

**Adolescents living with HIV and AIDS in Chiredzi District, Zimbabwe: Experiences of disclosure, stigma, sexuality and social support to treatment adherence**

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## **Abstract**

The study explores experiences of disclosure, stigma, sexuality and social support to treatment adherence for HIV positive adolescents in Chiredzi district, Zimbabwe. This qualitative study adopts a multiple interpretive case study methodology to explore the intricacies of living with HIV as an adolescent. Twenty (n=22) adolescents aged between 13 and 19 were recruited to participate in this study while attending social support or when they came to collect their medication. Individual in-depth interviews were carried out asking adolescence about their personal romantic lives, experiences and difficulties they must face while living with HIV/AIDS. Findings revealed that adolescents living with HIV (ALHIV) are confronted with stigma and discrimination while simultaneously grappling with emotional issues such as dealing with disclosure. Consequent to these challenges, adolescents (particularly males) adopt several coping mechanisms to deal with the difficulties and these include (but not limited to) non-disclosure of their seropositive status to their sexual partners thereby risking reinfection and exposing their partners to HIV. Social support was minimal. Non-disclosure of seropositive status contributed to poor adherence to or defaulting HIV medication.

Further, findings further attest to the fact that adolescents refrain from disclosing their HIV status because they want to fit in with their peers and romantic partners. Presumably, this justifies why, while there has been a decline in the number of new HIV infections among all ages, there has been a significant escalation in HIV infection among the adolescent population, amid a high incidence of virological failure. Evidently, statistics will maintain an upward trajectory if proper measures are not implemented. The study concludes that a life-cycle approach to HIV prevention and management is crucial in responding to adolescent HIV/AIDS challenges because risks of HIV infection, the challenges of accessing services and the solutions to these challenges change at different stages of someone's life. This scenario justifies the adoption and implementation of the principle of biomedical holistic approach in order to find suitable education programmes for the community, health workers and adolescents.

## Declaration

I, Christopher Jimu, declare that **Adolescents living with HIV and AIDS in Chiredzi District, Zimbabwe: Experiences of disclosure, stigma, sexuality and social support to treatment adherence**, is purely my work. Other sources used or quoted in the thesis have been indicated and acknowledged by means of complete references. This thesis has not been submitted for the award of a degree at any other university.

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## **Acronyms and Abbreviations**

AIDS	Acquired Immune Deficiency Syndrome
ALHIV	Adolescents Living with HIV
ARV	Antiretroviral
CATS	Community Adolescent Treatment Supporters
CDC	Centre for Disease Control and Prevention
CDPs	Condom Distribution Programmes
CSE	Comprehensive Sexuality Education
DOT	Direct Observation Therapy
ESA	Eastern and Southern Africa
EUPs	Early and Unintended Pregnancies
GoZ	Government of Zimbabwe
HAART	Highly Active Antiretroviral Therapy
HCW	Health Care Workers
HIV	Human Immunodeficiency Virus
IPA	Interpretative Phenomenological Analysis
MICS	Multiple Indicator Cluster Survey
MoHCC	Ministry of Health and Child Welfare
MRCZ	Medical Research Council of Zimbabwe
MTCT	Mother To Child Transmission
OI	Opportunistic Infections
NAC	National AIDS Council
PLHIV	People Living with HIV
PLWHA	People Living With HIV and AIDS
RNA	Ribonucleic Acid
RTGS	Real-Time Gross Settlement
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
STI	Sexually Transmitted Disease

UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Emergency Fund
WHO	World Health Organisation
UNESCO	United Nations Educational, Scientific and Cultural Organisation
TB	Tuberculosis
IRB	Institutional Review Board
NEC	National Ethics Committee

## **CHAPTER ONE: BACKGROUND AND INTRODUCTION**

### **1.1 Introduction**

In 2018, statistics revealed that adolescents aged between 10 and 19 years constituted 16% of the world's population (approximately 1.2 billion) (UNICEF, 2019a). UNAIDS (2018a), notes that approximately 2 million adolescents are living with HIV and 85% of them reside in Sub-Saharan Africa (SSA). The adolescent population living with Human Immunodeficiency Virus (HIV) results from vertical (perinatal and postnatal) and horizontal (behavioural) infections. In 2006, 2.3 million adolescents aged between 13 and 19 were living with HIV (UNAIDS, 2006). Statistics reveal a decline in the global population of ALHIV from 2.3 million in 2006 to 2 million in 2016 (Ferrand et al., 2016; Slogrove, Mahy, Armstrong, & Davies, 2017). However, it can be argued that in spite of this decline in the number of ALHIV, the rate at which HIV infections are declining is relatively low, especially measured against the background of the ambitious UNAIDS' 90-90-90 programme aimed at ending the HIV/AIDS epidemic by 2030. The strategy of the UNAIDS seeks to diagnose 90% of all People Living with HIV (PLHIV), provide antiretroviral treatment (ART) to 90% of the diagnosed patients and suppress the pandemic by at least 90% (UNAIDS, 2017). Undoubtedly, the success of any nation is inextricably linked to the health and successful transition of its adolescents from childhood to adulthood.

Berenbaum, Beltz, & Corley (2015) defined adolescence as a transitional period accompanied by biological changes associated with puberty, the need for increased independence, the quest for self-identity and a period of experimentation. Adolescence is a period of transition from childhood to adulthood with many physiological, sexual developments and social role challenges (Kar, Choudhury & Singh, 2015). For many adolescents, especially ALHIV, this transition is often disorganised and results in both poor adherence to treatment and inconsistent healthcare (Rosario et al., 2014). The researcher concurs with Li et al. (2009) who state that the challenges confronting adolescents living with HIV are not constant and therefore, they need to be identified and investigated.

Although research attests to the risky sexual behaviours that contribute to HIV infection, there are knowledge gaps regarding the impact of the vulnerability posed by HIV on the transition and identity of adolescents. Erickson (1950) found that people pass through a series of stages as they grow and change throughout life. People face a conflict that must be resolved to successfully

develop the primary virtue of each stage. The transition from childhood to adulthood is a significant stage of human development during which adolescents leave childhood behind and take on new roles and responsibilities as adults. Arnett (2015) maintains that the path that adolescents take from dependency in childhood to independence in adulthood is a longer and more complicated process than before. The period is characterised by social, psychological, economic and biological transitions. For many adolescents, the period involves demanding emotional challenges and a dilemma emanating from making significant decisions. Psychologically, adolescents develop a sense of identity and self-awareness while socially, it is a period when attitudes about sex, love, marriage, gender and other vital life issues are formed and become part of the individual's identity (Kar et al., 2015). The nature and quality of adolescents' future lives largely depend on how successfully they negotiate through this transition stage, especially adolescents who grapple with the additional burden of living with HIV. Thus, while the transition from childhood to adulthood is often regarded as smooth as adolescents move from school into employment or leave the family and so on, many adolescents do not move smoothly from a state of dependence to independence. It can be noted that the transition from childhood to adulthood can be stressful.

Siegel and Lekas (2002) associate HIV/AIDS with many challenges such as chronic diseases that are characterised by drug taking, psychological ill-health, stigma and difficult social situations which are only exacerbated by adolescence. Adolescents', like any other individuals living with a stigmatised disease like HIV/AIDS, experience stressful situations as they feel rejected and are often victims of stigma and discrimination. Matshili (2011, p. 8) argues that "HIV and AIDS influence how individuals experience and progress through this stage of adolescence". The available literature also highlights that while there are increasing chances of survival among children living with HIV as they traverse adolescence (Ben-Farhat et al., 2017), the majority continue to lose their siblings and caregivers due to HIV (Bryant & Beard, 2016). ALHIV face unique challenges sired by the impact of HIV on physical, social peer relationships and sexuality as they face additional burden such as, neurocognitive deficits and disease progression combined with external forces which include relative poverty and disruptive family attachments (Kar et al., 2015). At this stage, adolescents living with HIV begin to date and become sexually active. There is urgent need for social support for them to adjust socially and psychologically to living with HIV (Brown, Nesse, Amairan, Vinokur & Dylan, 2000). Therefore, social support is an important variable in the prevention of chronic illnesses like cancer and HIV; it also assists adolescents

ALHIV in the promotion of health, therapeutic compliance, safer sex and recovery from illness (Mavhu et al., 2017).

This study was influenced by the concern that adolescents living with HIV are transitioning into adulthood amid facing many challenges with their HIV status; for instance, they are battling discrimination, isolation, disclosure and stigma. The current research seeks to offer insights into some of the unique issues faced by adolescents living with HIV, such as difficulties in disclosing their seropositive status in sexual relationship, adherence to medication and appreciating the role of social support in promoting the quality of their lives. The participants are multiple case samples recruited from Chiredzi District, particularly Chiredzi General Hospital and as the geographical location of the study, the research area is understudied and most studies on ALHIV have been done in large cities such as Harare in Zimbabwe. In addition, studies focusing on the psychological challenges facing ALHIV and simultaneously evaluating interventions in Zimbabwe and Sub-Saharan Africa are few (Mburu, 2014).

## **1.2 The prevalence of HIV in Zimbabwe**

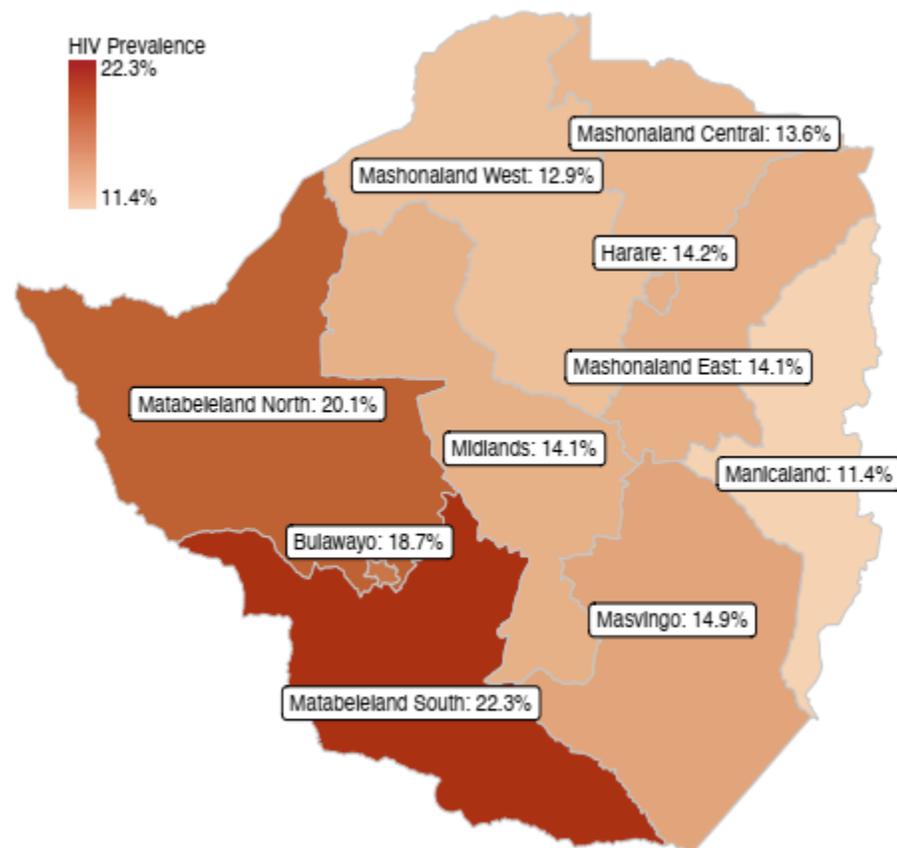
The first case in Zimbabwe of HIV/AIDS was recorded in 1985 (WHO 2011). After that, more people began to contract HIV. A cross-sectional hospital-based study testing for Sexually Transmitted Diseases (STIs) amongst adult participants at Murehwa Rural District Hospital, situated in the northeast of Harare, demonstrated a 50% HIV-1 seropositivity amongst adults with STIs (UNAIDS, 2017). This fast-spreading HIV epidemic became a major threat to the Zimbabwean health nation at large raising many questions about HIV and AIDS. Unfortunately, there was denial by the Zimbabwean government until the 1990s when HIV/AIDS issues were debated in the public. Another study conducted in Zimbabwe found that primary healthcare providers do not often recognise HIV infection among adolescents, many of whom reportedly contract the infection vertically, with others acquiring the infection behaviourally (Ferrand et al, 2016).

Statistics indicate that South Africa has the highest number of adolescents living with HIV/AIDS which stands at 50%, followed by Zimbabwe with 35% (Sohn & Hazra, 2013). Zimbabwe is among the World Health Organisation's (WHO) list of fourteen countries that are considered to be shouldering the heaviest burden of TB and HIV and AIDS (UNAIDS, 2018b). Furthermore, Zimbabwe is ranked high among the countries that have been hardest hit by the HIV/AIDS

epidemic in Sub-Saharan Africa. Although the literature has shown that HIV prevalence has been falling since the 1990s, an approximation from the National AIDS Council (NAC) in 2010 indicated that 15% of the active population in Zimbabwe (15 years and above) were infected annually and this is higher than anticipated (UNAIDS, 2018b).

### HIV Prevalence in Zimbabwe

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**Fig. 1. Prevalence of HIV in Zimbabwe by provinces [Zimbabwe Population Based HIV Impact Assessment (ZIMPHIV, 2016)]**

In 2016, Matabeleland South had the highest percentage of HIV prevalence in Zimbabwe standing at 22.3% followed by Matabeleland North recording 20.1%. Bulawayo lies in third with 18.7% while Masvingo where Chiredzi is located recorded a worrisome figure of 14.9% in fourth place to a country with 10 provinces. Harare lies in fifth position with 14.2% although many studies have been conducted in this city (Mavhu et al., 2013, Kiddia et al., 2014). Mashonaland East and Midlands lie next both recording 14.1%. The trend continues with Mashonaland Central lying on

seventh position with the prevalence of 13.6%. Mashonaland West and Manicaland are the least affected with 12.9 % and 11.1% respectively.

### **1.3 Routes of transmission**

The routes of HIV transmission are extensively documented. The literature reveals that sexual intercourse continues to account for most of the new HIV/AIDS cases in Zimbabwe. In Zimbabwe, the commonest mode of sexual risk among adolescents is heterosexual (Zimbabwe National Statistics Agency, 2016). In 2015, 17% of female adolescents aged between 15 and 19 reported having sex with a man 10 or more years older than them in the last 12 months (UNAIDS, 2018b). In addition, the ‘sugar daddy’ culture largely contributes to an extensive risk of HIV among female adolescents as they are exposed to older men who are more likely to have HIV and who also refuse the use of protection. Gibbs, Sikweyiya, and Jewkes (2014) found that female adolescents are subjected to humiliation, forced vaginal penetration and/or oral sex with older men, hence multiplying their risk of contracting HIV.

However, many people living with HIV/AIDS are infected via mother to child transmission (MTCT), during pregnancy, childbirth or breastfeeding (UNICEF, 2019a). These are also collectively known as vertical transmission or parent-to-child-transmission. Breastfeeding is now responsible for most cases of MTCT (UNICEF, 2019b). When infant feeding (bottle milk feeding) is not a good option, women can reduce the risk of transmitting HIV to their babies at this stage if they intensively breastfeed and if they are on antiretroviral treatment (ART). However, in 2013, only 49% of women continued to take antiretroviral treatment during pregnancy and delivery. This highlights the urgent need for education about the necessity of continuing treatment after giving birth (UNAIDS, 2013). Apparently, many people still lack basic knowledge about HIV/AIDS.

Although it is now rare that HIV infection can still occur in medical settings, for instance, through unsterilised needles or blood transfusions where infected blood is used, reports compiled in 2012 in Kyrgyzstan showed that at least 270 adolescents had been infected with HIV in hospitals as a result of the failure by doctors to follow universally correct precautions and medical procedures (Avert, 2018). In addition, reports also indicate that HIV has been reported to exist minimally in the saliva and tears of some people living with HIV/AIDS (PLWHA). Precisely, the risk of exposure, transmission and infection through these fluids is considered very low (Nasidi & Harry, 2015). It is difficult to proffer specific recommendations owing to the numerous cultural, political, and geographical controversies in resource-poor settings (Govender & Poku, 2016). The same can

be said about Zimbabwe. Therefore, solutions must be proposed in a specific way. However, teaching communities about HIV/AIDS through social support has been effective especially through social groups.

#### **1.4 Problem statement**

In 2018, statistics revealed that Zimbabwe had approximately 1.3 million people living with HIV/AIDS (Avert, 2018). According to UNAIDS (2018a), Zimbabwe's HIV prevalence rate is among the highest in the world, standing at 13.3% in 2017. This shows that many adolescents are living with HIV/AIDS. In addition, adherence to treatment among adolescents is generally low and treatment failure rates are comparatively higher than in any other age group (Hudelson & Cluver, 2015). Although adolescents have a number of physical, psychological, emotional and social needs, material needs always take precedence over psychological and emotional needs like dealing with disclosure, stigma and discrimination. Therefore, adolescents living with HIV/AIDS need social support.

An evaluative analysis done by the Community Adolescent Treatment Supporters (CATS) found that the beneficiaries of the programme are most likely to be three times more likely to adhere to treatment than their counterparts (UNAIDS, 2018a). In Zimbabwe, the Africaid *Zvandiri* 'know me as I am' CATS model (a social support group supported by AFRICAID Non-Governmental Organisation of adolescents who have accepted their status and offer services of peer educators to other ALHIV) has been successful in providing peer adherence support to adolescents living with HIV/AIDS (UNAIDS, 2018b). The literature highlights that ALHIV who attend social groups have better retention capacity regarding treatment and they build mental, emotional and physical resilience (Mavhu et al., 2017). Although HIV/AIDS is a widely researched topic, a holistic approach to issues to do with stigma, disclosure, transition and sexuality have always been unaddressed especially among social groups in Zimbabwe. Zimbabwe has a wealthy public health and epidemiological data such as sexual health, antenatal care, HIV services collected from clinics as well as demographic health surveys undertaken by international and local research institutions on adolescents and HIV/AIDS. While quantitative statistics effectively track the rise, stability and decline of an epidemic, a qualitative social research equally delves into the processes that underpin concurrent experiences of living with HIV among adolescents in Chiredzi District.

## **1.5 Aim**

The research aims to capture and document the experiences of adolescents living with HIV as they disclose their HIV status, deal with stigma, and navigate developmental stages from childhood to adulthood through their experiences of sexuality, relationships, and adherence to medication in Chiredzi District.

## **1.6 Research objectives**

This study is anchored on 2 objectives as outlined below:

- 1 To examine the experiences of adolescents living with HIV/AIDS particularly in terms of stigma and discrimination, sexual relationships, adherence to medication and status disclosure;
- 2 To examine experiences of adolescents living with HIV/AIDS regarding the social support they receive from social groups and their peers

## **1.7 Research questions**

- 1 What are the factors influencing stigma and discrimination, non-disclosure of HIV status, sexual relationships and non-adherence to antiretroviral medication among adolescents living with HIV?
- 2 Does social support received by adolescents help concerning adherence to treatment, dealing with sexuality and stigma and discrimination? In what way?

## **1.8 Rationale for and significance of the study**

The researcher observed that not much has been done in terms of fostering meaningful social and psychological support especially as the policies developed and implemented by the Government of Zimbabwe do not cater for the needs of adolescents, hence this research focuses on the experiences of adolescents living with HIV in Chiredzi District. Chiredzi district is located in Masvingo province which recorded a worrisome 14.9% HIV prevalence and lies in fourth place to a country with 10 provinces in 2016 (ZIMPHIV, 2016). It brings into focus the need to interrogate the current policies and how they have been implemented in this study area. Several researches mainly focus on major urban centres and cities while Chiredzi District has been understudied. More so, the research findings seek to bridge this knowledge gap and therefore

proffer recommendations on ways of circumventing the challenges faced by adolescents living with HIV/AIDS among private and public hospitals.

Previous researchers such as Mavhu (2017) evaluated a multi-component programme to improve adherence to and retention of medication caring for adolescents living with HIV/AIDS in Zimbabwe. Willis et al. (2019) also highlighted a systematic literature review which exposed a differentiated service delivery programme to scale for children living with HIV/AIDS in Zimbabwe. Although both studies drew samples from *Zvandiri* “know me as I am”, a study by Mavhu et al. (2017) was a quantitative study, while the recent one by Willis et al. (2019) was a more systematic review, which makes it imperative for a qualitative study to be carried out.

Adolescents who are diagnosed as behaviourally infected with HIV face unique challenges as compared to those who are perinatally infected. The behaviourally infected adolescents often take several months to come to terms with the diagnosis and return to treatment (Evans et al., 2013). This phenomenon often results from the fact that these adolescents have difficulty accepting their diagnosis, the lack of adequate support and engagement in risky sexual behaviours and substance abuse. These behaviours and attitudes, coupled with a fractured social support system, also contribute to poor adherence to medical appointments and treatment (Willis et al., 2019). In Zimbabwe, little is known about the challenges associated with adolescents’ transitioning into adulthood. The study seeks to contribute more robust strategies that urgently inform innovative and targeted interventions that support adolescents living with HIV/AIDS. The proposed solutions seek to improve the outcome for adolescents through social support and help reach global targets for an AIDS-free generation by 2030.

## **1.9 Definitions of key terms**

*Adolescent* – WHO (2018) defines an adolescent as an individual in their second decade of life (aged between 10 and 19 years), with a "young adolescent" being defined as a person aged between 10 and 14 years and an "older adolescent" as aged between 15 and 19 years. In this study adolescents are referred to as persons aged between 13 and 19 years because there is evidence that onset of sexual intercourse begins at 13 (Lindberg ,Maddow-Zimet, & Marcell, 2019).

*Adolescents living with HIV (ALHIV)* – this refers to adolescents who have acquired the Human Immunodeficiency Virus (HIV) either from their mothers during pregnancy and breastfeeding or through sexual intercourse.

*Adherence* - Amberbir et al. (2008, p. 2) define adherence as "taking drugs in all the prescribed doses at the right time, in the right doses and in the right ways". In this study, adherence refers to commitment to taking ARV medication at the right time and in the right doses.

*Sexuality* –This refers to the condition of being sexual. This research restricts the meaning of this concept to heterosexual sexuality.

*Stigma and Discrimination* – HIV related stigma and discrimination can be defined as the treatment of people living or associated with HIV/AIDS differently and this treatment includes isolating them or avoiding close contact with them.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

Adolescents who are either behaviourally or perinatally infected with HIV often face common difficulties; for instance, they grapple with poor adherence to antiretroviral medication, psychological stressors and pill fatigue. Consequently, the death rate that results from HIV/AIDS among this population group is still high, particularly in Sub-Saharan Africa (UNAIDS, 2016). Therefore, there is a dire need for research on the challenges facing adolescents infected with HIV/AIDS. Various efforts and interventions have been proposed to map the extent of the problem but knowledge gaps still exist. Although statistics reveal that HIV/AIDS related deaths are increasing and more children are born with HIV, they never truly reflect the nature or extent of the problem. The statistical and epidemiological approaches simply reflect the figures representing the number of individuals infected and affected, the deaths recorded and the upward trajectory of the epidemic, hence underestimating the actual impact of the challenge. This makes it imperative to undertake a qualitative research. Statistics highlight that there are several ALHIV; hence, the literature to be unraveled will cover various overarching matters of transition in the context of stigma, disclosure, social support and sexuality among adolescents living with HIV/AIDS.

### **2.2 Global perspectives of HIV/AIDS among adolescents**

Approximately 2.1 million adolescents whose ages range from 10 to 19 years were living with HIV in 2016 (Ferrand et al., 2016). Another worrisome fact is that 260 000 more teenagers were newly infected with HIV with more statistics revealing that the number of teenagers living with HIV increased by at least 30% from 2005 to 2016 (UNICEF, 2017). In support of the above statistics, UNICEF (2018) estimated that 590 000 adolescents aged between 15 and 19 were newly infected with HIV in 2017 alone. The Eastern and Southern African regions (ESA) are the most affected, with most young people and adolescents living with HIV (UNAIDS, 2018a). Secondly, the mortality figures representing this group have also been rising, recording a 50% increase from 2005 to 2013 (UNAIDS, 2013). The figures tripled between 2005 and 2015 (UNAIDS, 2017). In light of the above trends, the UNICEF (2018) estimated that globally, at least 55 000 adolescents aged between 10 and 19 had died as a result of HIV related sicknesses. Hudelson and Cluver (2015) attributed these deaths to treatment failures and non-adherence to treatment among this population. A study conducted in Mozambique on female adolescent sex workers in three urban centres

revealed that adolescent sex workers aged between 15 and 17 were unlikely to seek HIV testing and clinical services (Inguane et al., 2015). As a result, adolescents continue to dominate HIV mortality and infection rates, and this worrisome fact makes it imperative to undertake a qualitative research that solicits for detailed data from the adolescents themselves.

