaces in several health institutions.

2.1.2 Policy and System Factors

A study conducted to distinguish the Principal Challenges in the Health system in Africa and their answers for proof-based choices, strategy improvement, and program prioritization showed that, medical care frameworks in Africa experience the ill effects of disregard and underfunding, prompting extreme difficulties across the six World Health Organization (WHO) mainstays of health care delivery (Oleribe et al., 2019). Malakoane et al., (2020) upheld the attestation and demonstrated that the general wellbeing framework challenges announced by partners included underfunding, absence of coordination, staff deficiencies, conflicting stock of clinical commodities, poor monetary management, and failure to put resources into innovative activities. Thiam, Kimotho, and Gatonga suggested in their focus on Isonizide Preventive Therapy (IPT) inclusion in management of HIV in sub-Saharan Africa; A foundational survey on wellbeing hindrances. They reasoned that the exhibition of public essential mediations, like IPT, Vaccines etc., is connected to the presentation of how well the pillars of the nation's health system are functioning and addressed.

2.1.3 PrEP demand and motivation

Camlin et al., 2020 argued that PrEP demand among Adolescent girls and young women depends on delivery models that promote youth access, framed messaging on wellness and goals, and foster partner and peer support, which facilitates uptake among young people. They further indicated the motivation of PrEP came as a result of perceived HIV risk. Otherwise, motivation for PrEP were highly gendered: young men viewed PrEP aw a vehicle for safely pursuing multiple partners, while young women was PrEP as a means to control risk in the context of engagement in transactional sex and limited agency to negotiate condom use and partner testing. Furthermore, PrEP vas often discontinued due to dissolution of partnerships and changing risks, unsupportive partners and peers, or early side effects and pill burden.

2.1.4 Knowledge levels on PrEP

An article done by Young, Flowers and McDaid, (2018) indicated that the understanding of PrEP effectiveness and concerns about maintaining regular adherence were identified as barriers to potential PrEP uptake and use. Low perception of HIV risk due to existing risk management strategies meant few participants saw themselves as PrEP candidates. Many participants viewed PrEP as problematic because they perceived that other would stop using

condoms if PrEP was to become available. Alick, (2021) in his study focusing on Adolescent Health and Wellbeing indicated that lack of education in most sub-Saharan African countries made it difficult for most AGYW to keep up with the new trends because they are unable to read and write. This is a challenge in a way that even if information is provided on some of the essential health intervention to maintain their wellbeing, it requires more than on session which may not be very practical considering the limited number of health providers in the health institutions.

2.1.5 PrEP Effectiveness

Muhumuza et al., (2021) In their study on PrEP effectiveness among Key Populations indicated that some participants raised doubts about the effectiveness of PrEP to prevent HIV infection. They expressed that most HIV drugs are under investigation in clinical trials and most of them are found not to be effective when the trials are complete. Young, Flowers and McDaid, (2014b) also alluded to this assertion about PrEP effectiveness that the identified risk of other sexually transmitted infections and pregnancy are a concern which PrEP did not address for either clients or their sexual partners.

2.1.6 Stigma and Discrimination Associated with PrEP

Sustainable Development Goal number three (SDG-3) which centres on "great wellbeing and prosperity" guarantees solid lives and advances prosperity for everybody paying little mind to progress in years or sex, or nationality. It legitimizes the idea of "abandoning nobody" which is a message of widespread wellbeing inclusion (UHC) that puts its significance on individuals to get to quality wellbeing administrations inside their nearby networks without disgrace or segregation or causing a stressing on their funds. (Joined Nations, 2019). Nonetheless, Muhumuza et al., (2021) in their review Exploring Perceived Barriers and Facilitators of PrEP Uptake among Young People in Uganda, Zimbabwe, and South Africa, showed that the members would cease taking PrEP in view of the relationship of PrEP with antiretroviral medications and HIV-related shame. Taking medicine, particularly every day, can be confused with taking ARVs for treatment as opposed to anticipation. Camlin et al., (2020b) suggested that tales, HIV/ART-related shame, and craving for "evidence" of adequacy militated against take-up, and numerous ladies expected accomplices' authorization to take.

2.1.7 Complexity of PrEP eligibility and Use.

Muhumuza et al., (2021) there was a discernment that everyday PrEP would require tough timekeeping and keeping up with ordinary clinical visits. Some AYP claimed of that most sex activities happen without prior arrangements or maintaining a known routine. This was coupled with the concerns of pill burden especially individuals with comorbidities. On the other hand, PrEP has been shown to be effective against slowing the progression of Hepatitis B virus., therefore, individuals commencing on PrEP must be screened for Hepatitis B infection and if found positive, the have to be on Truvada for life. (ZCG, 2021).

2.1.8 Characteristics of PrEP

Alick (2021b) reported in his study focusing on Adolescent Health and Wellbeing that the growing concerns about Oral-PrEP included taste, smell, size, potential side effects and packaging of the drug. Additionally, he also reported that about 68% of Adolescents reported difficulties in taking oral drugs including PrEP. This was picked as a concern on PrEP effectiveness as a result of poor adherence.

The Zambia Consolidated Guidelines of HIV highlights the possible side effects of PrEP which are categorized as mild, moderate and severe. Additionally, the recommendation is that PrEP must be deferred in a even that one experiences side effects that affects one's functionality (ZCG, 2021).

However, the new initiatives in the prevention program from the World Health organization such as the use of the dapivirine vaginal ring (DPV-VR), the long-acting injectable cabotegravir (CAB-LA), and the the event driven PrEP (ED-PrEP) may be an additional HIV prevention option for people at substantial risk of HIV infection including AGYW.

2.2 THEORETICAL FRAMEWORK

A theory may be defined as a set of philosophies that describe something about life and the universe. Therefore, a theoretical framework is an outline of concepts and information that one desires to bear in mind so as to make logic of what one perceives considerable (Brunner, 1996). Theoretical frameworks play an important role in research. They are meant to guide the collection of relevant data and inform the ethical assessment of this study and they help to marry the new findings to the already existing theories in the world.