In the United States of America, approximately 1.1 million people were infected with HIV in 2016 (WHO, 2017). It is estimated that at least 1 in 4 (25%) of the new infections occur among adolescents and young people aged between 10 and 24 years through heterosexual intercourse. In Latin America, statistics reveal that approximately 100 000 (PLWHA), with adolescents constituting one fifth of these new infections (UNAIDS, 2018a). In the Caribbean, it has become a norm that young female adolescents engage in risky sexual behaviours with men who are 10 years older than them. Resultantly, young women face a higher risk than their male counterparts. For instance, in Haiti, the HIV prevalence rate among female adolescents is more than double that of male adolescents as estimated that between 9% and 24% female adolescents are involved in transactional sex with man 10 years older than themselves who refuse protection thus increasing the risk of new HIV infections (Avert, 2018). The current statistics show that the UNAIDS 90-90-90 strategy may not be achievable; hence, there is need for a determined intervention to minimise HIV infections within this age group. In most countries, the prevalence rate is still high among adolescents and the discriminatory regulations that outlaw HIV testing and counselling without parental consent in countries like Zimbabwe further complicate initiation and testing once the adolescents have engaged in risky sexual behaviours.

The trends of HIV infections among adolescents seem to be dominated by adolescent girls. In 2017, there were 250 000 new infections among adolescent girls aged between 10 and 19 and globally, there were 590 000 more new infections among young women aged between 15 and 24 (UNAIDS, 2018a). Most countries that have the highest prevalence rates are in Sub-Saharan Africa; for instance, in Swaziland, HIV prevalence rates among adults is estimated to be the highest globally, with over 27% in 2017 (UNAIDS, 2017). In addition, HIV prevalence rates among adolescents and young population whose ages range between 15 and 24 is greatest in South Africa and is close to four times higher among female adolescents and young women as compared to their male counterparts (SANAC, 2017). It is estimated that South Africa has a greater number of infections 1500 per week for female adolescents and young people (15 – 24 years) as compared to

male adolescents and young people for the same age group. The same can be noted in countries like Zimbabwe, Tanzania and Mozambique where older adolescents aged between 20 and 24 years are associated with increased incidence of infections among females than males. Therefore, a determined effort is required to determine the most effective practice that works best for adolescents and young people.

### **2.3 Transitions of adolescents in the contexts of HIV and sexuality**

Adolescence is referred to as a transitional period. In Latin, adolescence means ‘to grow into adulthood’ (Arnett, 2015). Tanner et al. (2016) notes that a transition is a multifaceted process where adolescents move from child-focused healthcare to an adult care health system. The transition of teenagers into adulthood is a process where peers navigate sexual relationships, resulting in the involvement of various societal duties or exclusion, thereby shaping cultural values and norms in every society. A transition can be defined as a bridge from childhood to adulthood; however, the process is complex and can be challenging especially to adolescents living with chronic diseases such as HIV/AIDS and cancer (Bailey, Cruz, Songtaweasin, & Puthanakit, 2017).

According to Arnett (1998, p. 313), Erick Erickson’s model posits that “it is in this stage that adolescents undergo the crucial separation-individuation processes, in particular from their families and other primary groupings, in order to establish a sense of who they are – an independent, self sufficient individual”. At this state of puberty, teenagers who are infected with HIV face a lot of psychological challenges while simultaneously trying to accomplish autonomy over the disease which in most cases leads to poor adherence to antiretroviral medication. Furthermore, adolescents infected with HIV struggle with common health problems such as neurocognitive defects, lung cancer, drug failure, fatigue and difficulty coping with metabolic experiences (Lowenthal et al., 2014). Adolescents living with HIV/AIDS are caught in a dilemma, that is, managing their own infection while simultaneously concealing their status from their friends, especially sexual partners. In this case transitioning from adolescence to adulthood can be a strenuous process.

WHO (2018) describes adolescents as people aged between 10 and 19 years. Fairlie et al. (2014) argue that HIV infected adolescents transitioning from childhood into adulthood must have undergone a disclosure experience facilitated by ongoing social support, care and peer counselling. The transitioning of adolescents can be hindered by stigma, discrimination and isolation, which

may impede access to the much-needed social support provided by hospitals and social support groups such as *Zvandiri* in Zimbabwe. Social support among adolescents is indeed a valuable intervention; for instance, social groups offer psychosocial support to adolescents living with HIV/AIDS. Studies conducted in Zimbabwe concluded that social support is an important aspect as far as therapeutic services and HIV education are concerned and plays a pivotal role in promoting adherence to antiretroviral medication (Mavhu et al., 2017)

Many adolescents infected with HIV are either single or double orphans after losing a parent or both, or a caregiver as a result of HIV-related deaths (Bryant and Beard 2017). Hence, these life events can be detrimental to their self-esteem and self-efficacy. In addition, adolescents who acquired the HIV infection perinatally may have given care to their parents with HIV related illness and such adolescents grapple with loss merged with shock associated with their status, emotional stressors that can make the transition a more difficult and complex process (Brown, Lourie & Pao, 2000). Difficulty in transitioning may be attributed to adolescents' lack health insurances and lack of monetary value before embarking on the journey to adulthood as most of them are unemployed, hence lacking money for transport to seek clinical and social support services resulting in poor adherence to medication. Therefore, adolescents lack adequate knowledge and find it difficult to disclose their own HIV status. Machado (2016) notes that the transition of adolescents from puberty to adulthood is a crucial moment of human development in which young adolescents take on new duties and responsibilities. The transition process can either fail or succeed; however, adolescents at this stage of the transition need to be assisted through guidance, counselling and proper support as a way of addressing the challenges and needs of this vulnerable population in Zimbabwe.

As adolescents transition from childhood into adulthood, they experience risky sexual behaviours and inconsistent condom use. Wack (2020) believes that adolescence is a period of storm and stress, referring to storm as the unavoidable confusion that adolescents experience while stress is referred to as the condition of being susceptible to emotional or physiological for instance higher levels of stress can cause depression. According to Ankunda, Atuyambe & Kiwanuka (2016), the onset of sex now takes place earlier in adolescents than before. Attitudes towards sexual behaviours and desire for sex occur early during the adolescence stage. Fortenberry (2013) argues that the adolescence stage is a period characterised by risk taking whereby adolescents engage in

risky sexual behaviours, norm breaking and drug or substance abuse. A survey conducted in Uganda in 2011 revealed that adolescents had experienced sex by the time they turned 15 years and the lack of experience among this group meant that there was inconsistent use of condoms or condomless sex, which amplified the rate of pregnancy and HIV infection (Ankunda et al., 2016). Another survey conducted in the United States of America, concluded that at least 30% of the adolescents reported that they had sex in 2017 (Centre for Disease Control and Prevention, 2017). 46% reported having had condomless sex the last time that they engaged in sex, 14% did not use any form of prevention against unwanted pregnancy, 19 % practised sex under the influence of alcohol while 10% reported that they had never been tested for HIV.

In South Africa, risky behaviours were also reported, with 12% having reported to have experienced sex before the age of 14; 32.9% reported inconsistent condom use while 18% reported that they had been pregnant, 24.1 % reported that they had multiple sexual partners and 13% reported that they had sex while under the influence of drugs (Groenewald, Essack, & Khumalo, 2018). While risky sexual behaviours had also been reported in Zimbabwe, the prevalence of Sexually Transmitted Diseases (STIs) indicate worrisome results (Zimbabwe National Statistical Agency, ZIMSTATS 2016; Marume, Maradzika & January, 2018). Condom use was reported at 74.9% among male adolescents while 57.6% was reported among females as concluded by the Multiple Indicator Cluster Survey (MICS) of 2014 among adolescents in Zimbabwe (ZIMSTATS, 2016). A new trend of sexually transmitted diseases has been reported to be on the rise as reported by recent researches in Zimbabwe (Marume, Maradzika, & January, 2018). Therefore, there is need for developing and implementing relevant interventions aimed at reducing risky sexual behaviours among adolescents as they amplify the risk of contracting STIs and HIV.

The death of parents through HIV/AIDS has contributed to the increase of orphans in Zimbabwean rural learning spaces (USAID, 2019). These orphans are also HIV positive and are under the care of economically disadvantaged siblings who cannot afford to support them. The disclosure of HIV status among adolescents had been noted to be complex, challenging and emotional, especially to partners (Evangeli & Wroe, 2017). Consequently, many adolescents living with HIV/AIDS avoid disclosing their HIV status to their partners and engage in risky sexual behaviours because they fear the reality of being rejected or isolated. Bryant and Beard (2016) maintain that most of the adolescents who are living with HIV/AIDS are orphans who lack proper knowledge on HIV/AIDS

because most of them dropped out of school where they are taught about HIV and AIDS and the importance of condom use. This on its own, amplifies the rate of inconsistent condom use, unwanted pregnancy and poor adherence to antiretroviral medication. Therefore, unprotected sex among adolescents in Zimbabwe remains the main HIV transmission course.

Precisely, adolescents living with HIV/AIDS engage mostly in unprotected sex because they fear to disclose their status which results in rejection by their romantic partners. In their survey involving 98 adolescents living with HIV/AIDS in New York, Weintraub et al. (2017) found that 59% of the adolescent participants reported not disclosing their HIV status to partners and the remaining 41 % reported that they used condoms when engaging in sexual intercourse. In South Africa, researchers conducted in the Eastern Cape Province found that adolescents living with HIV avoid disclosing their status because they fear being stigmatised, discriminated and rejected by their romantic partners (Toska, Cluver, Hodes, & Kidia, 2015). A systematic review of studies conducted in Sub-Saharan Africa indicates that adolescents living with HIV/AIDS engage in risky sexual behaviours (Zgambo, Kalembo, & Mbakaya, 2018). Sandy, Vhembo, & Molotsi (2019) also concluded that HIV rates are rising particularly because adolescents engage in risky sexual behaviours and never disclose their HIV positive status to their partners. The results from the later study indicate a sample of 62 highlighted that 37 (10%) have engaged in sexual intercourse and an estimated 14 (60%) did not use protection while 11(30%) reported that they have more than one partner. The evidence from this literature and statistics calls for a qualitative research in Zimbabwe to get insights into the experiences of adolescents living with HIV and therefore document issues of sexuality, stigma and disclosure with the aim of devising effective intervention strategies.

#### **2.4 Adolescents' vulnerability to HIV/AIDS**

Worldwide, at least 17.8 million adolescents below 18 years old have been orphaned as a result of HIV/AIDS (Avert, 2014). HIV prevalence is highest in Sub-Saharan Africa. Bekker, et al., 2018 notes that this group becomes vulnerable and is at risk of living in a family environment devoid of love. As a result, the burden of HIV/AIDS epidemic extends and affects the psychological functioning and emotional intelligence of adolescents due to the fact that they are a group that needs social care, nurturing support and the caregiver's guidance. However, the lack of such support for this vulnerable population means that they live in abject poverty. Klucklow (2004) in Van Dyke (2013) highlighted many strenuous challenges that result from the death of parents and/or caregivers or illness from HIV/AIDS-related sicknesses.

### **2.4.1 Role changes**

Parents' sickness puts adolescents' lives into jeopardy as they find their roles changing, taking on the roles of primary caregivers as they must take care of the sick parents. In addition, older adolescents aged between 18 and 19 are also at risk of taking on parenting roles and duties as they have to look after young siblings. Resultantly, this has serious implications on the older adolescents' cognitive functioning, hence affecting their identity formation and self efficacy. Kheswa (2017) posits that at least 92% of female adolescents were in transactional sex (exchange for money or any other gift) in Zimbabwe. Studies widely reported that young female adolescents infected with HIV reported higher incidences of transactional sex, low condom use and low level of completing educational courses at each stage (Augusto et al., 2016; Inguane et al., 2015; Toska et al., 2017). Brody, Tuot, Chhea, Saphonn, & Yi (2016) concur, arguing that teenage adolescents who are living in poverty engage in transactional sex to escape from their poor economic backgrounds and buy family necessities, thereby putting themselves at the risk of contracting HIV and sexually transmitted diseases. It can be concluded that adolescence can be a turbulent transitional process.

### **2.4.2 Isolation from family and peer group**

Adolescents are affected by HIV/AIDS either directly or indirectly. For instance, they may drop out of school as a result of relative poverty. Relative poverty is defined by Jensen (2009) as occurring when a family's gross income is insufficient to meet the demands of the family. Kucklock (2004), in Van Dyke (2013), argues that adolescents in families affected by HIV/AIDS are likely to also drop out of school as they are forced to assume the duties of primary caregivers previously occupied by their parents. In addition, losing the opportunity to attain professional qualifications also has serious repercussions for their development as they face a doomed future due to lack of proper skills needed in the employment market. Furthermore, adolescents giving care to their parents are robbed of their leisure time and the opportunity to interact with their peers. Sadly, they grapple with psychological and emotional problems such as depression, anxiety and sadness. A study in Botswana found a positive correlation between depression and lack of concrete reasoning when discussing sexual decision-making matters (Gupta et al., 2010).

Some adolescents also experience toxic life events especially if their peers isolate them. Adolescents aged between 13 and 15 are at risk of being further traumatised and isolated and the perception is that if HIV/AIDS had been the cause of parental death, then the children are likely

to be vertically infected (Kucklow, 2004 in Van Dyke, 2013). As a result, they are isolated by their peers, which further exacerbates their risk of being infected. Some even engage in leisurely but risky sexual activities and further complicate their transition to adulthood (Kheswa, 2017). In the United Kingdom, statistics from the Department of Health (2013) revealed that adolescents aged between 16 and 20 represent a mere 12% of the total national population. However, the alarming fact is that these adolescents also represent the highest HIV infection rate. In order to end HIV by 2030, there is need to prioritise social support systems in addition to the adoption of flexible and effective strategies and techniques such as the creation of friendly HIV Testing Centres.

#### **2.4.3 Troubling experiences, sickness, and death**

Adolescents who give care to their HIV positive parents are at risk of being traumatised especially after witnessing the deaths of their parents. The group under study is ill-prepared to nurse sick parents even with the help of external social agencies. In addition, some cultures even prohibit discussions around the death of a parent or a relative (Ekore & Lanre-Abass, 2016). In such African cultures, Zimbabwe included, death is being referred to as a taboo. Adolescents themselves are not emotionally equipped to deal with such, hence they suffer the brunt of stress and trauma. As such, the transition of adolescents living with HIV/AIDS or those who have a history of caring for parents living with HIV is a complex and strenuous process which can be ameliorated by developing flexible interventions such as a robust social support system.

### **2.5 Challenges experienced by adolescents living with HIV/AIDS**

#### **2.5.1 Ophanhood, emotional traumatic events and complicated grief**

Mental health has increased the burden faced by adolescents living with HIV/AIDS. A systematic review of literature suggests that psychological disorders, especially depression and anxiety, are prevalent among adolescents living with HIV/AIDS (Vreeman, McCoy, & Lee, 2017). Most of the adolescents living with HIV/AIDS are orphans. A study conducted in Namibia involving a large sample concluded that most adolescents living with HIV/AIDS are also most likely to be orphaned (Gentz, Romano, Martínez-Arias, & Ruiz-Casares, 2017). Congruent with other studies conducted in the Sub-Saharan African region are the findings of a qualitative study conducted in Lesotho, which found that adolescents living with HIV/AIDS express challenges of depression, financial crisis and high levels of trauma mainly due to parental loss and isolation (Ramaiya et al., 2016). Thus, these unresolved childhood experiences of trauma, sadness and shyness, as exacerbated by the absence of parental care and empathy, trouble these adolescents throughout

their development years. There is need for flexible interventions and strategies that complement Highly Active Antiretroviral Therapy (HAART) that has proved to be effective in promoting quality life amongst these adolescents.

### **2.5.2 Long distances to healthcare facilities**

Adolescents living with HIV/AIDS face an array of challenges like travelling long distances to healthcare centres, lack of social support, and opening and closing hours which conflict with school hours and all these promote poor and non-adherence to medication in Sub-Saharan Africa (Abimanyi-Ochom, Mannan, Groce & McVeigh, 2017), leading to virological failure (Hudelson & Cluver, 2015). The findings from a study in Lesotho revealed that HIV positive teenage adolescents attending schools complained that the opening and closing hours of health facilities often conflicted with school hours (WHO, 2017). WHO (2015) notes that worldwide, adolescents are more at risk of acquiring HIV than any other group. This observation is based on the fact that adolescents lack proper knowledge since they also need to benefit from treatment and the much needed social support even if they become HIV positive (Müller, Spencer, Meer, & Daskilewicz, 2018).

### **2.5.3 Adolescents' vulnerability to environmental factors**

Many adolescents living with HIV/AIDS in Sub-Saharan African countries are living in unfavourable environments characterised by malnutrition, suppressive cultures and overcrowding and these factors are worsened by relative poverty (Telisinghe et al., 2016). Adolescents and young people living in these areas face difficulties as they negotiate their transition into adulthood. Unstable transitions may be results of insufficient financial resources within the family; hence, adolescents living with HIV/AIDS may lack health insurances or money for transport to attend social services, particularly social support and healthcare facilities. Mirzazadeh et al. (2018) argue that adolescents grappling with challenges caused by HIV/AIDS can only be alleviated if HIV education is offered, which empowers them to protect themselves. For instance, there is need to adopt the risk and resilience framework propounded by Anthony and Cohler (1987), which posits that adolescents are possible 'shock absorbers' in this case, if they receive education on HIV/AIDS. Other effective protective factors are the family, school and peers. Therefore, if communities, schools and peers are educated on matters of disclosure, stigma, discrimination and social support, global health targets, such as UNAIDS 90-90-90 strategy advocated by global health institutions in a bid to end the AIDS epidemic by 2030 may be achievable.

#### **2.5.4 The effect of relative poverty and HIV/AIDS related sickness**

The death of parents as a result of HIV/AIDS signifies end of parental income, hence orphaned adolescents spiral into relative poverty and deprivation. Jensen (2009) defines relative poverty as a circumstance that occurs when the family's income is inadequate and below the poverty datum line, hence affecting the family's quality of life. The common practice among Sub-Saharan African cultures where the inheritance of the deceased's estate, as part of the cultural norms and values, implies that the siblings are left in abject poverty (Ekore & Lanre-Abass, 2016). The adverse effects of HIV/AIDS also manifest in poor health outcomes commonly witnessed in the development of neurocognitive defects, speech defects, gross and fine motor skills malfunctioning, apart from economic and social factors. Such effects are common among adolescents living with HIV/AIDS despite having access to antiretroviral treatment (Crowell et al., 2015). In addition, cognitive defects and other behavioural health disorders are common among adolescents, which negatively impacts on their academic performance, exacerbating the risk of substance abuse and the quitting of social support services. Van Dyke (2013) posits that there is need for psychosocial intervention in the form of counselling services; otherwise this group faces a high risk of committing suicide, engaging in deviant behaviours or dropping out of school.

#### **2.6 Disclosure among adolescents**

Arguably, the most complex subject among adolescents living with HIV/AIDS is the concept of disclosure. The targeted population in this study is undergoing the transition from childhood to adulthood, which makes disclosure even more complicated to peers in romantic partnerships. Mupambireyi (2016) argues that disclosure is a double-faceted event: first, adolescents have to know about their HIV seropositive status; secondly, they have to disclose their HIV seropositive status to others. Nonetheless, little is known about the disclosure of HIV status among adolescents. In the context of HIV/AIDS, a few adolescents openly disclose their seropositive status to their friends and romantic partners to circumvent isolation and stigma (Nöstlinger, Bakeera-Kitaka, Buyze, Loos, & Buvé, 2015). In the case of perinatal infection, parents and caregivers often resort to non-disclosure or may simply delay disclosure altogether. Disclosure of status for adolescents to their romantic partners' have been always an issue. The review of literature in this research found few studies in Sub-Saharan Africa that have documented issues of sexuality and disclosure among ALHIV expect for some few in Zambia and Zimbabwe respectively (Mburu et al., 2014) and the other two in Zimbabwe (Kiddia et al, 2014; Mupambireyi, 2016). The current research

aims to document some of the experiences of disclosure and sexuality SSA that have been understudied.

### **2.6.1 Disclosure as a process and as an accidental event**

As recommended in Zimbabwean and WHO guidelines, the HIV status of adolescents aged 12 and above must be disclosed by their parents or caregivers. In this case, disclosure must be a process rather than a once-off event. However, the process of disclosure is easier said than done. Studies noted that disclosure is often delayed by parents or caregivers who feel that children or adolescents are too young to understand the implications of their HIV status (Kiddia et al., 2014). However, the common complications faced by caregivers are accidental disclosures. A study conducted in Zimbabwe found that some adolescents discovered their HIV status through conjecture, from discussions in hospitals where they receive clinical healthcare and social support (Kiddia et al., 2014; Mupambireyi, 2016). Studies indicate that accidental disclosures lead to emotional instability and increase the risk of experiencing confusion, sadness and suicidal thoughts, especially if adolescents are living in non-supportive environments (Kajubi et al., 2014).

### **2.6.2 Benefits of disclosure**

Before the disclosure of their HIV status, adolescents living with HIV/AIDS face many challenges. For instance, they are in a dilemma, whether or not to disclose their status to their romantic partners. Many adolescents resort to non-disclosure due to fear of rejection and isolation. However, disclosing one's HIV/AIDS status is associated with various health benefits. The findings from various studies indicate that disclosure is beneficial to adolescents because it enhances adherence to therapeutic support and plays a vital role in fostering psychosocial support (Evangeli & Wroe, 2017). Mavhu et al. (2017) note that some Sub-Saharan African countries stress that knowing one's status and the willingness to disclose it to other group members is an essential requirement for attaining social support from social groups (Mavhu et al., 2017). Studies have established the significance of disclosure as it improves knowledge on safer sexual practices (Toska et al., 2015), improved adherence to antiretroviral treatment (Madiba & Mokgatle, 2016) and improved psychological wellbeing (Cluver et al., 2016a).

The disclosure of HIV/AIDS status is pivotal to many other health benefits, for instance, it enables primary prevention of HIV transmission (Evangeli & Wroe, 2017). Evidence from various studies indicate that adolescents whose HIV status has been disclosed early have better retention in terms of the uptake of antiretroviral medication and stand a better chance of attaining social support

(Cluver, Orkin, Meinck, Boyes, & Sherr, 2016). Further, evidence also suggests that a single disclosure attracts suitable support and influences others to disclose their statuses. The findings from a research that investigated the experiences of disclosure in adolescents aged 8 and 15 showed that adolescents who disclosed their status to their friends reported having better quality of health than their counterparts who did not. This was also noted through a steady increase in their CD4 + T cell counts (Sherman, Bonanno, Wiener, & Battles, 2000). Some studies also concluded that disclosing HIV status is significant as it helps to buffer HIV related emotional stress (Mavhu et al, 2017). Other studies concluded that children living with chronic diseases such as HIV/AIDS and cancer cope better after disclosing their status to friends or after their status has been disclosed by their parents (Li et al., 2009).

However, the reviewed literature on disclosure shows contradictory findings which may be attributed to individual differences. Cross-sectional studies examined disclosure and attributed to lack of disclosure as an increase in mental health issues (Tanaka et al., 2018) and less safe sexual issues (Sullivan, 2005). Regarding unsafe sexual practices, it can be concluded that as a result of antiretroviral medication, adolescents feel healthy and report that having sex using condoms is often determined by their partners. Furthermore, some studies associate disclosure with negative psychological and mental problems (Okeke, & Wagner., 2013). Therefore, the disclosure of HIV issues is a complex one and involves a myriad of components. This justifies the significance of understanding adolescents' thoughts and dilemmas regarding self-disclosure and the reasons behind the non-disclosure of their HIV/AIDS status.

### **2.6.3 Reasons for non-disclosure of HIV status**

Research done in poor-resource countries found that non-disclosure of HIV status among adolescents was influenced by fear of being rejected and stigmatised by romantic partners and peers; further, uncovering their HIV status meant the disclosure of their biological parents' status (Mburu et al., 2014). Essentially, they have to live with an additional stressor of covering up the family's secret (Evangeli & Foster, 2014). It is not surprising, therefore, that adolescents choose not to disclose their status for fear of the perceived adverse effects, compelling them to evade the truth and lying about their visit to hospitals to have their chest, asthmatic or heart problems checked. Some studies noted that disclosure is inevitable when the time comes, particularly when adolescents want to engage in sexual and marital relationships (Hogwood, Campbell & Buttler, 2013; Dirisio, Ballantyne, Read & Bendayan ., 2011).