2.2.1 Socio Ecological Model

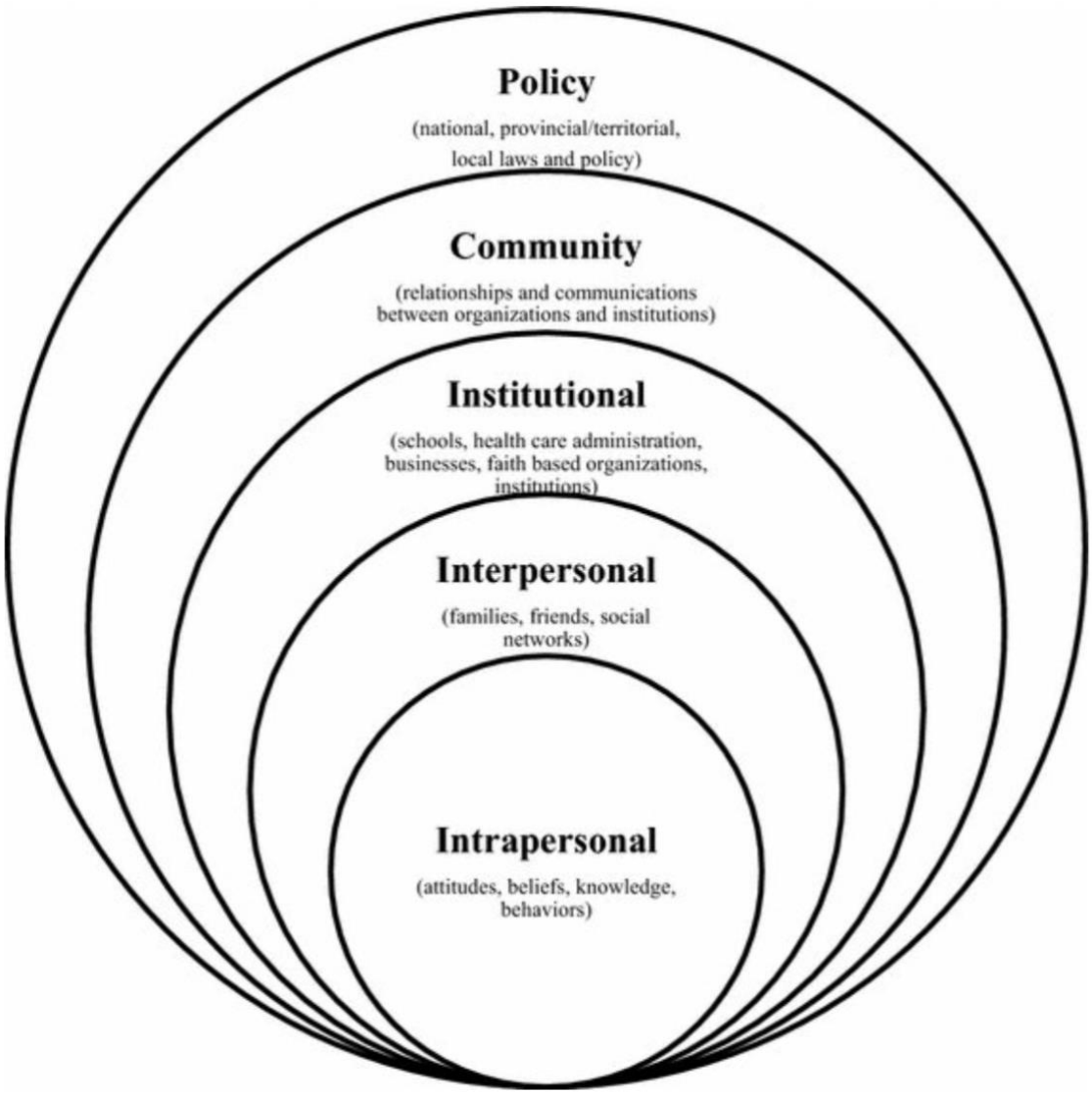
In order to understand the concept of the factors that influencing PrEP retention among AGYW, this study will be guided by the social ecological model done by a psychologist Urie Bronfenbrenner in the late 1970s. The social ecological model argues that individual, interpersonal, institutional, organizational, and societal factors should be taken into account when planning and implementing health promotion interventions. (Glanz et al, 2008). This model considers individual factors and the setting and context in which the person is actively involved and appreciates that all levels of the model impact on the behavior of the individual.

Predisposing characteristics include demographic factors (age and gender), social structures (education, occupation, ethnicity and other factors measuring status in the community, as well as coping and the health of the physical environment), and health beliefs (attitudes, values and knowledge that might influence perceptions of need and use of health services).

In this case, the theory will help the researcher to know the Intrapersonal, Interpersonal, Institutional, Community and Policy factors affecting PrEP retention among AGYW at Kapata Urban Clinic of Chipata District.

2.3 CONCEPTUAL FRAMEWORK

Figure 1: An exploration of factors influencing PrEP retention among adolescent girls and young women.



Interpretation and full understanding of the conceptual framework borrows the idea on how the research should be framed and shows a relationship among the ideas and how they relate to the research study.

CHAPTER THREE

3.0 METHODOLOGY

3.1.1 Chapter Review

This chapter describes the methodology used in the study. It outlines the study design, study area, study population, sampling procedures, data collection, data analysis, ethical considerations and limitations of the study methods.

3.1.2 Study Design

This study was an exploratory qualitative study design since the aim of the study was to determine factors influencing PrEP retention among AGYW at Kapata Urban Clinic, therefore, qualitative methods were appropriately used due to their ability to collect granular data on issues relating to socioeconomic, health system and individual factors unique to AGYW.

3.1.3 Study area

Chipata District is politically divided into two constituencies namely, Chipata Central and Luangeni Constituency and the study site Kapata Urban Clinic is located in the heart of the business District in Chipata Central Constituency geographically situated next to Chipata Main Bus Station and surrounded by both residential buildings and business entities. Kapata Urban Clinic is the largest Clinic in Chipata with the highest defined catchment population of about 59012 people according to Central Statical Report (2022). It has a total of 4332 people on ART treatment according to DHIS 2.0 (January, 2023) and it houses 2 community posts within its catchment and one of them is a DREAMS Safe Space that provides AGYW friendly Structural, Behavioural and Biomedical HIV Prevention Interventions. Kapata has a total of 33 recognized Neighbourhood Health Committees.

3.1.4 Target population

The study population comprised of beneficiaries of PrEP services and the service providers (i.e Facility Health Providers and Facility Based Volunteers). This provided a comprehensive view of what was affecting uptake of PrEP among AGYW.

3.1.5 Inclusion Criteria

Table 1. Inclusion criteria for each population type.