Another barrier to the disclosure of HIV status has been the issue of ‘normality’. At some point, prostitution in Zimbabwe has been perceived as the agent of HIV/AIDS, to an extent that the terms have been used simultaneously (Kiddia et al, 2014). Normality is a situation where adolescents who are HIV positive do not want to be labelled as such. For adolescents, disclosure carries negative connotations and the risk of being isolated, which have negative effects on their self-esteem, self-efficacy and seeking of informational social support from peers (Evangeli & Wroe, 2017). Being HIV positive attracts serious disapproval from a social group, a common feature among adolescents. Apparently, for HIV positive adolescents to be accepted by others, they have to pretend to be HIV negative, which ultimately affects their uptake of antiretroviral medication. In Abraham Maslow’s (1943) hierarchy of needs, belongingness is one of the main needs that motivate human behaviour (Cherry., 2015). In Social Psychology, the need for belonging intrinsically motivates an individual to be socially accepted by other group members (Cherry., 2019). The fear of being labelled HIV positive obviously deters adolescents from disclosing their HIV status. By disclosing their status, adolescents expect other peers to treat them differently; therefore, choosing not to disclose their status affords them the opportunity to evade being treated differently from others and therefore choose the right time to disclose or perhaps not their status (Madiba & Mokwena 2012).

Furthermore, non-disclosure of HIV seropositive status is caused by the fact that carers or parents feel that it is inappropriate to disclose adolescents’ status as the HIV infection may have been perinatally transmitted. Carers perceived adolescent children as too young to deal with the psychological burden of their status (Mupambireyi, 2016). Another reason is that young adolescents’ awareness of parental sickness and the possibility of death further complicate the disclosure process. Perinatal infection occurs when HIV is inherited. Therefore, carers or health care workers (HCW) are caught in between, whether to disclose the status or not as they are not only disclosing the child’s status but the parent’s too. Moreover, parents are caught in a dilemma whether or not to uncover their status to children owing to fear of stigma and discrimination, potential violence and fear of losing jobs and this negatively affects disclosure (George & Lambert, 2015). A study conducted in Mauritania involving people living with HIV/AIDS showed that some participants had known of their HIV positive status for over a year but never disclosed it and they attributed non-disclosure to fear of stigma and violence (Thapa et al., 2018). However, adolescents reported experiencing good psychological adjustment after having disclosed their status; though

they may grieve for a while, they would subsequently adjust to normalcy and adhere to medication (Madiba & Mokgatle, 2016). In contrast, other studies conducted in Sub-Saharan Africa, particularly in Uganda and Zimbabwe, noted that even after their HIV status had been disclosed, young adolescents did not understand the contexts of HIV/AIDS (Kajubi et al, 2014; Kidia et al, 2014).

In the context of adolescents who were behaviourally infected, fear of breaching confidentiality was also noted as the main reason behind non-disclosure among adolescents. Reports noted fear of psychological hysteria as another reason for non-disclosure. For instance, Siu et al. (2012) noted that parents are the least people to expect their young adolescent children to be diagnosed with HIV, hence if that happens, they might die of shock or suicide. Another fact that adolescents cited was that they depended on parents' financial support, which means that adolescents lack social and psychological support even after having disclosed their status. In addition, because HIV is associated with shame, homosexuality and prostitution, many adolescents chose not to disclose their status for fear of being stigmatised. However, a family that chooses not to disclose HIV status risks facing mental problems as non-disclosure hinders participation in social support groups.

### **2.7 Adherence to ARV medication**

Adherence is defined as taking prescribed medicine timeously and correctly in the right ways as prescribed by the practitioner (Sangeda et al., 2018). Adherence to antiretroviral treatment principally determines virology suppression; hence, it improves the quality of health for HIV infected individuals. Sub-optimal adherence includes not taking the required doses, missing doses and partial uptake of doses. Undoubtedly, ART plays a significant role in reducing mortality and morbidity rates. In the Sub-Saharan African region, a systematic review found that high adherence levels were shown to positively correlate with improved quality of life to the first line regimen. (Heestermans, Browne, Aitken, Vervoort & Klipstein-Grobusch., 2016). A recent study conducted in Tanzania concluded that HIV patients who started ART at the beginning of the study had 87% viral load suppression at the end of the longitudinal research. The study noted that adherence to ARV medication largely improves viral suppression (Sangeda et al., 2018). In addition, research also noted that proper ARV uptake improves linkage to social support groups and outward physical health. Although there are many benefits associated with adherence to ARV medication, there are several factors that lead to poor or non-adherence to medication.

### **2.7.1 Barriers to adherence to ARV**

To understand the experiences of adolescents living with HIV/AIDS, it is significant to understand the barriers they face, leading to the failure of therapy. Common barriers to ARV medication reported in Southern Africa can be classified into; individual level barriers, household and financial barriers, medication-related barriers, cultural barriers, distance and transportation (Azia, Mukumbang, & van Wyk, 2016; MacCarthy et al., 2018). Other barriers to be documented are psychosocial issues (inadequate caregiver support) as well as stigma and discrimination.

### **2.7.2 Individual experiences**

Duff, Kipp, Wild, Rubaale & Okech-Ojony (2010) argue that individual barriers to medication include panic emanating from their status disclosure, illness, addiction and denial of their status. Recent research has concluded that some adolescents abandon adherence to ARV medication when they are in public as they fear being seen taking medicines, which leads to a breach of their confidentiality (Hodes, Toska, Cluver, & Vale, 2018).

Another factor leading to discontinuation of ARV medication is that adolescents fear the side-effects and after-effects such as pain and vomiting, respectively. The literature highlights that non-adherence to medication is often influenced by adolescents' need to protect their positive self-image, identity and to resist peer pressure (Sangeda et al., 2018). Adolescents are at risk of non-adherence to their medication because of fear of perceived physical changes and when they are in the presence of suspicious friends and romantic partners. The physical changes that adolescents avoid are facial and buttock wasting as a result of undesirable fat distribution within their bodies (Bakeera-Kitaka Mckellar & Snideret., 2013)

In addition, adolescents in transition face difficulty adhering to their medication if they are fully made responsible for their own drugs without supervision (Woollet, 2016). Van Dyke (2011) submits that adolescents are at risk of forgetting their medication especially as they experiment with substances such as alcohol. A study conducted in South Africa showed that leaving the tablets at home, clinics running out of tablets and forgetfulness were the most reported causes of non-adherence to medication (Knight, Van Zyl, Sanne, Basset & Van Rie., 2015).

### **2.7.3 Household and financial barriers**

Poor housing (Palepu, Milloy, Kerr, Zhang, & Wood., 2011) and financial constraints that are linked to relative poverty (MacCarthy et al., 2018) have been identified as negatively influencing adolescents' adherence to antiretroviral medication.

Effective adherence to antiretroviral therapy (ART) is defined as the taking of 90% of the doses as prescribed by a medical practitioner (Vreeman et al., 2018). However, for ALHIV good adherence to ART is always problematic. The population under study lacks emotional and material support from parents and caregivers, which affects their adherence to medication. Some adolescents might have gone through unpleasant experiences of nursing their parents who later died of HIV/AIDS. Such adolescents are not likely to adhere to medication as they are likely to be ART dropouts (Heestermans, et al., 2016). The results from one systematic study showed that lack of education strongly correlated with non-adherence to medication (Heestermans et al., 2016). According to Heresi (2011, p. 29), "they may model their parents who were not taking their medication and die". Clinical evidence indicates that if ARV's are not taken correctly (around the same time that they should be taken), HIV may develop resistance to therapy and the patients are most likely to be changed into another expensive line (Care and Treatment for Children with AIDS, 2020). Most HIV/AIDS patients miss the opportunity to access second line treatment which leads to HIV/AIDS-related sicknesses and death (Vreeman et al., 2018). Therefore, to address drug resistance and high mortality and morbidity among adolescents, interventions such as social support must be integrated with counselling to maximise adherence to ARV medication, which in turn increases the quality of life.

Adherence to ARV treatment is also hindered by financial barriers such as unavailability of cash for transport (Azia et al., 2016). In Sub-Saharan Africa, there are reports of adolescents traversing long distances to health facilities because they do not have money for transport and this negatively impacts on ARV treatment (Abimanyi-Ochom, Mannan, Groce, & McVeigh, J. (2017). Reports from Lesotho and Uganda highlighted that adolescents traversed long distances to access healthcare facilities as well as social and clinical support (Nakigozi et al., 2017). Adolescents do not have the money because they are not employed and in Zimbabwe, most of them are orphans. Zimbabwe ranks the highest in terms of the number of orphans living with HIV/AIDS whose parents died of HIV/AIDS-related sickness with 74%, followed by South Africa with 63% (WHO, 2014). Resultantly, loss of parents and lack of emotional and material support affect adolescents'

psychological disposition and social life, making it difficult for adolescents living with HIV/AIDS to successfully negotiate the transition stage. For the Highly Active Antiretroviral Therapy (HAART) to be successful and to prevent drug failure among this population, efficient adherence measures should be adopted.

#### **2.7.4 Relative poverty a barrier to Adherence to ARV's**

Relative poverty is defined as a situation when the family's income is too inadequate to meet the society's generally expected standard of living (Jensen, 2009). Relative poverty means that the family is struggling to raise money to purchase food, pay for rented accommodation and electricity bills. Adolescents living in households threatened by poverty are at risk of missing review dates and social support meetings because they do not have money for transport (MacCarthy et al., 2018). Adolescents mentioned that poverty makes it difficult for them to buy enough food which is essential every time they take their medication. Adolescents in urban Uganda reportedly skipped pills because of the adverse effects they experienced after taking pills on an empty stomach (Nakigozi et al., 2015); a scenario not reported by rural-based participants. Interestingly, the current research has sampled adolescents from both rural and urban settings in Chiredzi District to obtain cross-sectional experiences of both urban and rural experiences in the contexts of poverty and adherence.

According to Kalichman et al., (2014) food insecurity results from relative poverty and positively correlates with incomplete HIV Ribonucleic Acid (RNA) suppression, CD4 count decline in time and reduced quality of life. Similarly, a cohort study involving 488 patients in rural Zambia highlighted that the benchmark food insecurity strongly correlated with sub-optimal adherence to ART, but when correlated with elements such as wealth, the relationship disappeared (Bierbeck, 2011). To obtain optimal adherence, interventions must address the actual problems, for instance, offering cash and eliminating barriers such as lack of school tuition fees, which in many cases compels this group to default.

#### **2.7.5 Medication-related problems**

Adherence to medication among children and adolescents living with HIV/AIDS has many complexities. Medical challenges hindering this population's adherence to medication include pill fatigue, loss of faith in medicine and poor health facilities (Gross et al., 2015; Nabukeera-Barungi et al., 2015). Additionally, long queues, misplaced files, limited clinic business hours and overcrowding with other patients were also reported to be negatively influencing non-adherence

to medication among adolescents (Heestermans et al., 2016). Furthermore, opening hours which conflicted with school hours, fear of breaching status confidentiality, coupled with poor healthcare facilities also aggravated adolescents' non-adherence to medication. In Lesotho, adolescents living with HIV/AIDS complained that clinical services were in conflict with school days, a scenario which promoted intermittent or non-adherence to medication (WHO, 2017).

Adolescents living with HIV/AIDS complained that the ARV medication had side-effects that include sweating and physical body changes such as enlargement of buttocks raise fears that suspicious friends and romantic partners would end up knowing about the unwanted disclosure of their status. The results from a systematic review conducted in Sub-Saharan Africa depicted adolescents as experiencing side-effects particularly vomiting, headache and dizziness, which negatively influenced their adherence to medication (Nakigozi et al., 2015). The review further established that adolescents believed that it seemed unfair for them to monotonously take ARV medication everyday especially when they felt fit, a practice common among adolescents whose seropositive status had not been disclosed. Such adolescents often skip drugs or completely quit medication if they are not closely monitored (Li et al., 2017); hence, this negatively impacts on their adherence to medication. Status disclosure, counselling and informing adolescents about the potential side-effects of the medication will help promote adherence to Highly Active Antiretroviral Therapy.

Adolescents on antiretroviral treatment reported feeling healthy; hence, they stopped taking their medication (Heestermans et al., 2016). Adolescence is a difficult stage as adolescents will be transitioning from childhood to adulthood. The process can either be a success or a failure especially to adolescents living with HIV/AIDS. Some parents also contribute to poor or non-adherence to medication because they accord full responsibility to infected adolescents before they are ready to take their medication independently. However, the result is always problematic as some adolescents reported pill fatigue, forgetfulness and refusal to take the pills because they professed to see no importance in them. As such, there is need for adolescent-centred interventions such as Direct Observation Therapy (DOT) which involves the parent/caregiver closely monitoring the child when taking their ARV medication.

### **2.7.6 Cultural barriers**

Surprisingly, some individuals in Sub-Saharan Africa still consult traditional healers (n'angas) even after the administration of ART has reported positive outcomes for HIV infected patients (Azia et al., 2016). The consulting of traditional healers, the use of holy anointing waters and oils or prayers have negatively hindered adherence to HAART in some Sub-Saharan African countries. Research results from Tanzania, Zambia and Uganda show that traditional healers negatively influenced the uptake of ARV treatment. The data further indicated that participants who lived in areas with traditional healers and were on treatment for more than 5 years were more likely to report missing appointments and exhibiting poor adherence to medication than those who were not consulting traditional healers (Wanyama et al., 2017).

Research conducted in Zimbabwe show that some churches discourage the accessing of medical care in favour of their religious faith and prayers. Many apostolic churches shun modern medicines, as they believe in their faith and prayers, though they are now gradually gravitating towards embracing medical care (Kanengoni, 2017). In some parts of Zimbabwe, reliance on herbs and concoctions prescribed by traditional healers is still a common practice and discussions around sex between children and parents is still a taboo (ZIMSTAT & ICFI, 2012). In this context, the relevant HIV education should be provided to all, including religious and spiritual leaders, general practitioners and psychologists.

### **2.8 Stigma and discrimination**

Stigma is defined as an extreme devaluation of people that are living or associated with HIV/AIDS (Patankar & Pandit, 2014). HIV-related stigma and discrimination are the major obstacles to disclosure and the provision of support to adolescents living with HIV/AIDS. Worldwide, literature has documented stigma and discrimination as the major obstacles to the achievement of UNAIDS's goal of a free HIV/AIDS generation by 2030 (UNAIDS, 2018a). Stigma and discrimination exacerbate the burden of HIV/AIDS by promoting a culture of secrecy, lack of knowledge and anti-social support for instance group social support where adolescents are taught about protection, which act as the major obstacles to the attainment of an HIV/AIDS free generation. Stigma and discrimination are associated with poor education. Discrimination is also unjust to adolescents living with HIV/AIDS; for instance, seeking parental consent to access HIV/AIDS services further influences non-disclosure and discourages the seeking of social support services.

### **2.8.1 Forms of stigma**

#### **2.8.2 Enacted stigma in educational settings**

Enacted stigma is a form of discrimination associated with the actual experiences of discrimination (Valle et al., 2015) experienced by school-going children or adolescents. Common attitudes related to enacted stigma include denial of school admission, refusal of physical contact such as hugging and kissing. Studies have concluded that children in schools are more vulnerable to stigma and discrimination and equally, they are more likely to experience both physical and online bullying (UNAIDS, 2016). Sadly, children and adolescent learners living with HIV/AIDS often perform dismally because of stressing about their lifetime status, drop out of school or are expelled from school facilities as a result of stigma and discrimination. Enacted stigma may be attributed to lack of a school curriculum that incorporates HIV/AIDS education.

Discriminatory attitudes against school-going adolescents often have a devastating impact on the self-esteem and self-efficacy of the adolescent learners. Both teachers and peers can create a non-favourable learning environment for HIV/AIDS victims. Teachers can discriminate children through seating arrangements or labelling, which negatively affect the victims' self-esteem, while discrimination from other peers includes name-calling or isolation. Resultantly, adolescents living with HIV/AIDS are vulnerable to dismal academic performance.

#### **2.8.3 Perceived stigma**

Perceived stigma is displayed as fear of thoughts and actions when others are perceived to know about an individual's HIV status (Choi, 2014). Perceived stigma can also be experienced by avoidance of significant others and form relationships, especially romantic relationships, because of fear of being victimised, isolated or the fear that the secret around their HIV status might be unveiled.

#### **2.8.4 Communities and internalised stigma**

Self or internalised stigma is when an individual living with HIV/AIDS accepts the isolation and often blames themselves for their status and accepts the attitudes exhibited by the society, friends or peers. Many countries in Sub-Saharan Africa are patriarchal societies characterised by poverty. Owing to relative poverty, many adolescents have fewer opportunities to attend school. Additionally, female adolescents often raise tuition fees through engaging in unprotected transactional sex, which puts themselves at risk of unintended pregnancies, gender violence and

HIV/AIDS (Toska et al., 2017). Gender-based violence and discrimination in schools negatively affect adolescent learners' academic performance.

### **2.8.5 Secondary stigma**

Secondary stigma is experienced by either the family or health care workers due to their association with adolescents living with HIV/AIDS. This form of stigma is embarrassing, for instance, peers often call them names, insulting their mothers. This is even more depressing to the adolescents as their peers refer to their mothers as prostitutes or when they avoid physical contact with them, associating HIV/AIDS with communicable diseases contracted through handshake or hugging (Deacon & Stepheny, 2007).

### **2.9 Challenges associated with stigma and discrimination**

Stigma and discrimination have been considered the greatest hindrances barring adolescents from disclosing their HIV status to health workers and romantic partners (Siu et al., 2012). Evidence from community-based HIV testing sites noted that the removal of barriers such as stigma and discrimination means that more people would be tested and therefore seek treatment (Iwuji et al., 2018; Orne-Gliemann et al., 2015). Nonetheless, some adolescents may not seek clinical treatment or testing services in spaces where they feel they might be seen. Recent studies in the United States of America show a strong negative link between HIV-related stigma and discrimination and adherence to medication (Rintamaki et al., 2019). Another study conducted in Thailand also highlighted that HIV-related stigma was a strong predictor of adherence to ARV medication (Lee, Amin & Kar 2014). Similarly, adolescents living with HIV/AIDS may miss important social support meetings and skip doses in situations where they perceive they might be seen taking medicines by peers, the family and community members or romantic partners, leading to unintended disclosure and invasion of privacy (Hodes et al., 2018).

In Zimbabwe, stigma and discrimination remain rife, with findings from one study indicating that 65% of the people living with HIV/AIDS had experienced them (Zimbabwe National Network People Living with AIDS (ZNNP+), 2014). Data from a statistical survey conducted in 2015 revealed that 22% of the women and 20% of the men have knowledge on HIV-related discriminatory attitudes. At least 6% of the women and 9% of the men did not think HIV positive children must be allowed to attend school together with other children who are HIV negative. In addition, 19% of the man would avoid buying vegetables from a shopkeeper living with HIV/AIDS and the same findings indicated that 31% of the people in Angola, 25% in Uganda, 21% in

Mozambique, 18% in Zimbabwe, 15% in Malawi and 13 % in Botswana suggested that many people still lack basic education regarding HIV/AIDS (UNAIDS, 2018b).

### **2.10 Facilitators of adherence to ARV medication**

Social support is a key protective factor to people living with HIV/AIDS. Studies conducted in Africa show a strong correlation between knowledge on HIV/AIDS and social support (Cluver et al., 2015; Lowenthal et al., 2014). Previous studies conducted in the Sub-Saharan Africa also found that social support, especially motivational words from same age peers or friends, stimulates the passion and zeal to continue living (Lowenthal et al., 2014) and influences adherence to medication (Cluver et al., 2015; Matovu, Todd, Wanyenze, Wabwire-Mangen, & Serwadda, 2015). Indonesian studies reported that raising the standard of social support meant for HIV/AIDS patients increased their adherence to ARV medication (Weaver et al., 2014). Social support was also associated with reduced HIV-related stigma and discrimination among individuals living with HIV/AIDS (Lowenthal et al., 2014).

### **2.11 Defining social support**

According to Ashida and Heaney (2008), social support manifests in the form of informational or emotional help proffered by the family, peers, healthcare givers and the schools. Although adolescents are a heterogeneous group, the findings from recent studies in Cambodia show that social support improves confidence, self-esteem and positively promotes the transition of adolescents living with HIV/AIDS from childcare to adult care (Toth et al., 2018). Social support positively influences the uptake of antiretroviral treatment, reduces HIV-related stress and illnesses, and effectively minimises suicidal thoughts and death associated with HIV/AIDS (Calvetti, Gauer, Giovelli, & Moraes, 2014). Social support protects adolescents with appropriate friendly treatment facilities, minimises stigma, promotes HIV retention care and offers effective therapeutic recovery from HIV-related sickness (Pedrosa et al., 2016). In addition, proper social support is an effective variable especially during grieving, acceptance of HIV status, recovery and adherence to antiretroviral treatment (Pedrosa et al., 2016). Apart from emotional or informational support, social support can also be conceptualised as appraisal or instrumental support.

#### **2.11.1 Emotional support**

Emotional support is the ability to trust significant others, that is, other adolescents living with HIV/AIDS, sharing empathy or care with them. Lee, Yamazaki, Harris, Harper, & Ellen (2015)

highlighted that emotional support is significant to all adolescents as they transition into adulthood, by ensuring that they maintain health; however, it is more relevant to adolescents living with HIV/AIDS because they may not only be transitioning, but handling an extra milestone of carrying an additional burden of HIV/AIDS which is associated with rejection, stigma, discrimination and fears of separating from others through imminent death and shame as the disease is associated with prostitution (Kiddia, 2014). In this way, emotional support can be very effective in ensuring that adolescents cope with difficult times. For instance, adolescents who have recently been diagnosed with HIV need empathetic support for them to cope with such a reality. Therefore, receiving emotional social support is significant as it averts HIV-related stress and buttresses psychological functioning which improves self-efficacy.

In addition, Colarossi and Eccles (2003) further asset that social support is even more effective for adolescents especially if it is received from same age peers and friends, which largely impacts positively on adolescents' self-efficacy and self-esteem. Adolescents need support, care and empathy so that they can feel cared for or appreciated to overcome or coping with HIV. Studies involving children living with HIV/AIDS and adolescents in Sub-Saharan Africa have reported that social support reduces depression and isolation, simultaneously increasing the level of self-esteem (Mavhu et al., 2013). Research suggests that social support is important because it reduces aversive situations faced by adolescents living with HIV/AIDS; for instance, peer support therapy may be beneficial since it ropes in trained treatment-supporters to deliver social-based psychosocial support that positively improves adherence to and retention of medication (Mavhu et al., 2017). In Zimbabwe, Africaid Zvandiri - Community Adolescent Treatment Supporters (CATS) programme has been successful in providing peer adherence support to children, adolescents and young adolescents living with HIV/AIDS (UNAIDS, 2018a). An analysis of adolescents in the CATS programme found that those who were in the programme were more likely to have protected sex than their counterparts who were not (UNAIDS, 2018a). It can be concluded that effective emotional support that includes attention, the presence of the caregiver and listening is significant because adolescents need to be cared for or appreciated, hence improving their psychological wellbeing.

### **2.11.2 Instrumental support**

This form of support is also beneficial to adolescents living with HIV/AIDS because it offers specific and relevant material solutions to problems; for instance, money for food, transportation and utility bills. Instrumental support can assume the form of material, clinical or monetary support. Adolescents who lack instrumental support are at risk of experiencing mental problems such as mood disorders, substance disorders and psychotic disorders, with the United States recording 2.6% while Africa, where the HIV burden is rife, recorded 27% (Remien et al., 2019). It was also reported that patients who were hospitalised due to depression lacked social support and endured greater pain (Kessler, 2012). The burden of mental health shouldered by people living with HIV/AIDS, to some extent, emanates from the burden of HIV/AIDS. Studies proved that people who are living with HIV and mental problems exhibit risky sexual behaviours which include unprotected sex, transactional sex and having sex under the influence of drugs, which undermines the ambitious 95-95-95 program (UNAIDS 2019 strategies to end HIV by 2030 thus to diagnose 95 percent of people living with HIV and to put the 95 percent on treatment and lastly to make sure that 95 percent of them have suppressed loads) (Remien et al., 2019).95-95-95 Therefore, these recent findings call for urgent interventions in the form of instrumental social support as evidence suggests that social support averts mental problems.

### **2.11.3 Informational support**

Informational support comes through caregivers or parental guidance, suggestions and information that an individual can use to address the problem, taking into cognisance the fact that many HIV infected adolescents experience stigma and discrimination. Casale, Boyes, Pantelic, Toska, & Cluver (2019) suggest that this stigma often comes from all the corners of the society including teachers and the family where they live. The assumption is that adolescents lack knowledge from the community in which they live. Evidence from the meta-analysis done in South Africa highlighted higher rates of depression, stress, anxiety and emotional disorders among people living with HIV/AIDS because they experienced more HIV-related stigma and discrimination (Casale et al., 2019). Rueda et al. (2016) argue that stigma continues among many vulnerable populations such as adolescents living with HIV/AIDS and this acts as a major barrier to HIV treatment as these adolescents avoid disclosing their status due to fear of being stigmatised. Consequently, adherence to medication among this population always remains below par (Hudelson & Cluver,

2015). That being the case, education on HIV/AIDS is still lacking and can only be disseminated in the form of informal social support through social groups.