POPULATION TYPE	INCLUSION CRITERIA
ADOLESCENT GIRLS AND YOUNG WOMEN	AGYW aged between 16 to 24 years.
	Able to provide verbal informed consent.
	Lived in the study area for more than 3 months.
	AGYW who have at least benefited from PrEP services.
	AGYW who have since stopped or had an interruption in PrEP service.
	Able to provide verbal informed consent
	Willing to participate
FACILITY BASED VOLUNTEER	Actively attached to the health facility
	Volunteered atleast for more than 3 months at the Health Facility
	Lived in the study area for more than 3 months
	Able to speak English or any other designated local language(s)
	Able to provide verbal consent
	Willing to participate
HEALTH FACILITY STAFF	Currently employed by an Non Governmental Organization or Government or Other Institutions
	More than 6 months in the current position
	Able to provide verbal consent
	Willing to participate

3.1.6 Study sampling

The participants were recruited using purposive sampling method which provided the best suited participants who provided a full description of factors affecting PrEP uptake among the

AGYW. AGYWs on PrEP were engaged during their clinical visits while those who had their PrEP interrupted were called and scheduled interview appointment was established. The modality of the interview was stratified by participants characteristic (i.e avoid clustering different population groups) in order allow them to freely share their ideas and perceptions. This activity was not funded therefore participants were not paid anything for taking part in the study.

3.1.7 Sample Size

A sample size of 34 participants was used in this study and 34 semi-structured interview guides were distributed among the AGYW actively on PrEP, AGYW who had their PrEP interrupted, Facility Health Providers and Facility Based Volunteers.

3.1.8 Sample size distribution

Table 2. Sample size for each population type.

S/N	CATEGORY	SAMPLE SIZE
1	Adolescent Girls and Young Women on PrEP	10
2	Adolescent Girls and Young Women Who had an interruption in PrEP	10
3	Facility Health Providers	2
4	Facility Based Volunteers	12 (from one FGD)

3.1.9 Data Collection Tool

Data collection for this study was done using two methods of data collection, in-depth interviews (IDIs) for the beneficiaries of PrEP and Health Providers and Focus Group Discussions (FGDs) for the Community Health Works. Some of the study materials needed for data collection was translated into Chinyanja a local language in the study area considering those who were not able to speak or understand English. The data collected was documented on paper and recorded in audio in order to have multiple scripts for analysis.

3.2.1 Data Management

All the collected data from individual interviews and FGDs was translated into English and the audio recordings were transcribed into verbatim. The collected data was later stored both on soft copy and hardcopy documents.

3.2.2 Analysis

The data was analysed using a Thematic Coding Analysis (TCA) approach where similar codes emerging from the data was merged and a final code category was created.

3.2.3 Ethical Considerations

Clearance was obtained from the District Health Director and the facility In-Charge. Participants were required to give consent either written or verbal before taking part in the study and/or at every stage where the participants had to reveal personal information. All the information that was collected was treated as confidential and only for use for the purposes of this study. Consent was equally obtained from the Ethical Committee at the University of Lusaka.

CHAPTER FOUR

4.0 DATA PRESENTATION AND RESULTS

4.1.1 Chapter Overview

The findings of the analysis, as well as the data gathered from the sampled respondents are presented in this chapter. Twenty-three 23 individuals were subjected to interview guides distributed as Twenty (20) Adolescent Girls and Young Women (20), Two (2) Health Providers and One (1) Community Health Workers. These were semi-structured and the distribution the depended on the modality of the interview and the type of respondents. The relevant words, phrases and concepts from the interview were coded. The responses from the interview were organized around the study questions and objectives from chapter one and analysed thematically. The results are presented in form of tables, pie charts and bar graphs to provide better explanation and make the analysis easier. After a proper analysis, the modes of data display were created using Microsoft Excel.

4.1.2 Response

The researcher distributed Twenty-three semi-structure interview guides and the table below summarizes the researcher's distribution and response rates from the interview.

Table 3. Interview Guide Distribution by respondent type and modality (Field Data 2022)

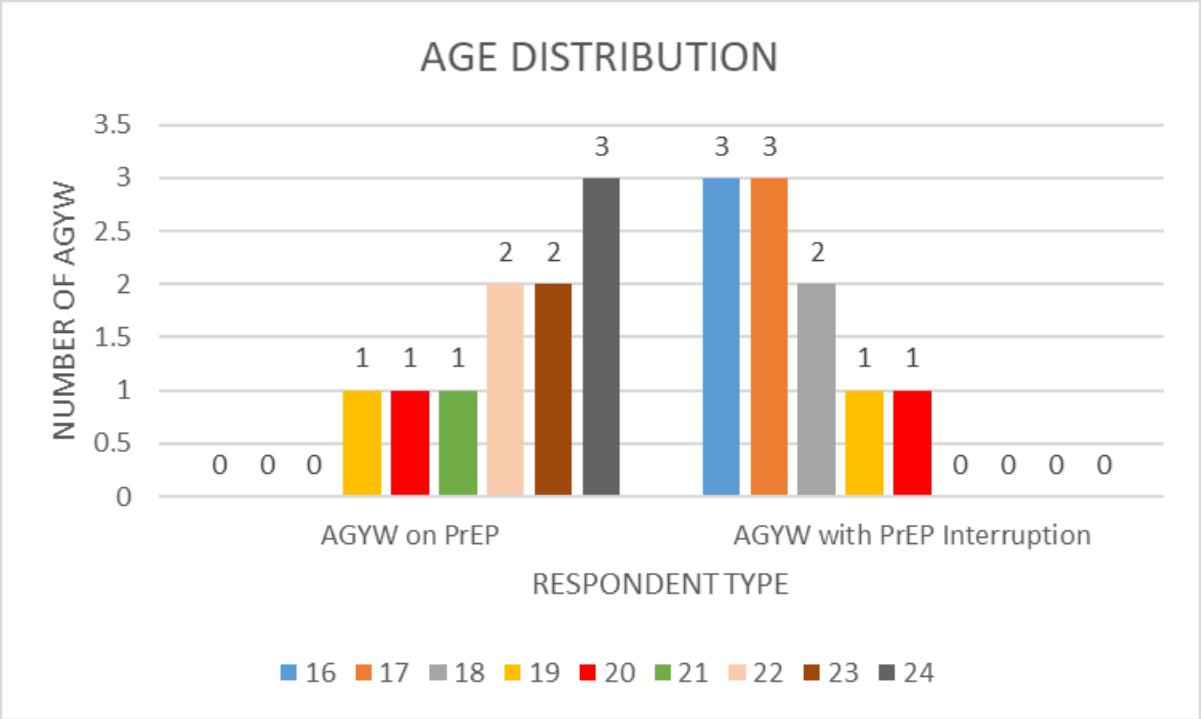
Type of Respondent	Modality of Interview	Interview Guides Distributed	Accepted	Rejected	Completed Interview	Not Completed
AGYW on PrEP	Individual	10	10	0	10	0
AGYW with PrEP Interruption	Individual	10	9	1	9	0
Health Providers	Individual	2	10	0	2	0
Community Health Workers	Focus Group	1	10	0	1	0