Evidence from recent cross-sectional and longitudinal research suggests that social support provides the social-emotional care needed by adolescents living with HIV/AIDS for them to initiate and maintain treatment (Cluver et al., 2016b). In addition, Cluver (2016a) pointed out that the government or non-governmental organisations supporting hospitals run by nurses, counsellors or social workers may have a positive impact on HIV positive adolescents' adherence to medication and their overall health. Lee, Veasna, & Wu, (2013) support this view, postulating that group therapy support has been found to improve mental stability and psychological wellbeing among families and adolescents infected with HIV. The results from a study conducted in Mozambique establish that social support reduces HIV-related stigma and discrimination (Pedrosa et al., 2016). Similarly, the results also show an improved quality of life, hence social support effectively minimises the adverse effects of the disease among adolescents.

#### **2.11.4 Appraisal support**

It is providing necessary support for self-assessment. Pedrosa et al. (2016) support the view that this type of support enhances better adherence to treatment. Matsumoto et al. (2017) postulated that appraisal support is basically fellowship with friends, recreational actions and constant feedback and affirmation. For instance, a close friend and age-mate can remind another HIV positive peer to equip themselves to beat stigma and discrimination through affirmation of knowledge about HIV/AIDS (that is motivating another peer to assess their current situation).

#### **2.12 Effectiveness of social Support**

For social support to be effective, it is imperative to contemporaneously offer a variety of social support strategies to adolescents living with HIV/AIDS. A study by Pedrosa et al. (2019) reported that patients demonstrated that they directly accessed a complex and robust support system to address their needs and this correlates with adolescents living HIV/AIDS because they are heterogeneous group. Precisely, Pantelic, Boyes, Cluver, & Meinck (2017) advised that HIV-related stigma has been associated with serious mental health among HIV positive adolescents.

However, effective social support strongly correlates with better mental health among people living with HIV/AIDS, in addition to reducing the rates of committing suicide, improved health and the ability to cope with stress (Bitew et al., 2016; Rizesutek, 2017). Getz (2017) found that

support group therapy has been found to maintain stable mental functioning and psychological wellbeing. However, Casale et al. (2019) argue that there is no clinical data to determine whether or not social support really improves mental stability among people suffering from HIV/AIDS.

Reports from Warsaw-based research found a strong link between social support and lower levels of suicide and improved psychological wellbeing and health among HIV/AIDS patients (Rzeszutek & Gruszczyńska, 2018). In Namibia, Gentz et al. (2017) agree with Rzeszutek (2017)'s findings that more social support levels (especially from prenatal caregivers) have been found to be a protective measure against mental health disorders among adolescents living with HIV/AIDS. The literature also notes that social support resources would curtail the effects of stigma which propel depression and suicidal thoughts and behaviours (Casale & Fioravanti, 2015; Gellert et al., 2018). Although literature documents the effectiveness of social support in minimising suicidal rates and risky sexual behaviours, a quantitative research by Casale et al. (2019) in the Eastern Cape Province, South Africa hypothesised that support group participation did not significantly correlate with depression. In addition, neither the availability of social support nor group participation was found to be directly associated with suicidal thoughts.

Moreover, Rueda et al. (2016) argue that the availability and level of social support for adolescents and young adults living with HIV/AIDS in Sub-Saharan Africa may be complicated by deepening poverty as the majority of them are orphans. Furthermore, participation in social support groups might be greatly hindered by stigma and non-disclosure of HIV status. More interventions are needed to address stigma since social support alone cannot curb the underlying problem of HIV infection especially in low-resource countries bereft of financial resources to bolster efficient group therapy sessions (Cluver et al., 2016b). In some countries like Zimbabwe disclosure is a prerequisite for accessing social support group therapies (Mavhu et al., 2017). While non-disclosure on its own negatively impacted on social support, there is need for interventions that underlie the overarching issues around stigma and discrimination, worse still the apparent unwillingness to disclose HIV status. Precisely, additional interventions are needed to address stigma and discrimination, disclosure and sexuality among adolescents living with HIV/AIDS simultaneously undergoing transition.

### **2.13 Theoretical framework**

The researcher utilised Ludwig von Bertalanffy's (1940) Bio-psychosocial Model and Ross Ashby's (1956) as cited in (Drack & Pouvreau 2015). Positive Youth Development Theory to formulate the theoretical framework underpinning this study.

The Bio-psychosocial Theory stems from the General Systems Theory, which propounded the view that systems exist within systems and that nothing exists in isolation. Drack and Pouvreau (2015) avers that the General Systems Theory maintains that patients' behaviours can only be explained in relation to the context within which they occur. As such, the challenges of adolescents living with HIV/AIDS are viewed within the context of the family, the community and the peers with which the adolescents interact. The Bio-psychosocial Theory, as applied in this study, illustrates how the challenges of adolescents living with HIV/AIDS may interact or cause a myriad of factors at different levels, for instance, stigma at community, school or household levels. Therefore, understanding adolescents' voices is the basis for a better understanding of their needs, hence HIV infected adolescents will be interviewed. The Bio-psychosocial Model proved to be useful in this research because of its flexibility; for instance, it clearly explains the barriers such as stigma which hinder the accessibility of clinical services among adolescents living with HIV/AIDS; it further analyses a combination of factors such as poor facility structures (Stankard, LeTouze & Jones, 2014).

The Bio-psychosocial theory states that biological, psychological and socio-cultural act all contribute simultaneously to people's health. According to the Bio-psychosocial Theory, an individual is shaped by the unique interaction and modification of the three important major components; the biological, psychological, and societal components. This model is in congruent with Erik Erikson's (1950) Psychosocial Theory, which examines eight psychosocial stages of human development determined by the human genes that stretch a human being's life span. The biopsychosocial model advocates that the process from birth to death is a developmental phase where an individual negotiates his/her way from one stage to another. The report from the National Research Council and the Institute of Medicine (2002) in Rubin (2013) support the view that the transition of adolescents from one stage to another is largely determined by cognitive and physical aspects of an individual and the available support. As such, there is an undisputed need for

adolescents living with HIV/AIDS to receive social support during their transition and throughout their developmental stages.

The Bio-psychosocial Theory also aligns with the Psychosocial Theory in that they both advocate for social support from the family. Feyissa, Lockwood, Wouldie, & Munn (2019), emphasise the view that families are agents of socialisation, hence they can assist adolescents who also belong to the family. Therefore, when dealing with adolescents, it is significant that they are assisted to negotiate from one stage to the other. For instance, at Stage Five of Erickson's model (Erickson, 1950), identity formation interacts with role confusion, with identity formation being a critical task of adolescent development from the age of 12 to 20; hence, in times like this, social support from the family is significant in dispelling adolescents' confusion regarding the role they ought to play as adults. However, with the expansion of the family, changes in the community hierarchy and the erosion of tradition, the traditional methods have become less competent in enabling the transition from childhood to adulthood. In addition, adolescents perceive themselves as having attained adulthood. This perception enables adolescents living with HIV/AIDS to decide on their own when and where to take their medication, which also affects the quality of their lives (Lawson, 2005). Lawson (2005) further explains that adolescents are active agents of their own growth, as they drive their own development.

The psychosocial issues examined by the theory include stigma and disclosure. Ross and Deverel (2010) noted that adolescents living with HIV/AIDS not only face bleak future, but they are also living in constant fear of being found to have HIV/AIDS. Adolescents also face a dilemma emanating from their status and that situation is compounded by a plethora of problems associated with the disease that carries the double stigma of being terminally ill as well as connotations of prostitution and death. For adolescents living with HIV/AIDS, negotiating this milestone from childhood to adulthood can be challenging. This transition is exacerbated by the notion that HIV/AIDS is a chronic, stigmatised and sexually transmissible disease. Resultantly, adolescents absent themselves from healthcare facilities due to fear of being stigmatised and as a result of relative poverty that bars them from showing up for medical appointments because of unavailability of money for transport. Feyissa et al, (2019) argue that in such a scenario, the social group therapy is among the best interventions for HIV-related stigma and discrimination and this can only be achieved through educating the school, the peers and the community.

### **2.13.1 The Positive Youth Development Theory**

The theory emphasises the empowerment of communities so that they can be useful in nurturing and supporting adolescents living with HIV/AIDS. Rather than focusing solely on adolescents' experiences, the model aims at strengthening developmental potentials and rewarding adolescents' thriving behaviours (Arnett, 2009).

### **2.13.2 The social aspects of adolescents' living with HIV/AIDS**

According to the Youth Development Theory, emphasis should be on empowering and developing adolescents. Therefore, a successful transition depends on the development of both the community and the adolescents if adolescents living with HIV/AIDS are at risk of being discriminated and isolated. The fear of being stigmatised discourages adolescents living with HIV/AIDS from disclosing their seropositive status to families, friends and romantic partners, which hinders them from getting healthcare services and the much-needed social support (Feyissa et al., 2019). Therefore, this theory attempts to involve adolescents in the improvement of their lives and their own development and that of the communities in which they live. Sengupta, Banks, Honas and Smith (2013) in Feyissa et al. (2019) postulate the imperativeness of developing interventions that target different groups such as students, healthcare workers and the general community. Hence, besides focusing solely on adolescents, interventions must also target the family, the school and the community (Stephenson, 2008). In addition, the testimonials of adolescents living with HIV/AIDS, given through social support groups and skills building support, can effectively curb the challenges faced by these adolescents. The researcher agrees with Feyissa et al. (2019) who hail the effectiveness of social group therapy. However, the current research maintains that adolescents must be given the platform to participate in the formulation of laws that concern their healthcare, treatment and support which, to a greater extent, can impact positively on adolescents' self-perception and self-esteem (Mavhu et al., 2017).

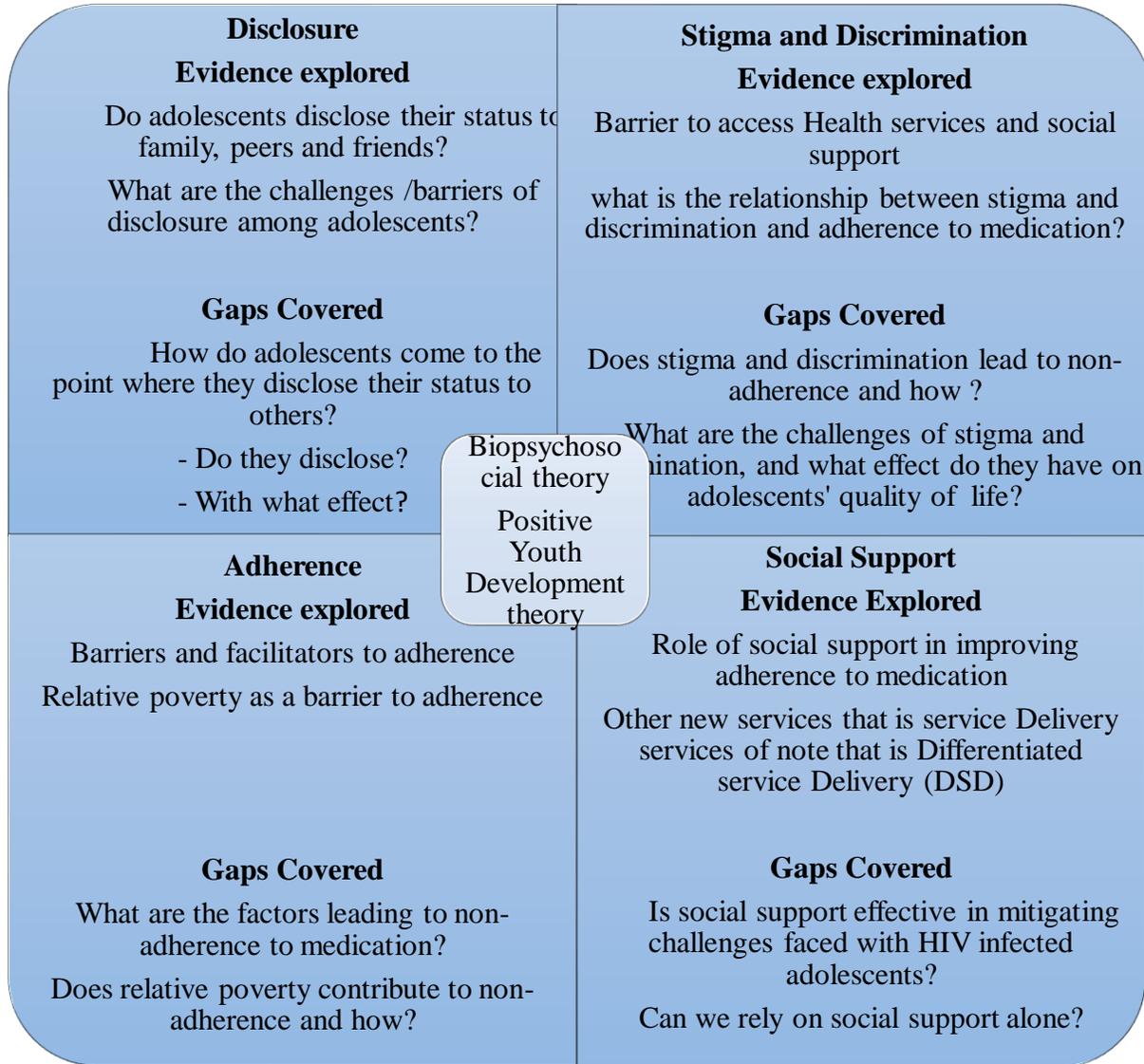
In line with the Bio-psychosocial Model, the Positive Youth Development Theory advocates that adolescents (despite their experiences) should use their potential to the fullest capacity. The theory further posits that adolescents should seek and receive support from their social environment including the family, peer group, the school, and the community. From an adolescent's perspective, the theoretical framework of resiliency has led to the empowerment of adolescents and community youth development that integrate the developmental needs of adolescents through education, thereby preventing them from engaging in drug abuse and risky sexual behaviours

which militate against their successful transition. Tangle, Lloyd, Brady & Baral, (2013) as cited in Feyissa et al. (2019), note that counselling and support approaches can minimise the negative psychosocial impact of HIV-related stigma and discrimination among adolescents living with HIV/AIDS. Allowing adolescents in a peer support group to make their own policies positively influences the development of their community and their own social and psychological upliftment.

Such interventions play an influential role in modelling community involvement by providing opportunities for the adolescents to participate in their development. This creates ‘shock absorbers’, for instance, through participating and peer leadership in social groups, adolescents become resilient when faced with such challenges as stigma and discrimination. UNAIDS’s Goodwill Ambassador HRH Crown Princess of Norway, Mette-Marit, also proclaimed to the Ukrainian and regional adolescents that: "I strongly believe in adolescents, adolescents’ leadership and empowerment can make miracles. If you unite your forces and raise your voices, one day you will be heard by decision makers” (UNAIDS, 2012). Therefore, if adolescents must be involved in the community and regional decision-making, they can also be involved in decision-making at the international level. As a result, communities need to empower adolescents, consider their challenges and lines of thinking as far as HIV/AIDS-related decisions are concerned. The researcher ropes in a multiple of relevant ministries, particularly the Ministry of Health and Child Care (MoHCC), to discuss the findings and recommendations that enhance improved outcomes for adolescents living with HIV/AIDS.

## **2.14 Conclusion**

The impact of HIV/AIDS on the functioning of adolescents is multifaceted as it affects all the aspects of the adolescent’s life. This chapter has reviewed the literature that details the challenges faced by adolescents living with HIV/AIDS focusing particularly on Zimbabwe. Adolescents transitioning from childhood to adulthood need social support as established by the reviewed literature.



**Fig 2: Summary of literature review**

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

According to Terre Blanche and Durrheim (2006, p.6), “methodology specifies how researchers may go about practically studying whatever they believe can be known.” This chapter describes the study setting and the various aspects that are of methodological importance. These are; research approach, design, and paradigm. The chapter also describes the data collection method, selecting participants, research instruments used, data analysis, trustworthiness of data and ethical considerations that were adopted in this study. It ends with the limitations of the study and conclusion.

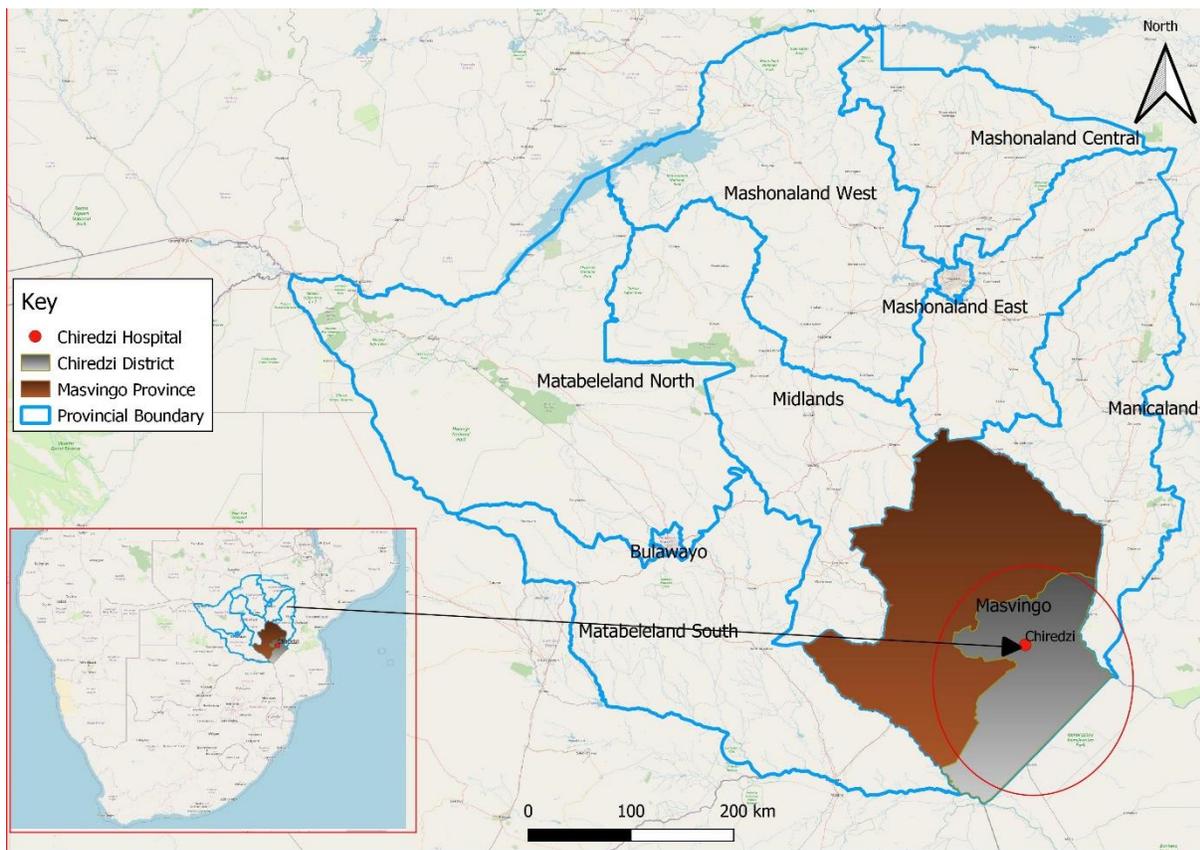
### **3.2 Background to the study setting**

The study was conducted in Chiredzi district, which lies 32°55' S and 29°49' E, in Masvingo Province, one of the ten provinces in Zimbabwe. In 2012, Chiredzi had a population of 26 129 (Zimbabwe National Statistics Agency, 2012). The town is surrounded by two estates, Triangle (East) and Hippo Valley (South), both sponsored by Tongaat Hullet Zimbabwe. In each estate, there are about 18 000 workers, eighteen (n =18) primary schools and four (n =4) high schools. In Chiredzi town, there are four (n =4) high schools and ten (n =10) primary schools (Scoones et al., 2018). Chiredzi town lies between two indigenous communities, the Shangani (South) and the Shona-Karanga community on the North. It is significant to note that all the surrounding rural communities access health services at Chiredzi General Hospital. This is a hybrid referral hospital offering comprehensive HIV treatment, social support and clinical services to people living with HIV and AIDS (PLHIV).

Chiredzi district was purposely selected because of its long history in child prostitution as well as sexual reproductive health and rights stretching from the 1960s, yet it remained understudied (Mafirakureva, 2019). In addition, there are reports of left behind female adolescents who are dying while trying to terminate unwanted pregnancies using unorthodox abortion methods such as inserting fresh chillies in the vagina or use of hooked wires to terminate pregnancy. It is alleged that when biological parents migrate to neighbouring country South Africa, legal guardians or senior commercial sex workers will then coerce these adolescent girls to sleep with older men, thereby putting them at risk of sexual transmitted infections (STIs) and HIV (Kheswa, 2017).

Economic challenges, and poverty are among the key drivers of migration, and HIV and AIDS (Helman, 2007). There is an assumption that migration of Zimbabweans from Chiredzi to South Africa is common because of the town's proximity to the South African border. It is a concern that this migration might have contributed to the rise of new HIV infections in Chiredzi and Zimbabwe at large. In addition, studies have concluded that left behind children are at risk of emotional, social and developmental problems than their counterparts who stay with their parents (Man, Mengmeng, Lezhi, & Jingping, 2017). Furthermore, the district was purposely selected because of its cultural diversity. This further added another layer to the objectives that the study sought to achieve. Therefore, it is imperative for this qualitative study to be conducted in Chiredzi district.

### Map showing the study area, Chiredzi in Zimbabwe



**Fig 3 study Area Map: Location of Chiredzi General Hospital**

### **3.3 Research approach**

The current research employed a qualitative approach. Cohen et al. (2018, p.10) advise about “fitness for purpose” entailing that researchers’ main priority in choosing an approach is to find components that will be fit in their intended purpose. Therefore, qualitative approach was chosen because of its appropriate to this study in line with the research’s aims. Qualitative research is a situated activity that locates the observer in the world (Creswell & Poth, 2018). Creswell and Poth (2018) further note that qualitative methods turn the world into meaningful representations such as field notes, interviews, photographs, recordings and memos. The researcher adopted a qualitative approach in this study as they sought to understand the experiences of adolescents living with HIV in terms of stigma, and disclosure through their interaction the participants from both rural and urban Chiredzi as reported by the adolescents themselves. The qualitative approach was used because of its limitless advantages as compared to its quantitative counterpart. In support of the qualitative approach to research, Poovey (1995, p. 84) noted that, “there are limits to what the rationalizing knowledge epitomized by statistics can do. No matter how precise, quantification cannot inspire action, especially in a society whose bonds are forged by sympathy, not mere calculation.” Arguments such as the one by Poovey (1995) above, inspired the researcher to use a qualitative approach to delve into the experiences of adolescents living with HIV, something we may not adequately explore if we were to use quantitative approaches, which are limited only to statistical reviews.

### **3.4 Research paradigm and design**

A paradigm is a set of common characteristics about how the research problem should be perceived (De Vos, 2005). The current study was located with the interpretive paradigm using a multi-method approach. The approach interpretive interviews comprising male and female adolescents with the aim to elicit multiple perspectives to illuminate the research issue. In support, a multimethod approach using indepth interviews was most appropriate to this study as it entails the use of in-depth interviews, which is a flexible method to gain views and opinions from the targeted population (adolescents) without the bias of other participants, which is highly possible in focus group discussions. Futhermore, the interpretive parading using indepth interviews research design was adopted for the purpose of laying insights for further studies since this is a pioneer research to explore the experiences of adolescents living with HIV in Zimbabwe’s lowveld region. The interpretive paradigm is viewed by Cohen, et al., (2018, p.175), as “subjectivists, interactionists,

socially constructed ontology and an epistemology that recognises multiple realities, agentic behaviours and the importance of understanding a situation through eyes of participants.” The fact that the researcher was in the field corresponds well with Cohen et al. (2018, p.66) who aver that in interpretative research, there is “personal involvement of the researcher”, which is an ontological assumption. Creswell and Poth (2018, p. 67) pointed out that the researcher is to get as “close to the participants as possible to enable the researcher to better understand what the participants are saying.” Therefore, these arguments influenced the researcher to enter the field and reach study participants through interviewing them face to face. Precisely, subscribing to the interpretivist paradigm dovetails into the study topic as the researcher sought to obtain a deeper understanding of the experiences of adolescents living with HIV.

### **3.6 Data collection method**

To gather rich and thick qualitative data, face-to-face in-depth interviews were used. In-depth interviews were adopted because of their flexibility when practically collecting sensitive information as they provide a platform for non-verbal communication and clarity to both parties (Harding, 2013). Qualitative in-depth semi structured interviews allow an open-ended approach that uses a number of guide questions, but give the interviewee the opportunity to answer the question broadly, focusing on the aspect under discussion while also giving the interviewer the chance to probe context specific issues that arise during the interview. According to Hennink, Hutter, & Bailey (2011), probes are used to encourage participants to provide more detailed and relevant information to a situation under study. The open-ended approach also allowed the researcher to adjust the questions and seek further clarifications according to the responses of the adolescents particularly during the exploration of sensitive topics. For the purposes of collecting quality data, the researchers (principal researcher and two research assistants [male and female]) created rapport through the use of repeated sessions with participants.

In addition, qualitative interviews are one method by which one’s study findings may have richness, which is achieved through sampling to reaching data saturation. Guest, Bunce & Johnson (2006) argue that at the 12<sup>th</sup> interview, the researcher can attain data saturation. However, for Burmeister and Aitken (2012) noted that data saturation is not about numbers per se, but choosing the right sample and depth of data. Therefore, it is necessary to note that data saturation is achieved when further data collection/analysis is no longer feasible or necessary. In this study, data saturation was attained after purposively recruiting a sample of 22 adolescents’ living with HIV

(ALHIV). Furthermore, researchers noted that participants were repeating what has been previously mentioned and more interviews were no longer necessary. Interviews were approximately 60 minutes long, as indicated on the informed consent form and this was of paramount importance in avoiding participants from withdrawing because of waiting too long to be interviewed<sup>1</sup>.

### **3.7 Selection of participants**

Study participants were either male or female adolescents living with HIV, vertically or behaviourally infected. These were purposively selected. Thus, 22 ALHIV between the ages of 13 and 19 were recruited at Chiredzi General Hospital<sup>2</sup>. According to Creswell and Poth (2018), purposive sampling helps us to select participants that are rich in information. Participants were recruited while accessing social support or accessing clinical care services for instance when they were collecting their Antiretroviral (ARV) drugs at Chiredzi General Hospital. Initial access to the participants was negotiated through the hospital superintendent who then introduced the researcher to the participants. Community Adherence Treatment Supporters (CATS) helped in explaining the purpose of the study to other adolescents, thus helping researcher(s) to create rapport with the participants.

Subsequent to the above, the researcher informed the participants about the study and willing participants voluntarily accepted to be interviewed. Willingness to participate was one of the important inclusion criterion adopted in this study. All the participants were given pseudonyms mainly drawn from Zimbabwean Shona names. The use of pseudonyms was in line with the ethical principle of confidentiality. Adolescents below the age of 18, which is the age of legal majority were given parental consent forms to obtain approval from their parents or legal guardians. The purpose of the study was well explained, and the researcher sought consent from participants that were over 18 years. It is important to mention that written parental consent from adolescents below 18 years of age did not replace the need to seek their individual assent thus, adolescents verbally gave their assent or dissent in this study. The informed consent form, which were available in both Shona and English were further explained by the principal investigator (Appendix 1 and 2). This helped to ensure that participants and their legal guardians understood that participation was

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<sup>1</sup> Participants were still allowed to withdraw from the study at any point without giving reasons for doing so

<sup>2</sup> Details relating to demographic and gender will be discussed in detail in chapter 4

voluntary and there was no room for coercion. The informed consent form and parental consent document were clearly explained to ensure that permission to participate in the study was granted willingly, and in full knowledge of the possible consequences.

Participation was voluntary with no direct benefits. However, transport costs that were incurred by participants were reimbursed. Each participant was offered Zimbabwean Real-Time Gross Settlement (RTGS) money that was equivalent to R40 per day as transport costs. In addition, participants were also provided with refreshments every time they participated. This was merely a gesture of appreciation and it did not in any way serve as a form of payment for their participation. Permission to audio record interviews was sought verbally and through informed consent forms. To minimise participants' fear and anxiety about discussing HIV status, the interviews were conducted in a trusted space; counselling rooms at the hospital. Participants were not only recruited because of their convenience but because they met the inclusion criteria

### **Inclusion criteria**

1. Be infected with HIV, whether vertically or behaviorally and disclosed status to parents, researcher(s) and the hospital staff.
2. Should be willing to participate in the study without payment (However, participants' transport money was reimbursed).
3. Participants with signed informed consent and willing to participate.
4. Willing to undergo a mandatory short screening test with the counsellor to determine if one is able to participate in the research without possible potential emotional distress experience.

### **Exclusion criteria**

1. Participants without signed informed consent
2. Participants who were acutely sick during the time of research
3. Participants who were at risk of suffering emotional distress as per counsellor's recommendations

### **3. 8 Research instruments**

This section focuses on research instruments. These are; the researcher(s) and the in-depth interview guide. The interview guide was generated cognisant of relevant literature, the problem statement and study aim.

#### **3. 8.1 Researcher as a key instrument**

Researchers in qualitative research are one of the main instruments for instance they assist to garner deep and thick data findings. This is supported by Kvale (1996)'s assertion that in qualitative research, researchers are key instruments in gathering and analysing data. The principal researcher was at the centre stage when interviews were carried out. Two co-researchers were adequately trained to elicit sensitive information from the participants. The male co-researcher had an Honours degree in Psychology and was a former intern at Chiredzi General Hospital while the female co-researcher had an Honours degree in Sociology. It is important to have someone known and trusted by the targeted sample to reduce suspicion in potential participants. Of the 22 participants that were interviewed, nine (n = 9) participants were females, hence they were interviewed by the female co-researcher while the principal researcher interviewed the remaining 13 with the male co-researcher as his assistant. In addition, the principal researcher requested the counsellor to redirect participants' thinking or emotional trauma that could have arisen from interviews, thus operating in line with the ethical principle of *first do no harm (primum non nocere)* (Neuman, 2014). The purpose was to prevent any harm to participants since the counsellor determined whether participants were ready to be interviewed or not.

#### **3.8.2 Interview guide**

The use of an interview guide allows the researcher to collect relevant data. Precisely, the interview guide allows the researcher to be objective and collect the data they intend to collect (Creswell & Poth, 2018). Through in-depth semi structured interviews, questions were structured around the following broad themes: views and perspectives of HIV and AIDS and the community context in which they were raised; adolescents experiences of stigma, adherence and discrimination; access to treatment, understandings about transmission, and the life experiences of adolescents living with HIV/AIDS in contexts of sexual relationships (Appendix 3).

### **3.9 Piloting the interview guide**

A pilot study is a preliminary small-scale version that researchers conduct in order to help them to determine if critical elements of the study are covered (Polit & Beck, 2004). To obtain the rich and think data required to understand adolescents' experiences of living with HIV, a pilot test of the interview guide was conducted before the main study was done. Adolescents who participated in the pilot study were not part of the 22 participants that participated in this study, but they had similar characteristics. Five (n=5) adolescents participated in this pilot study. The pilot study was done on a different day before the main study and modifications to the interview schedule were done two weeks prior to the interviews.

### **3.10 Data collection procedure**

The study was first granted provisional approval by the University of KwaZulu- Natal (UKZN). The protocol and provisional authority from UKZN, which was then submitted to Chiredzi General Hospital. Chiredzi General Hospital issued gatekeeper permission was provisionally granted, subject to the Medical Research Council of Zimbabwe's (MRCZ) endorsement. MRCZ is a National Ethics Committee (NEC) board in Zimbabwe. The study protocol was then submitted to MRCZ and authority was granted (MRCZ/B1794) (Appendix 5). The research study was then given full approval by the University of KwaZulu-Natal's Biomedical Research Council (BREC), protocol number: BE475/19 (Appendix 4).

Equipped with the ethical clearance letter, the researcher then went to Chiredzi General Hospital for fieldwork. In-depth semi structured interviews were conducted with ALHIV aged 13 to 19. Initially, 25 participants were recruited to participate in this research and two of them left before they were interviewed while one adolescent could not provide parental/guardian consent. Therefore, the final sample comprised 22 participants. All interviews (lasting for 45 minutes to one hour) were conducted from October to December 2019. Of the 22 participants, 11 were single sessions and the remaining 11 were repeated sessions. Repeat interviews were to follow up on the issues that were not well explained in first stage interviews. Participants for this stage were identified from the previous stage interview and invited for repeat interviews. These participants were those who showed knowledge on the topic under study but were shy to explain further what they meant exactly. Repeated interviews proved to be useful in this research since the topic was

sensitive and dealing with vulnerable population. Therefore, this helped to create rapport thus providing a platform for participants to open up.

### **3.11 Data analysis**

An inductive approach was used to define themes. This means that themes are strongly linked to research findings and the theoretical phenomenon that was under study (Patton, 1990). All interviews were audio-recorded in Shona, a relevant local language in Chiredzi district, and translated verbatim to English during transcribing. Efforts were made with all the researchers to improve accuracy as the process of data transcribing was done with all the researchers to enhance accuracy and clarity. Transcripts were later entered into Nvivo (QSR International, Melbourne, Australia) software for coding. The use of computer software was an advantage since its faster and more accurate than manual coding process.

Thematic analysis was further used to analyse data using the six stages method as explained by Braun and Clarke (2006). According to Braun and Clarke (2006, p. 78), thematic analysis serves to, “provide a rich and detailed, yet complex, account of data”. The six-phase processes are familiarisation of the data, coding, searching for themes, reviewing of themes, defining and naming themes and write up.

Familiarisation of data means reading and rereading of transcribed data so that researchers will become familiar with the data. Such immersing with data helped the researchers to get a deeper understanding of the underlying concept under study, which is the experiences of ALHIV. Generation of codes was the next step that was implemented in this research. At this stage, preliminary codes were generated as researchers utilised the data that appear more meaningful. This led to the third stage of searching for themes. Ryan and Bernard (2003) argued that theme identification is one of the most significant processes in qualitative research. The preliminary codes were then interpreted and relevant codes were grouped as main themes and sub themes. The fourth stage is reviewing of the set themes that is checking if the data set were flowing that is if there was coherence of research themes. This stage was done in two phases that is we checked themes in relation to the coded extracts as well as checking the overall data set so that a thematic map can be formulated. The last two stages were defining and naming the original themes and writing up of analysis taking into cognisance, relevant literature and research questions.

### **3.12 Trustworthiness of the data**

In qualitative research, we often use the term trustworthiness, which serves the same purpose as reliability and validity. The later terms are mostly appropriate for use in quantitative research. According to Lincoln and Cuba (1985), there are four important criterion to enhance trustworthiness in a qualitative research. These are; credibility, transferability, dependability and confirmability. However, these concepts are interdependent (Babbie & Mouton, 2004). For instance, we simultaneously need to talk about credibility and transferability as the two cannot be separated or neither can we talk about dependability without talking about confirmability.

#### **3.12.1 Credibility**

Shenton (2004) argues that description of credibility is sufficient to demonstrate the dependability of findings in a research. This assertion supports the relevant strategies employed in this study. In the current research, member checking and use of multiple eyes were used as validation procedures, thereby enhancing the credibility of the study. Member checking is regarded as one of the most effective techniques in ensuring the credibility of the data (Lincoln & Cuba, 1985). The method encompasses taking analysed data, interpretations and conclusions back to the participants so that they can determine the authenticity of the transcribed data. The process does not include taking back of raw data to the participants but shortlisted written themes so that participants will identify missing data. By so doing, the researcher prevented any form of missing data, a practice that is common in qualitative research and thus insuring credibility of this study's data.

In line with the present study, the researcher immersed himself in the data through repetitive reading of the transcribed data. In addition, the researcher also consulted multiple experts. Stake (2010, p. 127), advises “multiple eyes” and this is when experts in certain field are interpreting the data. Several experts were consulted from the Health Economics and HIV and AIDS Research Division (HEARD). They helped to develop the interview guide. Moreover, experts helped the researcher to interpret data together with the co-researchers. It is significant to have more than just one person interpreting data because sometimes the extra experts always provide significant knowledge. Such panel experts' reviews just like member checking are almost similar or serve the purpose of triangulation as Stake (2010) notes that “multiple eyes” is one of the most significant triangulations.

### **3.12.2 Transferability**

Transferability was enhanced through using thick descriptions of data gathered and this form offers a platform, which can be repeated. In addition, the use of purposive sampling and case study design in recruiting the actual participants means that data collected were relevant to the study.

### **3.12.3 Confirmability**

The other criterion which was most significant in this study is confirmability. This was enhanced through piloting research instrument to mitigate the challenges of interview bias. Piloting was also important in determining if the instrument (interview guide) used were feasible. Creswell and Poth (2018) echoed that the researcher is expected to validate the accuracy of the account using one or more procedures of validation. Therefore, piloting was used as one way to validate the research instrument, thus enhancing confirmability. All the procedures discussed helped ensure depth of the data, thereby increasing both coherence and transparency of the data.

### **3.12.4 Dependability**

Dependability is linked to firmness and consistency of the research results over time, through keeping of records by the researchers from the start until the end of the study (Cohen et al., 2018). Therefore, dependability was achieved in this study through prolonged time in the research field, from October to December as more accurate data were collected and the researchers obtained in-depth information that they were seeking. More so the use of a pilot study means consistence of the questions were tested and validated, thus the researchers improved the interview guide.

## **3.13 Ethical considerations**

Ethical clearance was sought from the University of KwaZulu-Natal's Biomedical Research Ethics (BREC) (BE475/19) and the Medical Research Council of Zimbabwe (MRCZ) (MRCZ/B1794) before the commencement of the study. The protocol was also submitted to Chiredzi General Hospital and gatekeeper permission was obtained. According to Brooks, te Riele, and Maguire (2014, p.154), "ethical issues are not a once-and-for-all matter which can be decided before the research commences or when the proposal is put to ethics committee, and then forgotten." Ethics are significant in any research, starting with the context, nature of the research, the type of the data to be completed, especially what is to be done with the data for instance it can embarrass the participants in some way if published in an unacceptable way to them (Oliver, 2003 in Cohen et al., 2018 ). The next section discusses the key ethical principles that guided this study. These are; anonymity, informed consent, confidentiality and voluntary participation. Research involving

children should never harm them and always ensure that their rights, dignity and autonomy are respected through informed consent and assent.

### **3.13.1 Anonymity**

One effective way of promoting participants' right to privacy adopted in this research was through promising anonymity. This concept stipulates that data presented from participants should in no way be traceable back to the participant (Cohen et al., 2018). A participant is considered anonymous when a researcher or another person cannot identify or another person cannot be able to identify the contributor from the data presented. In this study, the principal researcher and his trained research assistants promised anonymity to participants and maintained it. Thus, through the use of pseudonyms and keeping data in a coded laptop accessible to the researcher and study supervisor, anonymity was maintained.

### **3.13.2 Informed consent**

The principle of informed consent concerns autonomy and it rises from the participant's right to freedom and self determination (Cohen et al., 2018). The purpose of informed consent was to ensure that the researchers did not engage in any sort of deception regarding the nature of the study on HIV among adolescents. Parental informed assent and participant consent was well respected and a prerequisite in this study as parents decided for their children to either to participate in this research study or not. Participants were informed of the data collection method to be used. They were informed that verbatim transcripts and written explanations will be available and published.

### **3.13.3 Confidentiality**

In the current research study, sensitive information was being discussed between the researchers and the participants. Thus, HIV status is confidential, and researchers treated that information in this research as confidential. An extension of privacy was maintained where researchers privately kept participants' seropositive status and shared information as confidential information.

### **3.13.4 Voluntary participation**

Voluntary participation is an ethical principle that people should never participate in any research unless they feel to do so (Neuman, 2014). Voluntarism ensures that research participants freely choose to either take part or not in any research and warrants that exposure to risks is undertaken knowingly. Willingness to participate in the current research study was respected as one core recruitment process mandate and it was free from coercion. Participants were notified that they

are free to participate voluntarily and or stop participate during the process without being penalised in any way.

### **3.14 Methodological challenges**

Since the research was one of a sensitive nature, adolescents were open to disclose any information pertaining to other experiences. However, they were not willing to discuss information pertaining to their sexual relationships. The researchers engaged in the field for a longer period and this helped to establish good rapport and further probing with the participants to generate rich qualitative data in this qualitative enquiry.

### **3.15 Conclusion**

In this chapter, the researcher described the research methodology. The chapter described in detail the research methodology concepts adopted in this chapter notably the research design, approach and paradigm. First the chapter argued the reasons why it was ,necessary to carry a qualitaive research in Masvingo particularly in Chiredzi disctrict.In addition the chapter also documented the methods used to select participants and the instruments used crediting the researcher as the main instrument. The chapter lastly echoed the research ethical principles that were respected as well as showing how how rapport was created between participants and researcher(s). The next chapter focuses on presentation of findings

## CHAPTER FOUR: FINDINGS AND ANALYSIS

### 4.1 Introduction

This chapter reports on the findings, discusses and synthesises them within a thematic framework, allowing the researcher to reflect on key issues that are consistent with the aims and objectives of the study. Various software packages such as Google Earth, QGIS (Quantum Geographic Information System) and NVIVO 10 were used to analyse data. The findings of the study titled: **Adolescents living with HIV and AIDS in Chiredzi District, Zimbabwe: Experiences of disclosure, stigma, sexuality and social support to treatment adherence** are analysed and presented.

The demographic data of 22 participants is presented according to age, methods of transmission and categories of participants represented on **table 1 below**. Male participants dominated this qualitative research with a total of 13 (59.1%) males and 9 (40.9%) females. The sample comprised mainly of males because there is evidence that onset of sexual intercourse begins at 13 especially among males (Lindberg ,Maddow-Zimet, & Marcell, 2019). The ages of the respondents range from 13 to 19 years for both females and males. Most of the male participants 7(31.8%) were in the age range of 17 to 19 years. Most female participants 5(22.7%) were in the age range 17 to 19 years. Therefore, fewer participants, both male and female were within the age range of 13 to 15 years with 6(27.3%) males and 4(18.2%) females, respectively.

Most of the participants were either double orphans or single orphans (paternal/maternal). Twelve [12(54.5%)] participants who constituted the majority were maternal orphans while seven [7(31.9%)] participants were double orphans. Only 2(9%) participants were living with both parents while the other 2(9%) participants were paternal orphans.

The demographic data also encompasses methods of transmission for the study respondents. A greater number, 16(72.7%) of participants were vertically infected while 4(18.2%) were behaviourally infected through sexual intercourse. Only 2(9%) participants reported that they did not know how they got infected. They suspected that they got infected through sharing sharp objects.

Characteristics	Frequency	Percentage
<b>Age Range</b>		
<b>Males</b>		
13 -15	7	31.8%
16-19	6	27.3%
<i>Total</i>	<u>13</u>	<u>59.1%</u>
<b>Females</b>		
13-15	4	18.2%
16-19	5	22.7%
<i>Total</i>	<u>9</u>	<u>40.9%</u>
<b>Categories of Participants</b>		
Both parents alive	2	9%
Double orphans	7	31.9%
Maternal orphans	12	54.5%
Paternal orphans	2	9%
<b>Methods of Transmission</b>		
MTCT	16	72.7%
Risky Sexual Behaviours	4	18.2%
Any other ways (Suspected sharing sharp objects, such as razor blades)	2	9%

**Table 1: Age, gender, categories of participants and methods of HIV transmission**

Furthermore, educational level, social economic status and proximity to the hospital were represented as reported by the participants in **table 2 below**. Two 2(9.1%) participants were studying towards professional qualifications while 13(59.1%) adolescents were secondary level learners. More so, a worrisome 4(18.2%) participants who participated in this research, dropped out of school either at primary level or any other level, but did not write Ordinary Level examinations.

Eight (36.4%) adolescents reported that they did not have enough money to buy basic needs while 10(45.5%) reported that they could afford to buy basic needs. Only a total of 4(18.9%) participants admitted that they had the money to buy recommended food (balanced meal) for people living with HIV/AIDS.

In addition, the participants were also asked about their proximity to the hospital and whether or not they afforded transport to the hospital. In response, 9 out of 22 participants (40.9%) reported that they stayed in Chiredzi Town near Chiredzi Hospital. However, 13 out of 22 participants (59.9%) reported that they stayed in rural Chiredzi far from Chiredzi General Hospital, about 15 to 20 kilometres away. Of the 13 who reported residing in rural Chiredzi, 7 (53.8%), reported struggling to raise transport money to go to the hospital for check-ups and social support while the remaining 6 out of 13 participants (46.2%) reported that were not able to pay for their transport money.

### 4.3 The socio-economic status of the participants

**Table 2: Participants’ educational status, socio-economic status and proximity to the hospital**

Characteristics	Frequency	Percentage
<b>Educational level</b>		
Primary school attenders	3	13.6%
Dropouts	4	18.2%
Secondary school attenders	13	59.1%
Tertiary level attenders	2	9.1%
<b>Socio-economic attainment</b>		
Not enough money for basics	8	36.4%
Have money to buy basics	10	45.5%
Money to save and buy a balanced meal	4	18.2%
<b>Proximity to the hospital</b>		
Staying in Chiredzi Town (5 km to the hospital)	9	40.9%
Staying in rural Chiredzi (15 km away and more)	13	59.9%
Afford transport money from rural Chiredzi	6	46.2%
Do not afford transport money from rural Chiredzi	7	53.8%

### 4.4 Experiences of adolescents living with HIV/AIDS

Analysis shows that most common themes that emerged were stigma and discrimination, risky sexual behaviours (sex without a condom), non-adherence to medication, and poor adherence to medication as indicated by higher viral load.

**Table 3 below** shows some of the common themes that emerged and that are discussed in detail in the analysis that follows. Statistics reveal that adolescents were either discriminated or stigmatised. Most males reported that they were either stigmatised or discriminated either at school or at home. A total of 7 out of 13 (53.8%) males aged between 13 and 19 admitted that they had been stigmatised while 6 out of 9 (66.6%) females were also stigmatised.

**Table 3: Common experiences represented in terms of age and gender**

Characteristics	Gender	13 – 15 yrs	16-19 yrs	Total
Stigmatised	Males	3	4	7
	Females	3	3	6
In sexual relationship	Males	4	4	8
	Females	4	5	9
Unprotected Sex	Males	2	2	4
	Females	2	3	5
Disclosed their status to their partners	Males	0	2	2
	Females	1	2	3
Disclosed their status to families only	Males	7	6	13
	Females	4	5	9
Disclosed their status to friends or any other person	Males	2	2	4
	Females	2	3	5
Defaulters with copies above 1000	Males	4	4	8
	Females	2	2	4
999 copies and below	Males	4	3	7
	Females	3	2	5

More data on sexual relationships were also reported. The total number of adolescents in sexual relationships is 17 out of 22 (77.3 %). Only, 5 out of 22 (22.7 %) participants reported that they were in a stable relationship (without sex) while another 9 out of 17 (52.9 %) participants reported engaging in sex without protection, which apparently amplified the rate of HIV infection. Female

participants were more likely to engage in sexual relationships as demonstrated by 5 out of 9 (55.6 %) participants as compared to males with 4 out of 13 (44.4 %) participants. Of the 17 participants that engaged in sexual relationships, only 5 out of 17 (29.4%) reported that they disclosed their status to their partners while 9 out of 17 (53%) participants, both males and females, indicated that they had only disclosed their status to their friends or other people but excluding their romantic partners. This means that a total of 12 out of 17 (70.6%) were in sexual relationships but did not disclose their status to their partners. Adolescents reported disclosing mostly to trusted individuals as teachers and best peer friends. HIV/AIDS-related stigma and discrimination mainly hindered the disclosure of serostatus to friends and/or partners.

Further analysis shows that male adolescents were more likely to skip or quit ARV medication as signified by their high viral load. A total of 12 participants both genders 12/22 (54.5 %) indicated that they had, at some point, defaulted on ARV medication. In addition, eight boys 8/12 (66.7 %) had a high viral load as compared to 4/12 (33.3 %) female participants who also had a comparatively high viral load of more than 1000 copies. Participants cited different reasons for discontinuing their medication; for instance, the adverse effects of drugs, failure to understand the reason for continuously taking tablets especially if they felt healthy, and forgetfulness. Many participants noted that their parents or guardians misinformed them about the purpose of drugs, which made them find it funny to take the drugs when they were not sick. The reason was that most parents delayed serostatus disclosure to their children. Therefore, because parents delayed disclosure to their children, adolescents who discovered their status on their own or whose status accidentally got disclosed reported that they would abandon the tablets if they were not being monitored, hence their viral load soared.

#### **4.5 Reaction to HIV diagnosis**

##### **4.5.1 Fear of HIV outcome**

Regarding the experiences of HIV outcome, the participants mentioned that they were afraid as described by one participant, thus:

*“I felt afraid when I was first told that I was HIV positive”* (Kuda, pseudonym, 15-year-old male).

Adolescents living with HIV/AIDS also reported experiencing shame. Adolescents who reportedly experienced shame also reported isolation, hence they experienced internalised stigma.

Some adolescents reported that they learned about their HIV status with shock, hence they ended up denying being HIV positive. The outcome of the interviews shows that adolescents never easily accepted their status except for those who were attending social support programmes who noted that they learned about their status through social support.

Though many participants reported facing difficulties in accepting their positive status, it was a different scenario for Shovo, who attended social support and explained that:

*“After I was told about my status, I never thought of committing suicide. I learned of my status at the age of nine. At that age, I did not know anything about being HIV positive. I never contemplated committing suicide. Through social support and HIV/AIDS education at school, I accepted my status since I was already on medication”* (Shovo, pseudonym, 14-year-old female).