The data collection process consisted on two modalities thus individual interview and focus group discussion. From the 23 interview guides administered, 22 out of 23 were accepted and

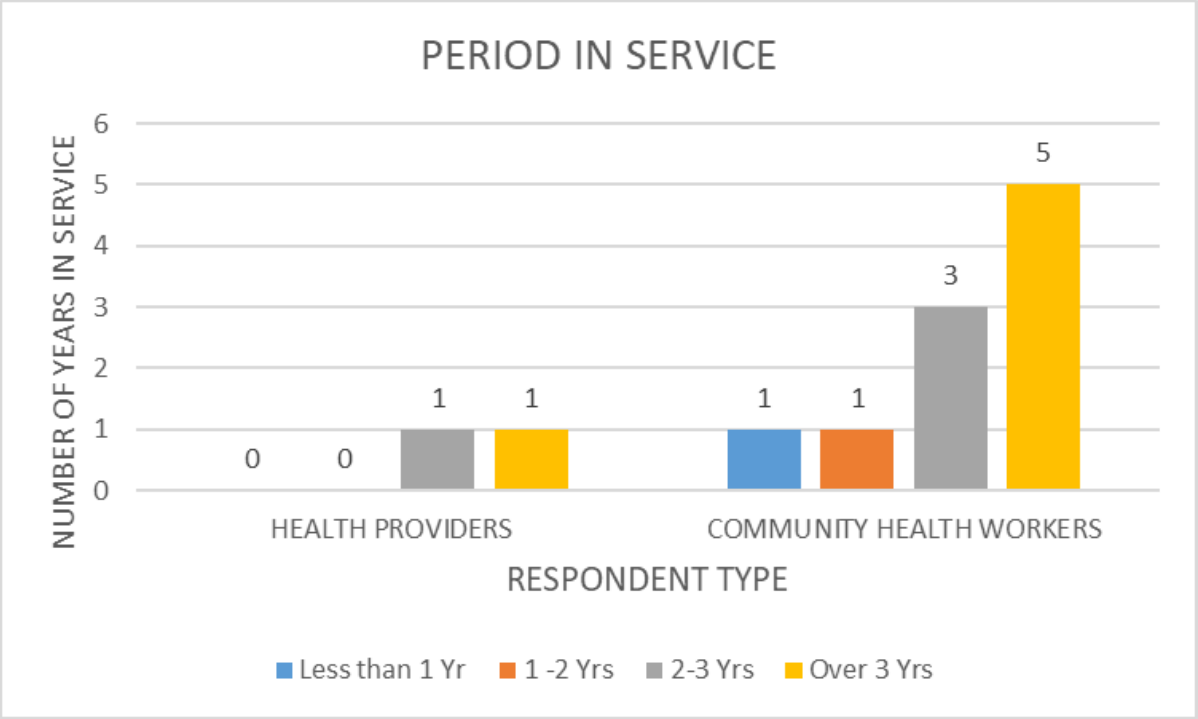
completed. 1 AGYW (with PrEP Interruption) opted out with fear of being exposed despite assurance of confidentiality from the researcher.

4.1.3 Age of Respondents

Bar-Chart 1. The age and gender distribution was more towards the population of focus. The graph below shows the age distribution among AGYWs both on PrEP and those who had an interruption.



Bar-Chart 2. Period in Service



4.4 RESULTS

The chapter objectively and neutrally presents the findings formatted following the conceptual framework determining factors which include the socio-economic, health system and, individual factors influencing PrEP retention among adolescent girls and young women at Kapata Urban Clinic targeting. The table tries to summarize the findings in a thematic context as tabulated in the table below.

Table 4. Thematic Presentation Findings on the Factors affecting PrEP uptake

INDIVIDUAL FACTORS	SOCIOECONOMIC FACTORS	INSTITUTIONAL FACTORS
Education	Social Cash Transfer	Confidentiality
Stigma	Intimate Partner Violence (IPV)	Client Waiting Time
Preference of HIV Prevention Method	Discrimination	Integration of Services
Side Effects		Customer Care Services
		Provider Competency
		Differentiated Service Delivery Models (DSD)

4.4.1 INDIVIDUAL FACTORS

These factor encompass issues surrounding culture, gender and many other aspects relating to human socialization like attitudes, personality, motives, values, self-esteem and level of exposure. The finding from this interview explored issues regarding to education, stigma, and individual choices.

4.4.2 Education

Education can be described as a process of receiving or giving systematic instructions with the intention to empower others to make informed decisions. All the AGYWs interviewed express knowledge about the PrEP and the need for it. However, the majority stated that the demand for PrEP depends on sensitization opportunities available. *I first learnt about PrEP when I was being treated for virginal discharge at the clinic. Had I known earlier, I could have commenced*

PrEP sooner. One AGYW indicated. There are different modalities that are used to disseminated information. Utilizing avenues which targets the population of interest has proved to be effective. The health provider expressed concern over the sensitization methods that are mostly used to sensitize about PrEP. *Other than the clinic, you can only hear about PrEP on radio. The challenge is that, most of these girls are healthy therefore they are not come to the clinic often and the radio messages may not be as effective because the target group is not listening.* Another Health Provider showed concern on how complacent some clients present. *Most of them do not to realize that they are at substantial risk of acquiring the infection.* One respondent among AGYWs on PrEP indicated that *attaining a certain level of education allows once to make informed choices in life therefore education being a tool for survival*. *Education makes it easy to communicate client's needs and be able to ask questions when not clear*.

4.4.3 Stigma

Self-stigma draws from lack of assertiveness and makes it difficult for one to talk to their Health Providers about their risk behaviours. This result from fear of being judged or mocked. *I find it challenging to talk to male providers about my sexual activities and talking about PrEP feels like I am expressing my promiscuity.* One AGYW explicitly explained. Furthermore, one of the Health Providers indicated that most AGYWs are worried to be seen with Antiretroviral Drugs. *The fear is about being mistakenly labelled to be living with HIV.*

4.4.4 Preference of HIV Prevention Methods

There are different methods of preventing HIV and the need for prevention changes time to time. All the AGYWs interviewed showed interest in continuing PrEP and indicated it is effective however, it requires commitment and following a strict schedule and it has to be taken for a certain number of days for it to be fully effective. On the contrary, one AGYW narrated that this may not be the same for sex because the frequency may not be as routine and predictable as PrEP uptake. *The unpredictability of sexual activities makes girls to opt for more convenient prevention methods such as condoms.*

4.4.5 Side Effects

The side effects of PrEP may range from mild to severe and can be prominent in individuals with pre-existing conditions such as renal insufficiency. *A limited number of people report having experienced side effects after being initiated on PrEP, however, we are guided to screen for specific conditions which can be complicated as a result of PrEP initiation*, the health

provider explained. One Adolescent girl indicate that she only experienced nausea for the first few days after initiations but it never resulted into anything too serious.

4.5 SOCIOECONOMIC FACTORS

Social and economic factors, such as income, community safety and social support can significantly how long we live. These factors affect the ability to make healthy choices, manage medical care, and manage stress.

4.5.1 Social Cash Transfer

Social cash is a mutual transaction between two or more parties. The intention is supposed to benefit all the parties indulging in these transactions. *Some AGYWs are engaging in intergenerational sexual activities in exchange for money. This is with the need to meet the demands that comes with peer pressure and considering they are naïve, it becomes difficult to suggest or demand for safe sex,* the Health Provider narrated. She further alluded that, those that engage in transactional sex like female sex workers belong to the same priority population of AGYWs.

4.5.2 Intimate Partner Violence

Intimate Partner Violence is a form of Gender Based Violence that breeds from the will of power and control. One AGYW openly indicated that she was once a victim to this vice and her intimate partner who is currently living with HIV had suspicions that she could be engaging in sexual acts with other people therefore he could throw away not only her PrEP medication but also birth control pills. *He thought being on PrEP was a way of covering up my engagements with other men* she explicitly indicated. The Health Provider also narrated that they have realized an increase in IPV case resulting from ART including PrEP uptake.

4.5.3 Discrimination

Discrimination occurs when a person is unable to enjoy his or her human rights or other legal rights on an equal basis with others because of an unjustified distinction made in policy, law or treatment. We all have the right to be treated equally, regardless of our race, ethnicity, nationality, class, religion, belief, sex, gender, language, age, health or other status. *We keep hearing heart breaking stories of people who suffer cruelty simply for belonging to a "different" group from those in positions of privilege or power.* A health worker indicated.

4.6 INSTITUTIONAL FACTORS

This looks at the Internal dynamics that reflects the institution's efficiency and performance. It exposes best practices which can be cross pollinated to improve other areas that may be suffocating and the institutional gaps which may require targeted intervention.

4.6.1 Confidentiality

Confidentiality is essential to client care and any deviation to the prescribed standards may result in social harm to the recipient of the service. A health provider indicated that *It is challenging to maintain the standards that confidentiality demands such as storage of patient records in a lockable room or cabinet. I expected the person who offer an HIV testing to tell e about my results, to my surprise, a facility volunteer just shouted through the widow that I am okey and may need to see the clinician for another PrEP prescription.* (AGYW).

4.6.2 Client Waiting Time

Wait times rising is bad for customer satisfaction. Depending on the industry, the expectation can be as low as five minutes and as high as forty-five minutes. These ranges vary based on what the call is about and which sector you are in. with an understanding that most PrEP clients are not patients, it is important to fast track them whenever they are visiting the health facilities. The Health Provider stated that their policy at the facility is to ensure that clients do not wait on the queue for more than fifteen minutes. However, this has failed to be implemented optimally due to inadequate human resource. The majority of AGYW complained about the long waiting hours which demotivates to come for subsequent clinical appointments. It was highlighted in the FGI that the queues are so long to a point where you have to wait for close to two hours just to get a refill. Clinicians are overwhelmed with patients and they give little time to clients.

4.6.3 Integration of Services

With the idea to provide a comprehensive package to patients and clients, most services in health facilities have been integrated. The health provides also indicated that the provision of services within the same helps to overcome the long standing challenges of infrastructure. It is easy to see clients in one space and provide them with a list of services to choose from. Sensitive population with unique needs may require not only a convenient space but that which is safe and appropriate for them. *Currently, PrEP services are only provided where we manage our HIV positive clients and this makes it hard for the girls to access PrEP because everyone*

who is seen in that department, people assume that they are also being managed for HIV. The AGYWs indicated if services could be tailor in a safe space with good privacy, most girl would be more free to access not only PrEP but other prevention method like modern family planning.

4.6.4 Customer Care Services

To achieve the best customer service, the customer service team should address customer needs quickly and with as few customer interactions as possible. Customer service is the act of taking care of the customer's needs by providing and delivering professional, helpful, high quality service and assistance before, during, and after their visit. It was discussed during the FGD that most providers including community health workers do not provide optimal client care due to lack of training. This contributes to substandard service provision, stigma, discrimination and compromised confidentiality.

4.6.5 Provider Competency

A senior health provider explained the need to have an informed and culturally competent provider to be an effective too to patient care and support. *Patients are more satisfied when they perceive their care came from well-qualified and competent staff. Clinical outcomes and patient health are improved. And patient safety initiatives are uniformly understood and supported*, she indicated. One member of the FGD also highlighted that the providers are competent in most areas, however, they are overwhelmed with work therefore, it's difficult to practice the best in such an environment. *If the government can recruit more staff, then it can be easy to provide a comprehensive health service to all patients including young people,* alluded a FGD Member.

4.6.6 Differentiated Service Delivery Models

A recommendation from the Focus Group Discussion was that there is need to invest in DSD Models for PrEP services because it lessens the burden of routine hospital visits when clients can get PrEP right within their communities and homes, it supports fast track service provision, and reduces the risks that comes with a breech in privacy at a health facility due to limited human resource and structures.

CHAPTER FIVE

5.0 DISCUSSION AND ANALYSIS OF FINDINGS

This chapter discusses and analyses the findings of this research. The discussion follows the research objectives with data which was presented in the previous chapter. The results presented are based on 22 respondents. The study found a variety of factors that affect the retention of PrEP among AGYW. This chapter tries to explicitly stress on the highpoints from the results sections.

5.1.1 Individual Factors

Education has so far demonstrated that it is a tool not only for communication but as a way of survival. In our findings, limited or lack formal education among AGYW has been highlighted to be a factor that affects how they maintain their health. This assertion was equally indicated by Alick (2021) in his study focusing on Adolescent Health and Wellbeing. He expressed that it is difficult for AGYW in most sub-Saharan African countries to keep up with the new trends because they are unable to read and write. This result from limited or lack of formal education and this affect mainly how information is disseminated and assimilated. This is a challenge in a way that even if information is provided on some of the essential health intervention to maintain their health, it requires repeated sessions which may be a challenge in an environment with limited resources.