For the adolescents, early disclosure of serostatus minimised the risk of missing review dates and social support sessions, hence promoting adherence and maximising quality life during the transition from childhood to adulthood. However, some participants reported that even after the disclosure of their status, they still did not understand what HIV/AIDS was. The social support groups to which Shovo belonged played a pivotal role in convincing adolescents to accept their HIV status, which minimised risky sexual behaviours such as unprotected sex apart from negative mental disposition, particularly suicidal thoughts.

#### **4.5.2 Suicidal thoughts and risky sexual behaviour**

Adolescents mentioned that living with HIV/AIDS involves a myriad of challenges including potentially threatening suicidal thoughts. The participants mentioned that they were in a denial mode and reported that at some point, if they had not received counselling, they would have committed suicide when they first learned of their HIV status. They reported experiencing difficulties coping with their status. A participant explained:

*“When I tested HIV positive, I spent sleepless nights, stressed and thinking about what to do. I even thought of committing suicide”* (Chikatyamadzo, pseudonym, 19-year-old female).

Suicidal thoughts were most likely to be reported by participants who were infected with HIV through risky sexual behaviours as explained by Chikatyamadzo:

*“I only had one boyfriend with whom I was having sex. I could hardly control my anger when I tested HIV positive. I thought dying was better than living with HIV/AIDS. We did not use condoms*

*because I was still a virgin. We tried using a condom, but it was painful, and he had to remove it”* (Chikatyamadzo, pseudonym, 19-year-old female).

Chikatyamadzo reported risky behaviour and harbouring suicidal thoughts simultaneously and explained that she only had one boyfriend with whom she engaged in unprotected sex several times. She explained that they tried to use a condom, but because she was still a virgin, they rejected it. She insisted that she never got another boyfriend and learned of her status when she was going for regular medical checkups because she later got pregnant.

Another male participant reported his intention to commit suicide. He stated that:

*“After being told that I was HIV positive, I even thought of committing suicide. However, when I researched on the Internet, I realised that I could still survive on ARV medication”* (Tinomudaishe, pseudonym, 19-year-old male).

Many participants concurred that it was not easy to hear of their HIV status and accept it. Most participants insisted that at some point, they wanted to commit suicide, but the Internet played an influential role in minimising the risk of harbouring suicidal thoughts, hence they longed to live quality life.

#### **4.6 HIV/AIDS-related stigma and discrimination**

Stigma was reported by all the participants in all the age ranges as shown in Table 3 above. Participants reported being stigmatised either at home or at school. Many forms of stigma were reported; for instance, participants noted that they felt different from others; hence, they were vulnerable to self-discrimination.

#### **4.7 Experiencing stigma and discrimination**

##### **4.7.1 Enacted stigma**

Despite the numerous HIV/AIDS campaigns in Zimbabwean schools, adolescents still face discrimination which impacts negatively on their self-esteem and psychological wellbeing. As a result, many participants feel isolated and stressed. Reports from most of the interviewed participants showed that most adolescents were experiencing the actual burden of enacted stigma. One of the participants related the stigma experienced at high school, thus:

*“At school there were some guys who used to see me taking pills. They said that they no longer wanted to play with me. I had to excuse myself”* (Tinomudaishe, pseudonym, 19-year-old male).

The participants' responses apparently indicate that adolescents experienced enacted stigma in addition to numerous other forms of HIV-related stigma and discrimination. For instance, Tinomudaishe reported experiencing enacted stigma which also influenced self-discrimination. In such a scenario, adolescents living with HIV/AIDS are at risk of experiencing stress and depression, hence facing difficulties navigating the adolescence period into adulthood.

Enacted discrimination made individuals living with HIV/AIDS feel ashamed. In addition, the actual experiences of enacted discrimination were also reported by Tinomudaishe who reported that:

*“I used to do Fashion and Fabrics at school. Nobody dared touch or use my sewing machine whenever I left it behind. People still believe that HIV/AIDS is Shuramatongo (deadly and ruinous). It used to stress me a lot and even my academic performance dropped”* (Tinomudaishe, pseudonym, 19-year-old male).

In some parts of Chiredzi District, HIV/AIDS is still being referred to as *Shuramatongo*, meaning a deadly and ruinous calamity or torment. Victims of enacted stigma usually perform dismally at school. In line with this finding, people experiencing enacted stigma experience toxic life events especially for adolescents living with HIV/AIDS who are at risk of being rejected by their peers, caregivers or parents.

#### **4.7.2 Community stigma**

Another form of stigma that adolescents reported is community-based stigma. Nhamoinesu reported that at home, they do not share even soap, food or blankets. He reported that whenever he visited his cousins, the situation worsened because they did not want to share food and clothes with him, let alone eating in the same plate with him. He said:

*“When my family members have bought snacks or cookies, they avoid eating them together with me. They would rather put mine in a separate plate. The same applies to any other type of food. I even use my own soap or blanket. This worries me a lot. I later stopped taking my tablets because they were spreading the news to anyone in the community that I was taking HIV/AIDS tablets”* (Nhamoinesu, pseudonym, 18-year-old male).

Tivanzwe, another male participant, also reported experiencing community-based stigma. He said:

*“I could hear them shouting, ‘Hee! Une AIDS! (He has AIDS!) Wakutomwa mapengard uyo (‘He is now taking tablets meant for mad people’). Others would say that I was drinking ‘majehovah ndouyako’ (Jehovah I’m coming there tablets)”* (Tivanzwe, pseudonym, 18-year-old male).

Tivanzwe’s response shows that people in the communities do not even have adequate and informed knowledge about HIV/AIDS. The HIV/AIDS pandemic is shrouded in myths and misinformation which tend to perpetuate stigma and discrimination in Zimbabwe in general and Chiredzi District in particular.

During these interviews, as a young researcher, the researcher could appreciate how some of these participants were struggling to come to terms with their experiences which required immediate action.

#### **4.7.3 Self-discrimination**

The interviews revealed that girl adolescents were more vulnerable to self-discrimination than their male counterparts and the fear of the potential adverse effects of being discriminated or isolated led to non-disclosure of their status in order to preserve confidentiality. Evidence notes that girls are generally vulnerable to both self discrimination than their male counterparts (Dellar, Dlamini, Karim 2015)

*“After my mother had disclosed my status to me, I never told anyone about it. I now feel different, I would rather play alone. I don’t even have a friend. My peers really want to befriend me, but I don’t feel any sense of belonging to the group”* (Tawananyasha, pseudonym, 15-year-old female).

Although teachers try to minimise HIV/AIDS-related stigma as reported by Tozvireva, this makes very little impact without a proper policy framework that incorporates HIV/AIDS education into the Zimbabwean educational curriculum. Tozvireva reported that he experienced discriminated when he was in Grade Seven and he reported the case to the Deputy Headmaster. He said:

*“They stopped discriminating me when I left Chitsipiwa Primary School in Mkwesine. I am now going to secondary school where I met different people who did not know me. I am now living in Chiredzi town”* (Tozvireva, pseudonym, 14-year-old male).

Although some students were reprimanded for their discriminatory acts, the participant further reported that discrimination stopped for a few days only before it resurfaced. Improper disclosure

of HIV status is still widely reported to be socially dangerous and in Zimbabwe, the breach of such confidentiality means the person is at risk of being discriminated or stigmatised.

#### **4.7.4 Secondary stigma/rejection from parents and caregivers**

Secondary stigma was reported by participants, noting that people discriminated them as they avoided befriending them. This created isolation and stress among the discriminated individuals. More so, some adolescents reported being rejected or stigmatised by their parents or guardians. One of the interviewees said:

*“My mom is dead and my father is a soldier. He is married to another wife and he does not even like me”* (Anotidaishe, pseudonym, 17-year-old female).

When asked why she said her father did not like her, she intimated that he never took care of her even when she was young. He did not buy any necessities she wanted. In her exact words, Anotidaishe said:

*“I told my father to pay for my fees but he never did so. He does not even buy me clothes and other necessities. He doesn’t even buy me food. He neither talks to me nor calls me. I don’t even want to stay with him”* (Anotidaishe, pseudonym, 17-year-old female).

Another male participant, Tapiwa responded, thus:

*“My father was not paying for my school fees. I think he felt that living with HIV/AIDS meant bleak future - ‘chasara kufa’ (‘what’s next is death’). I later told my peer educator who talked to him and from there he started paying for my fees again”* (Tapiwa, pseudonym, 17-year-old male).

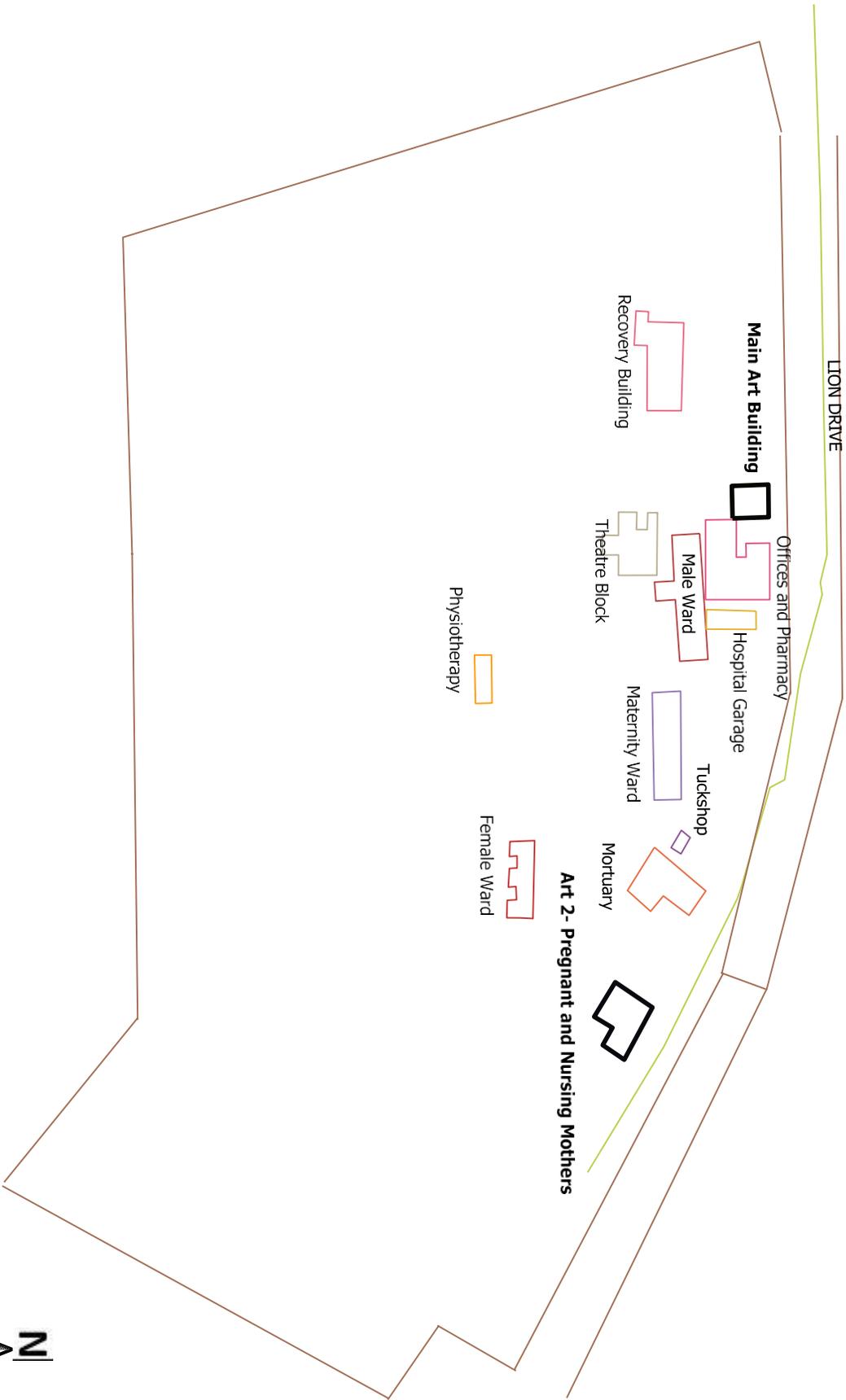
Some of the adolescent interviewees reported being rejected by their parents and caregivers and this negatively affected their psychological wellbeing, leading to a more dangerous, internalised stigma. This situation is often exacerbated by stigma and discrimination taking place in the learning environments and the community at large. This can be attributed to lack of knowledge on HIV/AIDS in Chiredzi District and the nation at large. Providing informed knowledge on HIV/AIDS through robust campaigns strategically empowers communities and people living with HIV/AIDS through the promotion of healthy and quality lifestyles.

## **4.8 Mapping analysis in documenting stigma and discrimination**

### **4.8.1 Poor and unfriendly location of infrastructure for healthcare facilities**

Participants complained of openness of location of health facilities including ART buildings where they collect ARV's which does not keep their confidentiality and amplify stigma and discrimination because of high human movement. Therefore, to present this data effective mechanism in form of Google Earth and Quantum Geographic Information System (QGIS) soft wares were used to draw Chiredzi general hospital map .The purpose of QGIS analysis was to show in map the location of ART buildings in relation to Lion drive, hospital reception as well as the location of entrance. The researcher in turn downloaded and installed Google Earth and Quantum GIS respectively onto his computer. Digitising of Chiredzi Hospital and nearby Highway (Lion Drive) was done using Google Earth that is all the buildings (ART buildings, Offices Theatre buildings and Mortuary just to mention a few) were done and converted into KML polygons (key mark-up language) files compatible with QGIS. Scale factor to calculate the actual distance was represented by calculating the actual distance in Excel sheet to represent the actual distance on the ground and deduced to scale 1cm to 3 000km

The mapping analysis applications, the QGIS and Google Earth enabled the digital presentation of **Figure 3** below, which shows Chiredzi General Hospital, including two flagged ART buildings adjacent to Lion Drive Highway where everyone can see adolescents collecting their ARV medication and attending social support sessions.



**Fig 4:** digital presentation of showing two Art buildings close to highway Lion drive and offices (reception included) where everyone can see adolescents taking their medication and attending social support

Most participants highlighted that they experienced strenuous times when collecting their medication as well as attending social support programmes because of the location of Opportunistic Infections (OI). The participants reported that they felt ashamed and afraid of collecting ARV tablets because everyone coming to the hospital would also pass through the offices that face one of the main ART buildings. The interviewed adolescents argued that stigma and discrimination manifest at the hospital itself. To make matters worse, at Chiredzi General Hospital, people living with HIV/AIDS (PLWHA) are given green files, which are different from those of other patients. That on its own shows discrimination as it makes it easier for them to be identified. Adolescents reported that they could not even attend social support sessions because the venue for such programmes is too open and it is just the same place where they collect their medication. One of the participants explained that:

*“Our OI is so open that everyone can see us taking the pills or attending social support sessions especially anyone passing through the highway or coming to the hospital reception. It was better if these buildings (pointing at ART buildings) were located at the back where we cannot be seen. In other hospitals like poly-clinics, it’s not like this, such facilities are right at the back of other buildings”* (Taona, pseudonym, 18-year-old male).

The majority of the adolescents pointed out that the location of ART facilities epitomised discrimination. Males seemed to be concerned about the location of the ART buildings. When asked the reason why he was worried about the location of the ART building, one male participant said:

*“I can be spotted by people that come from our community. Furthermore, if I see people that I know passing through the road, I would rather wait until they are gone because these ART buildings are too exposed to the highway”* (Kuda, pseudonym, 15-year-old male).

Therefore, the location of HIV/AIDS facilities also negatively impacted on social support which in turn affected adherence to medication.

## **4.9 Coping strategies to minimise stigma and discrimination**

### **4.9.1 Travelling long distances to far health facilities to avoid breach of confidentiality**

Adolescents living with HIV/AIDS, parents or caregivers try to minimise the rate of stigma by seeking clinical support from health facilities situated far away from their communities for fear of breaching the confidentiality of their HIV status. One of the respondents reported that she stays in Zaka, about 90 kilometres away, but she prefers to collect her medication from Chiredzi. She said:

*“I stay in Zaka, but I prefer to collect my pills from this facility because if the people at home know that I am HIV positive, they will isolate me. My parents support me with money to cover transport costs because they want to prevent the community from realising that I am taking antiretroviral medication. In addition, I am not acquainted with the nurses in Zaka”* (Chipo, pseudonym, 13-year-old female).

The problem of travelling long distances coupled with the relationship between the health care workers often led to poor attendance of social support programmes as Chipo noted that she only go to Chiredzi to collect her ARV medication. As a coping mechanism, adolescents living with HIV/AIDS are forced to seek clinical services or social support in faraway health facilities in order to keep their HIV status confidential. Chipo adds:

*“I only come to Chiredzi to collect my medication after three months. I can’t afford to come here for monthly social support sessions because my parents don’t have money to pay for transport”* (Chipo, pseudonym, 13-year-old female).

However, the problem of adolescents travelling long distances to seek medical care and social support meant that they were more likely to miss review dates and social support meetings partly because they may lack the financial resources as Chipo alluded to.

### **4.9.2 Avoidance of breaching HIV confidentiality**

The interviewees revealed that in Zimbabwe, HIV/AIDS is still a well-kept secret. Tamuka supported this view by highlighting that he does not want to collect his pills from Hippo Valley and prefers to walk about eight to ten kilometres from Hippo Valley to Chiredzi for the collection of ARV tablets and medical check-ups. When asked why he preferred to go to Chiredzi General Hospital instead of Hippo Valley Hospital which is adjacent to his community, he replied that:

*“If my girlfriend sees me taking the tablets, she will reject me. Again, I don’t want people at Hippo Valley Hospital and everyone in Hippo Valley to know about my status. Hippo Valley is a small*

*place and if someone in Hippo Valley knows about my status, then the whole of Hippo Valley will automatically know about it and they will think that I have been sleeping around with many girls”* (Tamuka, pseudonym, 16-year-old male).

The above views reveal that the communities lack proper knowledge on HIV/AIDS. In addition, it can be noted that HIV/AIDS is still a well-kept secret among families and individuals because everyone fears being socially isolated especially if their confidentiality is breached. Adolescents living with HIV/AIDS need to keep their HIV status confidential, hence they keep it a secret by travelling long distances for HIV/AIDS-related clinical support.

#### **4.9.3 Taking medication secretly to minimises rejection by potential romantic partners**

The participants indicated that there is always a risk of being rejected by potential romantic partners if the partner knows of their deep secret around HIV/AIDS. Tawanda revealed that:

*“When I have seen a girl I love, I stop taking my medication. I will just make some rounds at the hospital... (Laughs) until she is gone. However, if that girl is also taking the medication, then I can also take mine at that moment”* (Tawanda, pseudonym, 19-year-old male).

However, such a response was different from those made by female adolescents who noted that if the pills were the ones that gave them life, then they had to collect them despite the obvious discrimination they expected to face if their peers saw them taking medication. This was the case with one participant who noted that:

*“If the pills save my life, I should not be ashamed of taking them. I am not afraid of being discriminated”* (Kudzi, pseudonym, 17-year-old female).

Unlike males, female adolescents quickly accepted their HIV status and reported high response rate regarding attendance of social support programmes and showed higher rates of adherence to treatment. Another female participant maintained that:

*“I don’t mind what people say. Even if they talk, I will take my tablets as prescribed”* (Chikatyamadzo, pseudonym, 19-year-old female).

Many female participants reported that despite experiencing intense stigma and discrimination from the society, they still adhere to treatment and social support which are pivotal in promoting the quality of their lives.

#### **4.10 Disclosure**

Disclosure may mean that the adolescent is fully informed about their sickness; or it can be disclosure of serostatus to trusted individuals (friends/teachers) and romantic partners. There are multiple forms of disclosure, ranging from partial disclosure to full disclosure. This research focuses on the experiences of adolescents after their status has been disclosed by their parents/caregivers and an exploration of their views or experiences regarding the disclosure of their status to significant others. During the interviews with adolescents living with HIV/AIDS, various themes emerged. All the participants in this study agreed that they had disclosed their status to their families.

##### **4.10.1 Disclosure to friends and trusted individuals**

Some participants reported that they only chose to disclose their status to members of the extended family. From the current research, 9 out of 22 (40.9%) participants reported that they had disclosed their status to their friends or other trusted individuals such as teachers.

For instance, Anotidaishe reported that she chose to disclose her status to some of her relatives but not to others. Anotidaishe said:

*“I told some of my relatives and not the others. I only disclosed to the ones that I trusted”* (Anotidaishe, pseudonym, 17-year-old female).

Most participants reported that disclosure is not easy. From the interviews, it emerged that the participants were more comfortable with disclosing their status to closest friends and trusted individuals such as class teachers. Common reasons given by the participants who chose to disclose their status to friends were trust and concern. Chipso commented that:

*“I disclosed my status to my friends because I just wanted them to know and I believed it was just a good thing to do. Even when I am not at school, they know where I will be”* (Chipso, pseudonym, 13-year-old female).

Another participant reported trusting only one friend because their friendship dated back to primary school. She had this to say:

*“I have told my best friend only because I trust her. She had been my friend since primary school”* (Makanaka, pseudonym, 17-year-old female).

While most participants reported disclosing their status to friends, some reported disclosing their status to trusted individuals such as teachers. One participant said:

*“After I learned about my status, I disclosed it to my class teacher”* (Tapiwa, pseudonym, 17-year-old male).

When asked to give reasons for disclosing his HIV status to his teacher, Tadiwa replied that:

*“I disclosed to my class teacher because he was so concerned”* (Tapiwa, pseudonym, 17-year-old male).

From the above responses, it emerged that adolescents living with HIV/AIDS only disclosed their status to trusted and concerned people whom they believed would keep their HIV/AIDS status confidential.

#### **4.10.2 Disclosure to romantic partners and risky sexual behaviour**

Participants who often readily disclosed their HIV/AIDS status were adolescent single mothers. A participant had this to say:

*“The first thing I do on realising that a suitor is serious with me is to disclose my status to him and tell him that I am a mother of one”* (Ngoni, pseudonym, 19-year-old female).

Nineteen-year-old Ngoni related how she joined a WhatsApp group called ‘*Single and Searching*’. Some of the rules governing the group were that if a member loved a person, they had to inbox him/her.

*“I disclosed my HIV status to one guy who showed interest in me, but he could hardly believe me. I then sent him the pictures of the bottle of ARV medication and since then, the guy ceased to communicate with me”* (Ngoni, pseudonym, 19-year-old female).

Another participant, Taona, reported that:

*“I have a girlfriend and she knows about my HIV status because I disclosed it to her. We have had sex twice. However, on both occasions we used protection* (Taona, pseudonym, 18-year-old male).

When the interviewer asked Taona to give reasons for preferring protected sex, he responded, thus:

*“I attend social support where I was taught to use protection and to disclose my HIV status. I even disclosed my status to my girlfriend. I started with partial disclosure until I fully disclosed. Fortunately, she accepted me as I am”* (Taona, pseudonym, 18-year-old male).

This was different from Chido’s case who indicated that she had never used protection when engaging in sexual intercourse. She commented:

*“It’s difficult to disclose my status to my boyfriend who stays in South Africa. I also used to have another boyfriend and we were both in form two when I started having sex. I sometimes visit my boyfriend in South Africa. As for disclosing my status, handitotauriwo ini (‘I never talk’). It’s difficult for me. I can’t even ask for protection because he will ask me what I am hiding. I leave it to my boyfriend to decide whether to use condoms or not. I do not attend social support meetings because I will be busy selling drinks in town. I take family planning tablets to prevent unwanted pregnancy”* (Chido, pseudonym, 19-year-old female).

From the responses above, it can be denoted that disclosure is effective as it promotes safer sex. However, non-disclosure of status means an increase in HIV infections caused by unprotected sexual intercourse. Some participants were mainly concerned about preventing pregnancy other than risky sexual behaviours. Social support was perceived as positively promoting healthy lifestyles among most adolescents.

Another male participant reported that he did not have a girlfriend, but they sometimes used protection but at other times, they did not. He said:

*“We sometimes engage in unprotected sex. I can’t buy condoms at Uswaushava Township because everyone knows me and sometimes I don’t have money. At the hospital, they are given free of charge but i’m too shy to take them because they are kept in the nurses’ offices”* (Tawanda, pseudonym, 19-year-old male).

Adolescents intimated that it is not easy for them to disclose their HIV status to their partners. Of the 12 participants that reported being in sexual relationships, only 5 (29.4%) had disclosed their status to their partners. The reason is that they first did partial disclosure until they fully disclosed to their partners whom they spent years dating. Therefore, it can be concluded that disclosure is a difficult experience as reported by the participants. The participants also reported uneven distribution of condoms. They indicated that they needed to access free condoms at strategic

points, and this called for the Ministry of Health and Child Care (MoHCC) to distribute free condoms at designated places in order to protect adolescents' HIV status. Moreover, most of the participants indicated that they were unemployed; hence, they lacked the funds to buy condoms. Safer sex reduces infection rates among adolescents, but the opposite is true about the adolescents in this research.