Furthermore, self-stigma that surrounding issues to do with the way services are provided in the stimulates stigma. The results show that some AGYW found it challenging to be attending to by a male provider especially when their need to discuss their sexual reproductive health. In the same vein, integration of health such as ART Clinics and HIV Prevention clinics made it difficult for AGYW to access PrEP due to fear of being labelled to be on Antiretroviral Therapy. Muhumuza et al., (2021) in their review Exploring Perceived Barriers and Facilitators of PrEP Uptake among Young People in Uganda, Zimbabwe, and South Africa, showed that the members would cease taking PrEP in view of the relationship of PrEP with antiretroviral medications and HIV-related shame. The implication of this is that most AGYW may shy away from seeking the needed health services.

Despite the recommendation on combing HIV Prevention methods, the interventions available gives AGYW limited options as some focus purely on males such as VMMC. The new

initiatives in the prevention program from the World Health organization such as the use of the dapivirine vaginal ring (DPV-VR), the long-acting injectable cabotegravir (CAB-LA), and the event driven PrEP (ED-PrEP) may be an additional HIV prevention option for people at substantial risk of HIV infection including AGYW while monitoring periods when they are likely to be a risk. This simply means that AGYW will have range of prevention options to choose from based on their preference and frequency of exposure.

5.1.2 Socioeconomic Factors

In the report, it is indicated that social cash transfer resulting from intergenerational sexual activities has been a concern and possibly a driver of HIV. This comes with the need to meet the demands that comes with peer pressure and considering that some maybe naïve, it becomes difficult to suggest or demand for safe sex the report indicated. Such sexual activities are often come with a spectrum of risk factors such as non-disclosure of one's HIV status, multiple and concurrent sexual partners, and Intimate Partner Violence. The implication of one being exposed to such risk factors puts them to be at substantial risk of HIV acquisition.

Muhumuza et al., (2021) in their review Exploring Perceived Barriers and Facilitators of PrEP Uptake among Young People in Uganda, Zimbabwe, and South Africa, did highlight issues to do with insensitive health providers. Discrimination occurs when a person is unable to enjoy his or her human rights or other legal rights on an equal basis with others because of an unjustified distinction made in the way they are treatment. We all have the right to be treated equally, regardless of our race, ethnicity, nationality, class, religion, belief, sex, gender, language, age, health or other status. It was reported that there are claims of discriminatory cases being reported however, this may require further analysis to fully understand the magnitude of the problem.

5.1.3 Institutional Factors

The findings from the study indicated that limited staffing and convenient structures make it difficult to confidentiality standards as most health rooms are not lockable and do not have lockable file cabinets for record keeping. Confidentiality is a key component to client care. A breech in confidentiality can result due to several factors including compromised privacy, limited facilities, inadequate human resource, and incompetent providers. However, maintaining this key principle gives the recipients of care confidence to seek medical services and may foster trust with the service providers.

Furthermore, long waiting time may expose clients and limit their routine social activities and it can demotivate the health seekers. The report showed that clients do not have to wait on the queue for more than fifteen minutes. However, this has failed to be fully implemented optimally due to inadequate human resource. The majority of AGYW complained about the long waiting hours which affected their subsequent clinical appointments. It was highlighted in the FGI that the queues are so long to a point where you have to wait for close to two hours just to get a refill. Camlin et al., (2020) reasoned that PrEP demand among Adolescent girls and young women depends on delivery models that promote easy access, framed messaging on wellness and goals, and foster partner and peer support, which facilitates uptake among young people.

Integration of health services has demonstrated to limit the cost of health services and gives chance to the recipients of care to receive comprehensive health service withing one space. This was supported by Malakoane et al., (2020) who upheld the attestation and demonstrated that the general wellbeing challenges pronounced by partners included underfunding, absence of coordination, staff deficiencies, conflicting stock of clinical commodities, poor monetary management, and failure to put resources into innovative activities. On the contrary, integration of services my equally make it difficult for some individuals to seek services in a space were everybody is and goes. This result into breach of confidentiality and privacy.

Despite these barriers, most AGYWs and Health Providers are generally positive that with the establishment of the community access points and the buddy system through the differentiated Service Delivery Model, PrEP retention and subsequently prevention of HIV among AGYWs will improve.

Additionally, the results also showed that patients are more satisfied when they perceive their care came from well-qualified and competent staff. Clinical outcomes and patient health are improved. And patient safety initiatives are uniformly understood and supported. Therefore, having competent health providers gives the motivation for individuals to seeks services and become ambassadors and advocates for health.

CHAPTER SIX

6.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the findings and some recommendations.

6.1.1 Conclusion

Oral HIV Pre-Exposure Prophylaxis (PrEP) has been proven to be a highly effective pill that HIV-negative individuals at substantial risk of HIV acquisition can take once daily to prevent the HIV infection. Although PrEP is a private, user-controlled method that empowers AGYW to protect themselves without relying on their partner's behaviour, follow up for subsequent PrEP uptake has been extremely low starting at three (3) months post PrEP imitation. The findings of the research indicate that most AGYW are willing to take daily PrEP however, the barriers such as intimate partner violence, limited access, lack of DSD models, stigma, discrimination, lack of confidence in Health Providers, and poor client care affects retention.

The majority of these factors highlighted in this research and related studies were institutional factors for example limited PrEP access points, compromised confidentiality, and Intimate Partner Violence. Additional studies are needed to address research gaps including client care services and Intimate Partner Violence.

6.1.2 Recommendations

The following can be adopted and implemented to improve PrEP retention among AGYW at Kapata Urban Clinic in Chipata, Zambia.

1. Intensify demand creation activities for PrEP through deliberate modalities such as routine IEC, community engagement meetings and media programming.
2. Conduct sensitivity trainings for health care providers including support staff to mitigate stigma and discrimination.
3. Strengthen age specific DSD models both at facility and community level targeting AGYW.

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APPENDIX

BUDGET SUMMARY

S/N	ITEM	QUANTITY/DESCRIPTION	COST (EACH)	AMOUNT(ZMK)
1	Stationary	1 (REAM)	200	200
2	Printing and Binding	24 (Copies)	50	1200
3	Transport Costs	1 (10 days)	100	1000
4	Secretarial Services	1 (10 Days)	100	1000
5	Contingence Funds	1	290	290
GRAND TOTAL				**3690**

ACTIVITY ROADMAP

S/N	ACTIVITY	REPOSIBILITY	JUL-AUG	SEP	OCT	NOV-DEC	JAN-FEB	MAR-APR	MAY
1	Chapter One	Christopher Lunda	■						
2	Chapter Two	Christopher Lunda		■					
3	Chapter Three	Christopher Lunda			■				
4	Proposal Defence	Christopher Lunda				■			
5	Data Collection	Christopher Lunda					■		
6	Data Analysis	Christopher Lunda						■	
7	Dissertation Submission	Christopher Lunda							■

SEMI-STRUCTURED INTERVIEW GUIDE FOR HEALTH CARE PROVIDERS

Respondent's Age: ……...