#### **4.11 Reasons for non-disclosure**

##### **4.11.1 Fear of rejection and isolation**

One of the participants, Tinomudaishe, shared the view that the nature of the HIV pandemic makes the victim vulnerable to discrimination and isolation. The participant noted the dangers associated with disclosing the status even to close friends. When asked why he did not like disclosing his status, Tinomudaishe related:

*“Some people will never keep a secret. They will tell everyone at school and in the community. Some people havana hana (‘cannot keep a secret’). Some of them smoke ‘weed’ (mbanje) and drink. When they are drunk, they will discourage everyone from playing with me because I am HIV positive. It once happened when I was living in Chimanimani that I told my friend about my status. We then quarrelled and he spread the news about my HIV status”* (Tinomudaishe, pseudonym, 18-year-old male).

In that regard, another female participant indicated that:

*“I don’t disclose my status because mashamwari angu anokwanisa kuzondisema (‘my friends will discriminate me’). Therefore, I don’t disclose my status to anyone”* (Tawananyasha, pseudonym, 15-year-old female).

Fear of discrimination and isolation was reported by participants as the main reason for not disclosing their HIV status to their friends.

Moreover, most people living with HIV/AIDS keep their status a secret. One participant said that her HIV status is part of her secrets. Tanatsiwa had this to say:

*“I have not disclosed my status to anyone in our community because it’s part of my secret”* (Tanatsiwa, pseudonym, 18-year-old female).

Therefore, these findings point to the reality that adolescents living with HIV/AIDS are being discriminated and isolated in Chiredzi District and some sections of the Zimbabwean society. The

responses of the participants indicate that HIV/AIDS is still perceived as an infectious and communicable epidemic transferrable through skin contact. The participants refrained from disclosing their status owing to fear of stigma, rejection from the society and isolation as the disease is still unacceptable and associated with shame. As a result, people living with HIV/AIDS always live in secrecy.

#### **4.12.2 Fear of being rejected by romantic partners**

The participants strongly believed that full disclosure to girls was always accompanied by rejection. This factor also presumably led to the prevalence of risky sexual behaviours among this group, which often leads to an escalation of new HIV infections every year. Adolescents mentioned that they could hardly disclose their status to their partners. One participant highlighted how the society still views HIV. He said:

*“If you want to know that HIV still causes rejection by girlfriends, ask me. I have been in more than five relationships, but the moment I disclosed my status, the girlfriends would call it quits with me. I am in a relationship now and I have disclosed my status to her. Fortunately, she accepted me as I am. However, this time around I took about six months doing partial disclosure I was taught at the social support meetings until I fully disclosed my status to her”* (Tawanda, pseudonym, 19-year-old male).

The point emerging from the above sentiments is that people still view HIV/AIDS as an unacceptable and communicable disease associated with imminent death; hence, people living with it ought to be rejected. Another participant reported that her boyfriend accepted her but then his family did not approve of the relationship. She reported, thus:

*“I disclosed my status to my boyfriend and he and his mother accepted me. However, his brother did not approve of the relationship, hence, it broke up”* (Chikatyamadzo, pseudonym, 19-year-old female).

The responses from participants highlighted that disclosure of HIV status has both negative and positive connotations. It facilitates social support that helps in decreasing HIV infection rates because social support emphasises protected sexual intercourse among adolescents living with HIV/AIDS. However, negative implications include rejection by and isolation from romantic partners as well as abandonment by relatives and friends.

Another participant indicated that he cannot disclose his HIV status to friends or his sexual partner. Eighteen-year-old Taona admitted that he is sexually active. He just uses sexual protection without telling her partner. He maintained that he does not disclose his HIV status for fear of being rejected by his girlfriends. He also reported that he was practising sexual protection with several girlfriends.

*“I don’t disclose my status. I just practise sexual protection. If I disclose, I will be rejected”* (Taona, pseudonym, 18-year-old male).

As already highlighted, disclosure has both negative and positive connotations. Negative effects include rejection by romantic partners while the benefits include more chances of seeking clinical health and social support. However, adolescents mentioned that they could only disclose their status if they perceived that the benefits outweighed the negative implications. The results gathered from this research indicated that participants would rather not disclose their HIV status to their partners to avoid rejection and worse, they feared that those close to them would breach their secret.

#### **4.12.3 Fear of disclosure of HIV status**

The disclosure of HIV status needs courage as noted by one participant, who said:

*“To disclose your HIV status, you need to be courageous .You should be ready to tell your boyfriend even before you sleep with him. You will find yourself keeping on postponing disclosure”* (Makanaka, pseudonym, 17-year-old female).

Many participants admitted that it is not an easy task to disclose their status to others especially their romantic partners. Though some participants mentioned that they had disclosed their status, 5 out of 12 (22.7%) participants noted that it was difficult to disclose their status even if they wanted to. One female participant reported that:

*“I can’t disclose my HIV status even to my boyfriend. I am afraid. Sometimes I just find myself keeping quiet even if I want to disclose my status”* (Chido, pseudonym, 19-year-old female).

The responses indicate that disclosure is a difficult experience for adolescents living with HIV/AIDS. Some noted that even if they wanted to disclose their status, they found themselves overwhelmed by fear. Even those respondents who attended social support programmes and learned about partial disclosure also reported the same; hence the disclosure of HIV status is characterised by fear among adolescents in Zimbabwe particularly in Chiredzi District.

#### **4.12.4 Conformity**

Adolescents feared being treated differently from significant others once they are labelled HIV positive. Therefore, to fit in with other peers and friends, they had to identify themselves with those who were HIV negative. This was especially prevalent among male participants. One participant related how disclosure would make him a misfit among other group members. He said:

*“I don’t disclose my status because I want to be like them. Tinenge tichingoti takangofanana (we are just the same)”* (Tamuka, pseudonym, 16-year-old male).

The participant said that *tinenge tichingoti takangofanana* (we are the same), meaning he does not want to be labelled as different from others.

The participant also mentioned that once other peers know that their friend is HIV positive, they ridicule them, treating them differently. So, they find it better to conform to confidentiality, hence the participant noted that he would rather identify himself with HIV negative peers.

The participant reported that:

*“The moment some boys find out that their friend is HIV positive, they laugh at him”* (Tashinga, pseudonym, 16-year-old male).

Male participants maintained that the need to fit in with HIV negative peers influenced non-disclosure especially among same age peers who are also friends. They mentioned that they detested being treated differently once they disclosed their HIV status.

#### **4.13 Adherence to ART**

The advent of ART has reduced deaths and improved the quality of life and extended life expectancy among adolescents living with HIV/AIDS. Simultaneously, adherence to ART has increased the chances of suppressing the virus. However, adherence to ART has always been complicated as the interviewed participants cited different reasons influencing non-adherence; such reasons include forgetfulness, a lack of knowledge on the importance of ARV medication and the strong feeling that they no longer wanted to take the medication.

#### **4.14 Reasons for non-adherence to ART medication**

##### **4.14.1 Feeling heathier**

When asked if he had ever skipped the ARV medication, one participant responded by saying that he felt strong and thought he must stop taking the medication. However, he reported that he got sick. He said:

*“Many people were discriminating me. When people asked me about the pills that I was taking, I told them that they were for AIDS because I was not aware of what exactly HIV/AIDS was. Other boys told me to leave the ARV medication. I was feeling strong, so I stopped taking the tablets. When I came to the hospital, they admitted me because my viral load was above 1000 copies and I was sick. My friends who are also HIV positive visited me and asked me if I was still taking the tablets. I honestly told them that I had stopped. They told the nurses who put me on second line treatment”* (Takura, pseudonym, 16-year-old male).

Therefore, the reasons such as feeling stronger and disapproval of HIV treatment by other adolescents negatively impacted on adherence to medication.

##### **4.14.2 Health care workers’ reluctance to properly explain directions of taking drugs**

Another female participant reported that she was repeatedly taking the same cotrimoxazole tablets, an antibiotic that stops sickness such as nausea and diarrhoea, assuming that she was taking ARV drugs. It may be surmised that health care workers were reluctant to properly explain medication directions to HIV patients which resulted in the medication being taken erroneously. She said:

*“They gave me many tablets. I could not differentiate between ARV drugs and cotrimoxazole because the health care workers did not properly explain them to me. On discovering that I was only taking cotrimoxazole, the bottle of the ARV drug was still half full as I had not been taking them for some time”* (Chido, pseudonym, 19-year-old female).

People living with HIV/AIDS are also most likely to be taking other prescribed medicines for bacterial infections and other side-effects; hence, they take other medications such as cotrimoxazole apart from ARV drugs. Therefore, HIV/AIDS patients need to be cautious when taking various types of medication. Precisely, nurses need to clearly explain the medication directions to prevent errors in taking medication which sometimes leads to death. Chido dropped out of school at Grade 7 level indicated that after her aunt had passed away, she could not find another person that could take care of her studies and it is not surprising that she was taking the

wrong medication because she needed proper explanation on taking the right drugs for her ailments.

#### **4.14.3 Boys' masculinity**

Male participants were on record for exhibiting rebellious attitudes towards HIV medication probably because of the adolescence stage which is characterised by risky behaviours and the quest for independence and self-status. When asked if he knew anything about the importance of ARV drugs, one male participant responded by saying that he knew that the drug improved the quality of life, but was simply too rebellious to adhere to them. He said:

*“My friend and I felt that it’s better to die than take the medicine. Unfortunately, my friend died. I was then counselled and I’m now taking my medication but I was put on second line because my viral load had risen”* (Vunganai, pseudonym, 15-year-old male).

Owing to masculinity, boys either delay taking their medication or deny their status. The masculinity in boys, the feeling of being dominant, and the feeling of being bossy lead to poor adherence to medication.

Another respondent commented that adherence to ARV drugs decrease viral load and patients' life span. He commented, thus:

*“The medication makes us look like the others. The difference is seen when we get tested. However, I defaulted for a year when I was doing forms three and four, but I never got sick. I was coming here every month to get my ARV medication, but I was throwing them into the toilets. I think I was taking one or two after a month. I just felt like I did not want to take them anymore”* (Takunda, pseudonym, 19-year-old male).

Apparently, more still needs to be done to assist this group as it clearly stood out that most of them defaulted on their medication for several reasons.

#### **4.14.4 Deception from parents/caregivers**

Most participants reported that they stopped medication because they were not sick. Most of them reportedly threw away their medication after discovering that their parents or guardians were lying to them about the purpose of the tablets. Precisely, parents hid the actual status of the kids; hence, they adopted the strategy of non-disclosure or delayed the disclosure of HIV status. A participant said:

*“I was just told to drink these tablets. When I asked, they told me that I had chest problems, but my chest was fine. When they asked me to take them, I would just flash them into the toilet and tick the paper I was given at the hospital so that it corresponded with the number of pills taken on a daily basis”* (Tanatsiwa, pseudonym, 18-year-old female).

However, non-disclosure or the delaying of status disclosure always resulted in accidental disclosure and many participants admitted that they sabotaged the taking of the medication once their status was accidentally disclosed. In this study, the adolescents mentioned that nurses accidentally disclosed their HIV status to them assuming that the parents had already done the disclosure. Another participant intimated that:

*“When I came here (hospital), I was told that I was born with HIV. I was very depressed and angry that they kept my status a secret. Though I sometimes received counselling, I just left the ARV drugs until my sister saw that I was not taking them. All these days, it was my mother who was taking the tablets from the hospital on my behalf”* (Tinokunda, pseudonym, 15-year-old male).

Therefore, in line with WHO (2011) guidelines applicable to Zimbabwe as well, children must have their HIV status disclosed at the age of 10 in Zimbabwe. However, parents always delay disclosure, fearing that by disclosing their child’s status, they end up disclosing their own status too; hence, they adopt the delaying or non-disclosure technique.

#### **4.14.5 Travelling and forgetfulness**

The skipping of doses because participants had travelled or visited relatives was also reported as another cause of poor adherence to ARV treatment. One participant noted that he sometimes forgot to take pills with him when he travelled. He said:

*“I forgot to take my pills with me when I went to my aunt’s place because my father, with whom I stay, was not there and the doors were locked. Therefore, I could not take them for weeks”* (Ngoni, pseudonym, 17-year-old female).

Another participant also reported that the pills got finished while he was in the rural areas. He said:

*“In December, we always went for Christmas. My pills got finished, and I did not tell my father. When we came here (hospital), the nurses scolded both of us, reprimanding my father for not monitoring me when I was taking my pills. I was put on another treatment because my viral load was high”* (Tashinga, pseudonym, 16-year-old male).

Clearly, parents ought to closely monitor their children when they are taking medicine.

It was also reported that although the participants took tablets, they sometimes delayed taking them. One male participant indicated that:

*“Sometimes we come back from sporting competitions at around 9 or 10 pm yet I am supposed to take my pills at 5 pm. It’s not that I do not want to take the tablets, but I forget because I will be playing with other guys in Hippo Valley and sometimes I take my tablets at the wrong time”* (Taona, pseudonym, 18-year-old male).

Therefore, some of the reported incidences were delaying the taking of tablets and forgetfulness. Two boys reported that they forgot to take tablets because they would be far away playing with friends.

While the participants highlighted that they forgot to take the drugs, another participant indicated that he often found it very difficult to adhere to medication because he would be asleep at the time he must be taking his tablets. He said:

*“I walk a long distance to and from school. After walking such long distances, I would be so tired that I would just eat and go to bed. By the time I should be taking my pills, I would be fast asleep”* (Shingai, pseudonym, 14-year-old male).

Since adolescents easily forgot their medication, they need more support. Young adolescents aged 16 and below often forget to take their medication because they are too young to be responsible and they need to be monitored by their parents and caregivers.

#### **4.14.6 Adverse effects of ARV treatment**

Another aspect that was reported by most participants was the issue of the adverse effects of the HIV/AIDS pills. The participants indicated that they defaulted on their medication because of the physical effects that ARV drugs had on their bodies. However, numerous participants pointed out that the drugs were often painful at their inception or when changing to another drug. The respondents cited vomiting, feeling sick, sweating and dizziness when they took their ARV drugs. During the interviews, one participant reported that after taking the drugs, he would get somewhat intoxicated and fall asleep instantly even when he wanted to study. This made him quit the medication for he believed that it was a barrier to his studies since he was writing his Ordinary Level examinations. He reported that:

*“I used to take the pills but they made me feel very weak and sleepy. I was writing my Ordinary Level examinations, so I stopped taking them because I wanted to study”* (Tanatsiwa, pseudonym, 18-year-old female).

Another participant intimated that ARV drugs were even more painful than the virus itself and she had to skip doses. She said:

*“At first I experienced many difficulties. I developed pimples because of the medication. I was vomiting and shivering and the problem was even worse than having the virus itself. I had to quit the pills”* (Makanaka, pseudonym, 17-year-old female).

Another participant insinuated that ARV drugs caused unusual physical changes that made him quit the medication. He said:

*“They make me develop breasts. I thought it was normal for boys who are growing up. However, it never ended. I even tried to squeeze them but to no avail. I later stopped taking them. When I came here at the hospital, I was changed to another drug”* (Tawanda, pseudonym, 19-year-old male).

#### **4.14.7 Lack of sufficient food/relative poverty**

The participants also reported facing difficulties obtaining food, transport money and basic commodities. When the family’s income is too insufficient to meet the societal standards including failure to afford food and transport fees, such a family is said to be living in relative poverty. Relative poverty negatively affected adherence to ARV medication among adolescents living with HIV/AIDS; for instance, adolescents needed food which was essential before taking their ARV medication. Other participant reported transport shortages and complained of walking long distances because of shortage of money for transport. One participant explained that he walked 20 kilometres to Chiredzi General Hospital from Three Hectares where he currently stays. He had this to say:

*“I come on foot from Three Hectares, about 18 to 20 kilometres away from here. I sometimes miss my reviews because I will be feeling too weak to walk this long distance”* (Vangani, pseudonym, 13-year-old male).

Commenting on the issue of availability of food, Vangani replied that:

*“We hardly have enough food. We depend on food from donors such as CARE International. Our irrigation scheme is currently not working. If I take my medication without eating in the morning, I feel dizzy. At the hospital we were told to eat first but we sometimes miss breakfast hence I skip my medication”* (Vangani, 13-year-old male participant).

Another participant added that he travelled about 25 to 30 kilometres from Kubatana Makaranga. When asked about what mode of transport he used to get to the clinic, Tinashe replied that:

*“I stay in Makaranga or Kubatana. I come here on foot for my medical check-ups and for collecting my medication because I don’t have money for transport. My father stays in South Africa and he does not always give us money. I only came here for my medication because coming for social support is not possible with this long distance”* (Tinashe, pseudonym, 15-year-old male).

From the above responses, it can be deduced that relative poverty and the risk of being left behind formed the pith of non-adherence to HIV medication because adolescents lacked the financial muscle to travel to hospitals to seek clinical support.

#### **4.14.8 Understanding HIV**

Adherence to ARV therapy is significant for virologic suppression; hence, it reduces mortality rates. Poor adherence creates the risk of higher viral load while non-adherence is associated with high HIV/AIDS-related mortality rates. In this study, participants with Ordinary Level, Advanced Level and Tertiary Level qualifications reported better adherence to treatment than those with lower educational qualifications. Perhaps this is so because this age group has not yet disclosed their status and they do not know the importance of ARV medication.

Two participants commented on the importance of taking ARV medication. One of them said that:

*“I do not even know what HIV/AIDS is. They just say drink these pills because you are HIV positive. If I ask what will happen if I stop them, they say I will die; but once or twice, I had to cheat if they were not monitoring me”* (Chipso, pseudonym, 13-year-old female).

When another female participant in her late adolescence was asked about her perception of the importance of ARV medication and what she understood by the terms HIV/AIDS, she replied that:

*“I take ARV drugs because they reduce my viral load. They make us appear healthy like others”* (Chido, pseudonym, 19-year-old female).

The first respondent noted that she did not really understand what HIV/AIDS was; hence she did not take the medication correctly. Though the 19-year Chido is aware of the importance of taking her medication correctly, young adolescents must be taught about the importance of taking medication as it emerged that not all the participants were aware of the definition and implication of HIV/AIDS as well as taking medication correctly.

#### **4.15 Impact of social support**

The participants were recruited while they were attending a social support session. However, the research was not limited to adolescents attending social support programmes. Some adolescents were recruited while accessing their HIV/AIDS treatment.

The participants reported that social support is helpful for they learn about relationships, taking their medication correctly and that HIV does not define who they are especially regarding peer to peer support.

During the interviews, Tinomudaishe stressed the importance of social support as it teaches them to adhere to medication through drama or plays screened on television. He said:

*“Social support teaches us to take our medication correctly. We sometimes play ‘soldier game’ which emphasises correct taking of medication because if we stop, our antibodies (soldiers) will be weakened by HIV; hence, the name soldier game”* (Tinomudaishe, pseudonym, 19-year-old male).

In this case, one cannot overemphasise the effectiveness of informational social support for it promotes adherence to medication whereby the adolescents receive effective education on HIV/AIDS. Social support engenders a sense of belonging to a social group since adolescents meet as a group and make friends. It also helps in building resilience among this group even in the face of discrimination. The participants who attended social support mentioned that they were resilient despite facing stiff discrimination. One female participant said:

*“Even if people point at me saying that I am HIV positive, I don’t even look at them because social support taught me that people are meant to talk, and I have learnt to mind my own business”* (Chikatyamadzo, pseudonym, 19-year-old female ).

The participants also mentioned several benefits derived from social support. During the interviews, participants reported that meeting as a group helped them to develop resilience in the

face of a hostile social world characterised by stigma and discrimination and it helped them to take their medication correctly. One male participant responded, thus:

*“Sometimes I forget how certain pills are taken, but at the social support meetings, we meet peer educators who remind us because they work with nurses and they know almost all the pills that we take”* (Kuda, pseudonym, 15-year-old male).

In this instance, informational social support is pivotal to adherence to antiretroviral treatment as adolescents are equipped with information that effectively mitigates HIV/AIDS-related stigma and discrimination, simultaneously improving retention of and adherence to ARV medication. Adolescents appreciated the effectiveness of informational support as reported by Chikatyamadzo and many other participants.

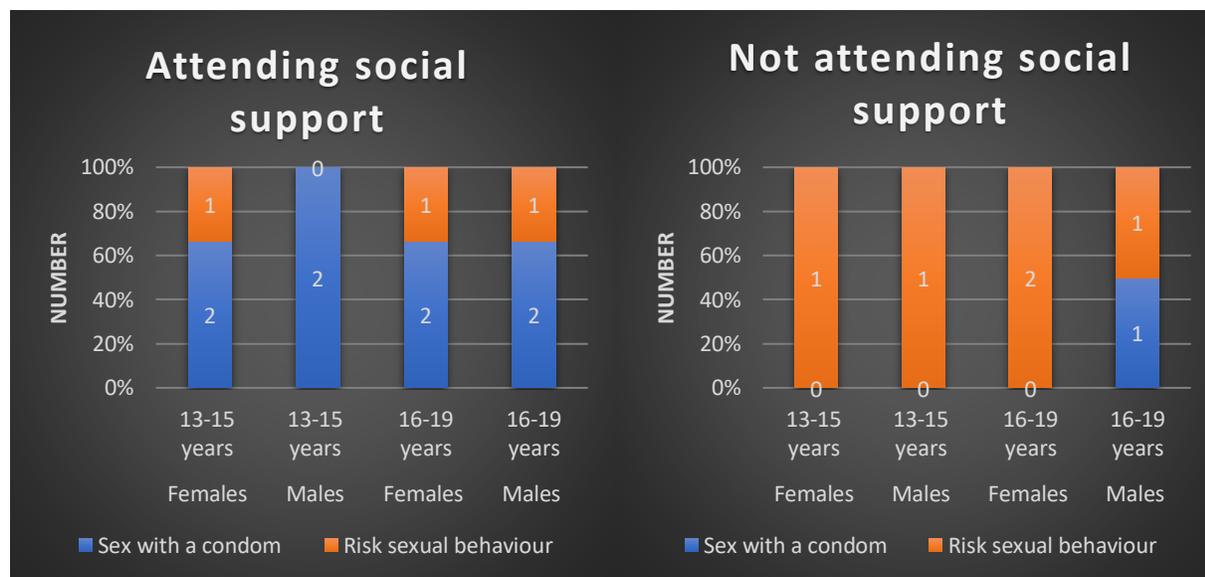
**Table 4: Comparisons of participants attending social support and those who are not in relation to defaulting on medication and adherence to medication**

Characteristics	Gender	Young adolescents (13-15yrs)	Older adolescents (16-19yrs)	Adherence Rate	Reported Defaulting
Attending social support	Males	3	4	6 (85.7%)	1 (14.3%)
	Females	3	3	5 (83.3%)	1 (16.7%)
Not attending Social support	Males	2	4	2 (33.3%)	4 (66.7%)
	Females	2	1	1 (33.3%)	2 (66.7%)

The **table 4** above shows adolescents who attend social support and those who do not. The results show that the participants attending social support have low default rate and the reverse is true about those who do not. Seven male participants reported that they attended social support. From the group that attended social support, 6 reported excellent percentage of adherence to and retention of medication with 85.7%, while only one participant reported that despite attending social support, he has defaulted medication, representing 16.7% of the people who reported defaulting their medication although they were attending social group. The participant argued that he still did not understand what it means to be HIV positive despite attending social support; hence, he defaulted on ARV medication because it was not important to him.

Six (6) out of 9 female participants who attended social support reported high incidence of adherence to ARV medication with a rate of 83.3%. There was a worrisome trend reported by adolescents who did not attend social support as they reported a high percentage of defaulting on ARV treatment. Of the 6 participants who reported not attending social support, only 2(33.3%) participants reported proper adherence to ARV therapy while a large proportion of 4(66.7%) reported that at some point, they had to quit their medication. Statistics also reveal that 2(66.7%) female adolescents had also defaulted on their medication.

**Comparison of adolescents attending social support in relation to sex using a condom and risky sexual behaviours**



**Fig 5a-b: Outcomes of adolescents in sexual relationships attending social support in comparison to adolescents who are not attending social support**

Figure 4a-b above compares adolescents (males and females) attending social support and those who do not in respect of their age. The results reveal that those who do not attend social support risk engaging in more risky sexual behaviours and defaulting on ARV medication than those who attend social support. From the results above, 2(100%) male adolescent participants (13 – 15 years) attending social support reported having sex using condoms as advised during their social support meetings. A total of 2(66.7%) female participants attending social support reported sex using condoms while only 1(33.3%) reported engaging in risky sexual behaviours. As shown a greater percentage of adolescents engaging in safer sex among adolescents that attend social support prevailed, the opposite was true for the same age group (13-15 years) that was not attending social

support as nobody reported engaging in sex using condoms for both male and female participants aged 13 – 15 years, resulting in both genders reporting a 100% incidence of risky sexual behaviours.