Respondent's Sex: ……

Respondent Characteristic: Health Care Provider (STAFF) ☐

SECTION A: Individual Factors

1. First, I would love to understand more about your work as a healthcare provider in general.
    a. Did you receive any training to work with adolescent girls and young women concerning PrEP? [*If not, skip to the next numerical question*.] If so…
    b. Can you talk a little bit about when the trainings took place and what was the duration?
        i. Probe for level of knowledge on PrEP services and the importance of retaining clients for their refills.
    c. How do you feel about being trained to provide PrEP services to adolescent girls and young women?
        i. Probe on feelings about providing PrEP services to AGYWs.
    d. What do you think might be challenging about introducing and maintaining PrEP to adolescent girls and young women?
        i. Probe for attitude towards PrEP provision to AGYWs.

SECTION B: Social–Economic Factors

1. We know not every adolescent girl or a young woman who has been on PrEP come back to the facility for a subsequent PrEP visit.
    a. What factors might explain this?
        i. Probe: individual, family, interpersonal relationship, community, clinic, (including stigma), cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works, frequency of HIV counseling and treatment services required, committing to daily pill-taking
    b. What factors do you think could help them to overcome some of the barriers to getting access for their eligibility that you just discussed?
        i. Probe: individual, community, clinic, family, interpersonal relationship (including stigma), cost, location of services, fear of being 'discovered'
    c. Can you give an example of a recent case where you worked with someone on PrEP and has been adhering to clinical appointments?
        i. Can you describe this in detail?
        ii. What seems to be working well for this client and what factors seem to help with this?
        *iii. Probe**:** community, family, facility, relationship, individual, cost, location of services, fear of being 'discovered'*
    d. Now can you describe an example where you worked with someone who is on PrEP and is having challenges with keeping clinical?
        *i. Probe**:** why did this person decide not to take PrEP?*
        ii. How common is this?
2. There are many potential factors involved in supporting PrEP retention among AGYWs. Please describe how healthcare workers, CHWs, and Peers work together to create demand for PrEP
        i. Probe: how much interaction between each group (i.e., healthcare worker/CHW/Peers), nature of interaction, is it a team effort or is everyone working in silos?

SECTION C: Institutional Factors

1. I'd like to turn towards thinking about continuing to use PrEP, or PrEP retention.
    a. Please describe your role in supporting retention?
        i. Probe: What are the challenges to providing support? What makes it easy?
    b. Can you talk about who stays on PrEP and who doesn't?
        i. What are some of the experiences that your AGYW have had with staying on PrEP?
        ii. How often do you talk with clients or worked with clients to help them to stay on PrEP?
        iii. What are the differences between those who stay on PrEP and those who stop taking it?
    c. Can you talk about all the different reasons AGYWs might stop taking PrEP, from your experience?
        i. How do AGYWs make the decision to stop or to stay on PrEP?
        ii. What would you say are the biggest challenges and barriers AGYWs face that may make it difficult to stay on PrEP?
        iii. What factors might explain this?
        *i. Probe**:** personal, household, relationships, community, facility, legal, political, cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works, frequency of HIV counseling and treatment services required, committing to daily pill-taking*
2. It is rare for someone to stay on PrEP for more than three months. Let's talk about those who do.
    a. Describe the modalities used to remind AGYWs of their PrEP appointments?
        i. Probe on the effectiveness of the mention strategies/modalities.
3. Based on your experience providing PrEP services, are there other skills or training you think would be helpful for you to receive to better support this work?
    a. Do you have recommendations for how to prepare healthcare providers for this work in the future?

b. Any additional recommendations that you have for the Ministry or Health Facility to help improve retention of PrEP among AGYWs?

4. Is there anything you would like to add to what we've discussed today?

SEMI-STRUCTURED INTERVIEW GUIDE FOR ADOLESCENT GIRLS AND YOUNG WOMEN

Respondent's Age: ……...

Respondent's Sex: ……

Respondent Characteristic: AGYW on PrEP ☐

AGYW with PrEP interruption ☐

SECTION A: Individual Factors

2. Firstly, I would love to understand more about your knowledge concerning PrEP.
    a. What does PrEP mean to you?
    b. How much of a benefit is PrEP among AGYWs?
    Probe for PrEP eligibility among AGYWs
    c. Where did you receive information concerning PrEP?
        i. Probe for sensitization opportunities (Radio, Health Facility, Social Media, Peer, etc.)
        ii. Probe how easy the information on PrEP can be accessed.
    d. How do you feel about PrEP services being offered to AGYWs?
        i. Probe for attitude towards PrEP.
    e. What do you think might be challenging about introducing and maintaining PrEP to adolescent girls and young women?
        i. Probe for limitations to PrEP provision among AGYWs (Pill burden, adherence, stigma, discrimination, level of risk to HIV, side effects, etc.)
    f. What are the differences between those who stay on PrEP and those who stop taking it?

SECTION B: Social–Economic Factors

3. We know not every adolescent girl or a young woman who has been on PrEP come back to the facility for a subsequent PrEP visit.
    a. What factors might explain this?
        i. Probe: individual, family, interpersonal relationship, community, clinic, (including stigma), cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works,

frequency of HIV counseling and treatment services required, committing to daily pill-taking

b. What factors do you think could help AGYWs overcome some of the barriers to getting access for their eligibility that you just discussed?

i. Probe: individual, community, clinic, family, interpersonal relationship (including stigma), cost, location of services, fear of being 'discovered'

4. There are many potential factors involved in supporting PrEP retention among AGYWs. Please describe how healthcare workers, CHWs, and Peers influence retention on PrEP?

i. Probe: how much interaction between each group (i.e., healthcare worker/CHW/Peers), nature of interaction, is it a team effort or is everyone working in silos?

SECTION C: Institutional Factors

5. I'd like to turn towards thinking about continuing to use PrEP, or PrEP retention.

a. Please describe the role of the health facility in supporting PrEP retention among AGYWs?

i. Probe for methods used to support client retention. What are the challenges to providing support? What makes it easy?

b. Can you talk a bit more about staying on PrEP?

i. What are some of the experiences that you have had with staying on PrEP?

ii. How often do you talk with your Health Provider concerning the issue of staying on PrEP?

c. Can you talk about all the different reasons AGYWs might stop taking PrEP?

i. How do AGYWs make the decision to stop or to stay on PrEP?

ii. What would you say are the biggest challenges and barriers AGYWs face that may make it difficult to stay on PrEP?

iii. What factors might explain this?

j. Probe: personal, household, relationships, community, facility, legal, political, cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works,

frequency of HIV counseling and treatment services required, committing to daily pill-taking.

d. Is there anything you would like to add to what we've discussed today?

SEMI-STRUCTURED FOCUS GROUP INTERVIEW GUIDE

Respondent's Age Composition: ……...

Respondent's Sex Composition: ……

Respondent Characteristic: Community Health Worker ☐

SECTION A: Individual Factors

3. First, I would love to understand more about your work as community health workers in general.
    a. Did you receive any level of training to work with adolescent girls and young women concerning PrEP? [*If not, skip to the next numerical question*.] If so…
        i. Probe for level of knowledge on PrEP services and the importance of retaining clients for their refills.
    b. How do you feel about being trained to provide PrEP services to adolescent girls and young women?
        i. Probe on feelings about providing PrEP services to AGYWs.
    c. What do you think might be challenging about introducing and maintaining PrEP to adolescent girls and young women?
        i. Probe for attitude towards PrEP provision to AGYWs.

SECTION B: Social–Economic Factors

5. We know not every adolescent girl or a young woman who has been on PrEP come back to the facility for a subsequent PrEP visit.
    a. What factors might explain this?
        i. Probe: individual, family, interpersonal relationship, community, clinic, (including stigma), cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works, frequency of HIV counseling and treatment services required, committing to daily pill-taking
    b. What factors do you think could help them to overcome some of the barriers to getting access for their eligibility that you just discussed?
        i. Probe: individual, community, clinic, family, interpersonal relationship (including stigma), cost, location of services, fear of being 'discovered'
    c. Can you give an example of a recent case where you worked with someone on PrEP and has been adhering to clinical appointments?
        i. Can you describe this in detail?
        ii. What seemed to be working well for this client and what factors seem to help with this?
        *iii. Probe**:** community, family, facility, relationship, individual, cost, location of services, fear of being 'discovered'*
    d. Now can you describe an example where you worked with someone who is on PrEP and is having challenges with keeping clinical?
        *i. Probe**:** why did this person decide not to take PrEP?*
        ii. How common is this?
6. There are many potential factors involved in supporting PrEP retention among AGYWs. Please describe how CHWs create demand for PrEP
        i. Probe: how much interaction between each group (i.e., healthcare worker/CHW/Peers), nature of interaction, is it a team effort or is everyone working in silos?

SECTION C: Institutional Factors

6. I'd like to turn towards thinking about continuing to use PrEP, or PrEP retention.
    a. Please describe your role in supporting retention?
        i. Probe: What makes it easy?
        ii. Probe: What are the challenges to providing support?
    b. Can you talk about who stays on PrEP and who doesn't?
        i. What are some of the experiences that the AGYWs have had with staying on PrEP?
        ii. How often do you talk with clients or worked with clients to help them to stay on PrEP?
    c. Can you talk about all the different reasons AGYWs might stop taking PrEP, from your experience?
        i. Who makes the decision for PrEP to be stopped?
        ii. How do AGYWs make the decision to stop?
        iii. What would you say are the biggest challenges and barriers AGYWs face that may make it difficult to stay on PrEP?
        iv. What factors might explain this?
        k. Probe: personal, household, relationships, community, facility, legal, political, cost, location of services, fear of being 'discovered', being mistaken for someone living with HIV, drug side effects, drug-drug interactions, knowledge/awareness about how the drug works, frequency of HIV counseling and treatment services required, committing to daily pill-taking
7. It is rare for someone to stay on PrEP for more than three months. Let's talk about those who do.
    a. Describe the modalities used to remind AGYWs of their PrEP appointments?
        i. Probe on the effectiveness of the mention strategies/modalities.
8. Based on your experience providing PrEP services, are there other skills or training you think would be helpful for you to receive to better support this work?
    a. Do you have recommendations for how to prepare healthcare providers for this work in the future?
    b. Any additional recommendations that you have for the Ministry or Health Facility to help improve retention of PrEP among AGYWs?

9. Is there anything you would like to add to what we've discussed today?

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SCHOOL OF MEDICINE AND HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

Ref no: IORG0010092-2022/116

Date: 10th June, 2022

LUNDA CHRISTOPHER – BSPH19116045

Re: Research Title; FACTORS INFLUENCING PrEP RETENTION AMONG ADOLESCENT GIRLS AND YOUNG WOMEN AT KAPATA URBAN CLINIC

The above research was submitted to the research ethics committee for review. The study has no major ethical problems and is approved subject to the following:

1. The study cannot be changed without express permission of the UNILUS Research ethics committee
2. Approval from the Lusaka District health Management or equivalent health authorities should be sought.
3. The study tools should be added.
4. An informed consent form should be attached and filled by all study participants (If dealing with primary data)
5. The risks and benefits should be included in the consent form.

Congratulations and the committee wishes you success in your work.

Prof Kasonde Bowa
MSc(Glasgow),M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)
Chairman- UNILUS REC
Professor of Urology and Consultant Urologist
Executive Dean
University of Lusaka and University Teaching Hospital
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PERMISSION FOR **LUNDA CHRISTOPHER – BSPH19116045** TO CONDUCT A RESEARCH STUDY AT YOUR FACILITY/ INSTITUTION/ ORGANIZATION
Reference is made to the above subject matter

The University of Lusaka, School of Medicine and Health Sciences here by requests for permission for **Lunda Christopher** Public Health Student to conduct research at your facility/ institution/ organization, entitled**; FACTORS INFLUENCING PrEP RETENTION AMONG ADOLESCENT GIRLS AND YOUNG WOMEN AT KAPATA URBAN CLINIC.**

The research is in partial fulfillment of the requirements for the degree of Bachelor of Science Public Health. This is purely for academic purposes and information gained in such a way will not be used in the public domain without prior authorization from the institutions/ organizations involved.

The research topic has been cleared by the University of Lusaka, School of Medicine and Health Sciences Research Ethics Committee as per the attached copy. Data collection is expected to be done from **16th June, 2022 to 16th October, 2022**.

The University of Lusaka avails itself of this opportunity to review to your office the assurances of its highest considerations and looks forward to your timely and favorable response.

Prof Kasonde Bowa
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