Of the three adolescents (16-19 years) that attended social support 2(66.7%) males/females reported engaging in sex using condoms while only one reported risky sexual behaviour, representing 33.3% and the same was also reported by females of the same age. Both of the female either young or old adolescents from (13-19 years) adolescents who were not attending social support reported engaging in risky sexual behaviours with 2(100%) for older females (16 – 19 years) and 1(100%) young adolescents. However, older male adolescents (16 – 19 years) reported 50% risky sexual behaviour and 50% use of condoms during sex among those who were not attending social support while 100% risky sexual behaviour have been reported with young male adolescents (13 – 15 years).

Social support, especially family support, was also noted to be effective for psychological or emotional adjustment among adolescence. One female respondent indicated that:

*“At home my mother comforted me, encouraging me to accept it”* (Chikatyamadzo, pseudonym, 19-year-old female).

Adolescents further maintained that the social support they received from relatives or family members was effective as it constantly reminded them to adhere to medication. One male participant intimated that his brother provided him with transport and financial resources for him to access medication from the nearest health facility. He said:

*“My brother supports me, encouraging me to always take my pills. He even accompanies me to the hospital and often collects tablets for me. When he is not around, he even supports me financially with transport money”* (Tonmudaishe, pseudonym, 19-year-old male).

Undoubtedly, such support is pivotal so far as it reduces mental disorders such as mood disorders because one receives specific support needed at a particular time. Social support is therefore important, especially if offered in a proper way; for instance, if it encompasses all the various ways of social support that have been noted to be effective in this research. As a result, risky sexual behaviours and defaulting on ARV medication will be minimised. Precisely, the risk of new HIV cases will be averted, ushering in a healthy nation with HIV/AIDS-free adolescents.

#### **4.16 Conclusion**

This chapter presented a detailed analysis of the experiences of adolescents living with HIV/AIDS in the family, the school and the community at large. It presented the perceptions of the participants regarding the effectiveness of the social support initiative. As adolescents narrated their experiences, the main themes that emerged encompassed risky sexual behaviours resulting from difficulties that impede the disclosure of HIV status to romantic partners and prospective sexual partners. It was also noted that adolescents who attended social support were more inclined towards adhering to medication as well as practising safer sex than those who did not.

## **CHAPTER FIVE: DISCUSSION**

### **5.1 Introduction**

An estimated 2.1 million adolescents aged between 10 and 19 are living with HIV/AIDS globally (Slowgrove et al., 2018). As these adolescents are perinatally or vertically infected, their transitioning from childhood to adulthood is often impeded by social exclusion which manifests through stigma and discrimination being perpetrated by the community and their biological parents; thus, they are destined to experience a rough transition into adulthood. Resultantly, many adolescents living with HIV/AIDS resort to risky coping strategies such as non-disclosure of their HIV status to romantic partners, unprotected sex and defaulting on medication which often resulted in new infections and premature deaths. A more nuanced analysis revealed that adolescents in relative poverty are at risk of missing review dates and social support due to lack of financial resources to cover transport costs, which also negatively impacts on their adherence to medication. In addition, adolescents living in relative poverty risk experiencing poor adherence due to the burden of unpleasant pills taken on an empty stomach because of lack of food. There is need for adopting a bio-psychosocial approach to cater for the physical and psychological challenges these adolescents face. The current research demonstrates the effectiveness of social support in advancing the psychological needs of adolescents through informational counselling; however, provision of financial resources also proved to be essential in curbing transport woes and food shortages.

### **5.2 The challenge of stigma and discrimination during transitioning<sup>3</sup>**

As adolescents are transitioning into adulthood, their quest for freedom, individualism, concrete reasoning capacity and the need to fit in with others increase the chances of new HIV infections (Bekker, Johnson, Wallace & Hosek, 2015). Adolescents living with HIV/AIDS face the challenge of living with chronic illness as well as the dilemma of whether or not to disclose their status especially to romantic partners because they fear being stigmatised and rejected, which further complicate the search for healthcare services (Feyissa et al., 2019). The pressing issue reported by adolescents in this research bordered on stigma and fear of being rejected by romantic partners once their status became public knowledge. Moreover, adolescents reported experimenting with

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<sup>3</sup>Is referred to in this research as experiences of ALHIV as narrated by themselves from childhood to adulthood

unprotected sex, resulting in new HIV infections (UNAIDS, 2018a). Studies conducted in Sub-Saharan Africa (SSA) concluded that peer counselling is effective in offering emotional support, promoting safer sex, enhancing school attendance and fostering adherence to clinical support suitable to adolescents living with HIV/AIDS (Willis et al., 2019; Toth et al., 2018). Likewise, studies have also concluded that counselling from health care workers is effective in minimising suicidal thoughts, feeling of shame and worthlessness among adolescents living with HIV/AIDS (Toska et al., 2015). The Youth Development Theory, however, advises that to curb the challenges facing adolescents living with HIV/AIDS, it is imperative to include adolescents and the community in which they live when formulating policies (Govender et al., 2018).

The current research highlights that some parents or caregivers discriminate or reject adolescents merely because of their infection. Resultantly, the lack of parental support means these adolescents are likely to drop out of school, engage in risky sexual behaviours such as unprotected sex and defaulting on HIV medication (Agnew-Brune, et al., 2019). This also explains why many adolescents living with HIV/AIDS are dropping out of school as their parents do not want to pay for their school tuition anymore (Kimera, et al., 2019). The literature reveals that HIV/AIDS accounts for school dropouts as statistics from Zimbabwe's National Aids Council (NAC) (2008) revealed that about 50% of school dropouts were HIV/AIDS-related causes. Social support can be adopted as the best intervention to alleviate HIV/AIDS-related stigma at household and community levels (Kalichman et al., 2014). Parents and caregivers must be taught about HIV/AIDS for HIV/AIDS-related stigma to be eradicated. Also, informational social support strategy can be an essential tool for effectively combating discrimination and stigma among adolescents living with HIV/AIDS (Agnew-Brune, et al., 2019).

Stigma and discriminatory attitudes that dehumanised adolescents living with HIV/AIDS were commonly cited as negatively affecting adherence to medication. Similar results have been documented in previous researches in SSA (Ashaba et al., 2018; Willis et al., 2019; Petersen et al., 2010). Enacted stigma was also reported as adolescents reported being discriminated by parents at home and by their peers and at school. As a way of counteracting enacted stigma, adolescents isolated themselves and engaged in more dangerous internalised stigma which affected them psychologically upon witnessing other HIV positive adolescents being discriminated (Takada et al., 2014). In Cambodia, 32% of the adolescents living with HIV/AIDS reported that at some point,

they had been discriminated because of their status (Toth et al., 2018). Stigma and discrimination were the major factors hindering adherence to medication among adolescents living with HIV/AIDS, hence they affected the quality of their lives. A study conducted in Uganda also concluded that stigma was the main hindrance to adolescents' adherence to medication and quality of life among school-going teenagers living with HIV/AIDS (Kimera, et al., 2019). Communities hold misconceptions about HIV/AIDS. The findings from a study conducted in Zimbabwe highlighted that HIV/AIDS is perceived as unacceptable and associated with prostitution (Kiddia, 2014). Evidence supports the view that offering all forms of social support, especially informational social support, is important in minimising stigma and discrimination in communities as reported by adolescents in this research (Willis et al., 2019; Armstrong, 2018).

Furthermore, a Zimbabwean Non-Governmental Organisation called Zvandiri, sponsored by AFRICAID, offers differentiated services to adolescents living with HIV/AIDS. The Community Adolescents Treatment Supporters [(CATS) (18-24 years)] comprises adolescent peer educators who work closely with health facilities (hospitals), social workers and the MoHCC in Zimbabwe to increase linkages and adherence to and retention of ARV treatment among adolescents living with HIV/AIDS. Evidently, this programme is effective as data from Zimbabwe's 161 sites revealed that 976 adolescents living with HIV (ALHIV) were recruited by CATS, 947 of 976 (94%) were initiated on ART and 909 retained after 6 months (Willis et al., 2019). Therefore, CATS offers support services linking adolescents living with HIV/AIDS to forms of resilience and facilitates the dissemination of education on HIV/AIDS in the families of people living with HIV/AIDS. The existence of strong positive networks in the community proved to be effective through offering linkage services and improved retention of care offered by health facilities. The current research has revealed that some adolescents reported that their parents only stopped discriminating them after receiving the necessary education on HIV/AIDS from CATS, which points to the effectiveness of informational social support. Furthermore, this research has demonstrated that adolescents who do not attend social support are more at risk of exhibiting poor adherence and non-adherence to medication than the ones that attend social support (see Table 4). To attain zero discrimination and zero stigmatisation, adolescents must be at the forefront of innovation, policy formulation, and empowerment so that they are influential in theory and practice in terms of advancing national targets in the eradication of the challenges they experience.

### **5.3 The danger of non-disclosure of HIV status**

Parents or guardians amplify the rate of HIV transmission by delaying disclosure of HIV seropositive status to their children. Evidence of adolescents' poor adherence and non-adherence to ARV treatment has been attributed to late disclosures as exposed by this research. Arguably, this is one of the reasons HIV prevalence rates are decreasing at a slower pace than expected and this explains why virological failures among this group are high (Hodes et al., 2018). In line with Sustainable Development Goal Number 3, which aims at promoting health among all ages, adolescents, parents and health care workers must be educated on dangers and negative ramifications of late disclosures or non-disclosure of HIV status to adolescents living with HIV/AIDS who are also their children. Studies from Sub-Saharan Africa, South America and the United States found that disclosure to children in line with WHO guidelines is an effective way of managing HIV/AIDS; for instance, it promotes adherence as adolescents will not hide anymore when taking medication (Vreeman et al., 2013). Disclosure improves general mental health as it effectively reduces secrecy, improves condom use negotiation and forestalls potential isolation (Hayfron-Benjamin et al., 2018). If parents, health care workers and adolescents are not educated, global targets of attaining an AIDS-free generation by 2030 may not be feasible. WHO recommends that adolescents should be empowered with knowledge so that they know the right time for partial and full disclosure and this significantly reduces new infections. Hence, this signifies the possibility of meeting global targets of 75% AIDS-free generation by 2030 (UNAIDS, 2017).

Delayed and accidental disclosures or lying about sickness to adolescents were reported by most adolescents in the current research and this negatively hindered adherence to medication. Participants reported skipping medication, defaulting on HIV medication, suicidal ideation and denial of their status after discovering that they were HIV positive. According to Kajubi et al. (2014), accidental disclosures lead to sadness, suicidal thinking, and an increase in risky sexual behaviours. Many adolescents who reported non-adherence to medication in this research had their HIV status accidentally disclosed or they discovered on their own that they were HIV positive. Frustrations upon discovering their status resulted in poor or non-adherence, an aspect which was reported mostly by male adolescents in this study.

Adolescents who reported risky behaviours mentioned that they were not comfortable with disclosing their status to their romantic partners; as a result, they ended up engaging in risky sexual

indulgence which contributed to new HIV infections. In 2018, 510 000 new infections among adolescents aged between 10 and 24 were recorded globally (UNICEF, 2019). The most significant falls in percentages in the Eastern and Southern Africa were 14 % for boys and 19 % for females aged between 15 and 19 (UNAIDS, 2018b). Similarly, adolescents, especially those not attending social support, reported engaging in riskier sexual behaviours than their counterparts (see Figure 4a-b) and such evidence indicates that statistics will keep rising if proper measures are not implemented.

Due to extensive stigma and discrimination experienced by adolescents living with HIV/AIDS, who got infected either behaviourally or vertically, these adolescents developed strategies of coping with stigma and discrimination. Male adolescents are more unlikely to disclose their status than their female counterparts. Even though males have their masculine behaviours and tendencies which influence non-disclosure of their status, both genders in the current research mentioned a cycle they went through. The cycle starts when adolescents hide their status from their partners. As sanctioned by the patriarchal society in Zimbabwe, some female participants in this research mentioned that they could not tell their partners to use condoms during sex. As such, the men decide when and how to have sex. Risky unprotected sex had been reported by both male and female participants. The participants reported facing difficulties disclosing their status. This meant non-disclosure of HIV status to romantic partners, which heightened the risk of engaging in unprotected sex. Apparently, while there has been a decrease in new HIV infections among all other populations, there has been a marked rise among adolescents, accounting for 37% of the new infections (UNICEF, 2018a).

#### **5.4 Location of health facilities determining adherence and social support**

Another dreadful issue reported by adolescents in this research concerns the location of facilities where they receive clinical therapy and social support. These were reportedly so open that they increased the chances of confidentiality being breached (Gross et al., 2015). Adolescents complained that the days when they collected their medication were the same with those of other people living with HIV/AIDS. They recommended that they wanted their own specific day to collect their medication without other people seeing them. Although Saturdays had been set as the days for the collection of ARV drugs, this resulted in long queues such that some HIV patients (including school-going adolescents) would be asked to return on Sunday or Monday, hence adolescents missed school. This scenario promotes poor or non-adherence to medication as the

findings from this research dovetail with previous findings reported by adolescents in Lesotho (WHO, 2017). According to the Youth Development Theory, the priority is on empowering and developing adolescents. Adolescents must be offered the platform to participate in the formation and implementation of their own laws governing healthcare and clinical services which, to a large extent, impact on adolescents' self-perception and self-esteem (Mavhu et al., 2017). In addition, there must be involvement of adolescents as leaders, a component practised in Zimbabwe's CATS programme, which is a peer support group (Willis et al, 2019), and in this way, adolescents living with HIV/AIDS feel valued as they make their own policies which positively influence their contribution to community development by directly influencing the social and psychological upliftment of adolescents.

### **5.5 Offering influential education on HIV [(Comprehensive Sexuality Education (CSE)]**

Arguably, programmes that solely aim at promoting abstinence have been found to be ineffective in delaying sexual debut, risky sexual behaviours, unintended pregnancies and reducing multiple sexual partners (UNESCO, 2018). For instance, adolescent girls (15-19 years) living in Sub-Saharan Africa represented the highest rates of unintended teen pregnancy globally (UNFPA, 2013). These findings are further supported by the current research which found that female adolescents reported risky sexual behaviours and inability to negotiate condom use. Although female participants in this research reported risky sexual behaviours more than their male counterparts, this trend may be attributed to the patriarchal nature of the Zimbabwean society other than to transactional sex reported in most studies conducted in Sub-Saharan Africa (Ranganathan et al., 2017). Evidence indicates that combining Comprehensive Sexuality Education (CSE) and the creation of adolescent friendly social group corner has been effective in equipping children and adolescents with relevant knowledge, skills and attitudes needed in promoting healthy behaviours such as reduced unintended pregnancies, condom use and delaying sexual debut (Fonner et al., 2014). Studies have concluded that sexuality education and social support strongly correlate with delayed sexual debut and reduced sexually transmitted infections in Nigeria and Zimbabwe (Amaugo et al., 2014). Further, studies in Sub-Saharan Africa also highlighted the strong link between sexuality education and improved HIV-related knowledge (Ross et al., 2007).

### **5.6 Experiences of living with HIV: Need for special attention among adolescents**

Armstrong (2018) highlighted the need for concerted effort among adolescents to curb new infections. Statistically, there is a high number of adolescents living with HIV/AIDS (16- 19 years)

as compared to other groups (UNAIDS, 2016). Therefore, priority must be given to this group if a healthy nation has to be created. However, the group is difficult to manage, considering that it is undergoing transition where risk taking is primarily associated with stigma and discrimination (Neuman, Obermeyer, & Match Study Group, 2013). Notably, the group represents higher drug failures, risky sexual behaviours, and poor or non-adherence to medication (Hodes et al., 2018); hence, there is need for robust strategies that minimise the current negative trends that involve adolescents living with HIV/AIDS. Basing on the reports from adolescents themselves, the group alluded to lack of financial resources to cater for transport and the lack of income generating projects means high chances of engaging in risky sexual activities. Adolescents who reported instrumental social support in the form of cash for transport reported less risky transactional behaviours among females and unprotected sex among males; thus, reducing new infections (Cluver et al., 2016a).

Arguably, masculinity among men amplifies the mortality rates and treatment failures, a common factor reported among this group. Adolescents are seemingly rebellious because they are undergoing transition to adulthood which makes them believe in themselves. At this stage, the provision of optimum mental care is significant to avert the transitional complexities and ensure that the transition process is successful.

Indeed, health practitioners should develop and implement interventions at society and community levels. Notably, adolescents are inextricably linked to the social ecosystem that encompasses the family and the school in the community (Mburu et al., 2014). Adolescents living with HIV/AIDS are also likely to be orphaned and live in hostile family environments characterised by discrimination (Ramaiya et al., 2016; Telisinghe et al., 2016). The current research demonstrates that stigma and discrimination can influence defaulting on ARV treatment, risky sexual behaviours and poor adherence to medication among adolescents living with HIV/AIDS. Therefore, it is imperative that health practitioners should adopt a holistic approach, that is, the biomedical approach to mitigate the unpleasant HIV/AIDS-related experiences. Thus, HIV/AIDS education must be offered at schools and in communities to create protective environment for adolescents living with HIV/AIDS.

### **5.7 Social support as a safe corner for adolescents**

This study has demonstrated that adolescents who do not attend social support are at risk of engaging in risky behaviours compared to their counterparts. Therefore, social support is an effective health promotion component which offers HIV/AIDS education to caregivers, the community and peers especially at school where many adolescents had reported being isolated and discriminated. Adolescents and children need social support to psychologically and socially adjust to living with HIV/AIDS. Studies done in SSA concluded that social support is effective in adolescents' acceptance of their status, enhancing adherence to treatment, dispelling suicidal ideation and reducing risky sexual behaviours (Mavhu et al., 2017). In order for social support to be effective, it is recommended that multiple social support packages should be adopted. Emotional social support has been found to effectively buffer stress-related problems while informational social support played an influential role in supporting adolescents with the right knowledge. As such, the current research demonstrates that offering an optimum combination of appraisal, informational and instrumental social support to adolescents living with HIV/AIDS can be an effective therapeutic intervention linked to safe practices such as disclosure of status to romantic partners, adherence to medication and increased self-confidence. In this research, adolescents reported that social groups are their safe stress-free corners where they learn about adherence to medication, safe sexual practices and testimonies from others on how to improve the quality of their lives.

### **5.8 Financial cash flows**

Financial cash flows greatly build the resilience of adolescents by providing financial muscle which enables them to travel to hospitals for regular medical check-ups and social support (WHO, 2015b). The current research found that adherence to ART was barred by financial constraints directly linked to relative poverty. Unavailability of food was associated with poor adherence and non-adherence to ART because of the pain experienced if the pills were taken on an empty stomach, while transport issues also negatively impacted on social support visits and adherence to treatment. The literature in the Eastern and Southern African region has demonstrated that unavailability of food is a key structural barrier to adherence to ART (Toska et al., 2016). This may be worsened by natural disasters such as drought or rainstorm cyclones; a case in point is Cyclone Idai which ravaged Zimbabwe and Mozambique. People living with HIV/AIDS found themselves stranded as they could not afford transport to health facilities as the cyclone almost

totally demolished local health facilities and crops. Therefore, food shortages, crowded living environments and financial constraints rendered it difficult for HIV/AIDS patients to adhere to treatment. However, offering financial support is tantamount to offering the actual social protection the adolescents need (UNAIDS, 2016).

Furthermore, provision of cash also augments social protection as it curbs the risk of malnutrition, creating the opportunity to start income generating projects and fostering the attainment of professional qualifications (Toska et al., 2016). Evidence shows that such social protection effectively reduces certain practices such as defaulting on medication, early and unintended pregnancy, transactional sex, early sexual debut and marriage, dropping out of school and unprotected sex (UNICEF-ESARO, 2015). A research in Malawi concluded that cash flows among adolescents reduced the risk of school dropouts by 35%. Further, research findings also concluded that offering financial support greatly lessened the rate of early marriages by 40% and the risk of unwanted pregnancies by at least 64% (Remme et al., 2014). Thus, implementing the discussed strategies hopefully reduces HIV among this key population group.

## **CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

This qualitative research concludes that many adolescents defaulted on their medication due to stigma and discrimination coupled with accidental and late HIV status disclosures. It is recommended in Zimbabwean and WHO guidelines that adolescents at the age of 10 and above must have their HIV status disclosed (WHO, 2012). Adolescents reported difficulties in disclosing their status to their peers especially to potential and romantic partners and this mostly resulted in risky sexual behaviours compounded by lack of proper knowledge on sexuality and HIV/AIDS. Adolescents reportedly disclosed their status to trusted individuals such as teachers and closest friends. The findings show that adolescents who attended social support were more likely to disclose their HIV status to romantic partners and to practise protected sex than their counterparts.

Stigma and discrimination were reportedly occurring in communities, the school and adolescents living with HIV/AIDS tended to isolate themselves from others. The coping strategies adopted in combating the challenges of stigma and discrimination included lying about the purpose of tablets or visits to the clinic, non-disclosure of status to potential and romantic partners, taking medication secretly, travelling long distances to access healthcare support to faraway health facilities to avoid breaching their confidentiality, which resulted in poor or non-adherence to medication. Additionally, poor adherence to medication significantly correlated with relative poverty as adolescents reported lack of money to travel to hospitals to seek clinical services and social support visits. Though social support is playing its part, it needs to be supported by more effective models to minimise stigma and discrimination and to stop new infections. Counselling, sexuality and HIV/AIDS education were all reported to minimise hopelessness and suicidal thoughts, at the same time promoting condom use and adherence to medication. The research concludes that a lot still needs to be done as adolescents are still being stigmatised and discriminated. Again, adolescents are indulging in risky behaviours as statistics on new infections and treatment failures are worrying among this population.

## **6.2 Strengths and limitations**

The strength of the current research lies in its geographical location and its contribution is unique. It is one of the first studies to document the experiences of adolescents living in Chiredzi District situated in Masvingo Province, Zimbabwe. It is also one of the few studies in Sub-Saharan Africa to evaluate the effectiveness of social support on stigma, disclosure and adherence to medication (Mburu, 2014).

There is need for a quantitative study that identifies the relationship between stigma and adherence to medication as well as examining the extent to which social support effectively benefits adolescents living with HIV/AIDS.

Due to the small sample, the findings of the current research cannot be generalised to other places in the country. However, the study's case study nature lays a foundation that warrants further studies.

## **6.3 Recommendations**

### **6.3.1 Results-Based Funding and improved cash flows**

The Government of Zimbabwe (GoZ) must prioritise grants and cash flows meant for adolescents. For instance, in 2011, the Government of Zimbabwe (GoZ) introduced the Results-Based Funding (RBF) model from the Health Results Innovation Trust Funds administered by the World Bank. The grant prioritised an output-based and performance-based approach in financing the health sector with special focus on Maternal and Child health as the main indicators. Resultantly, there was an increase in institutional deliveries (childbirth) from 77% to 85 %, according to Zimbabwe's MICS survey results of 2019 (ZIMSTAT and UNICEF 2019).

Therefore, GoZ should re-introduce the RBF initiative among health facilities and redirect it towards the reduction of new HIV infections and retention of care and adherence to medication as the main indicators. The strategy has proved to be effective in reducing home deliveries by promoting institutional deliveries and un-doubtedly, the model can be effectively adapted to matters related to HIV/AIDS.

### **6.3.2 Comprehensive Sexuality and HIV/AIDS education**

The challenge is that large numbers of adolescents grow into adulthood without basic knowledge on HIV/AIDS and sexuality needed during their transition which is marked by the onset of puberty. Research evidence has demonstrated the effectiveness of sexuality and HIV/AIDS education in promoting the quality of life among adolescents living with HIV/AIDS (UNESCO, 2016). There is need for the endorsement of CSE to effectively impart the right information among adolescents living with HIV/AIDS. The GoZ should consider incorporating aspects of the CSE in the school curriculum for every child to benefit depending on age, gender and level of education. HIV/AIDS education must not mainly focus on adolescents, but on various other stakeholders including the communities where stigma and discrimination have been found to be occurring. Gender-focused interventions are more effective than 'gender-blind' programmes in promoting critical thinking and sexual health education, which are significant in reducing unintended pregnancies, stigma and discrimination and therefore promote safer sexual behaviours.

Further, there is need for an out-of-school CSE programme that uses the same curriculum used in schools (UNESCO, 2018). This holistic strategy significantly benefits adolescents who have dropped out of school, pregnant teenage mothers expelled from schools as many Sub-Saharan

African countries still rely on punitive approaches, thus excluding teenage who may have fallen pregnant and those that live in relative poverty (UNESCO, 2016). Therefore, the strategy is significant in ensuring continuity and making sure that no one is left behind regarding acquisition of critical knowledge on HIV/AIDS and sexuality.

#### **6.3.4 Media and the Internet to be utilised in Adolescents Quality of Care**

This recommendation serves to be an eye opener to offer care to the vulnerable group adolescents living with HIV and AIDS. Therefore, the point is to recommend that GoZ and Sub Saharan African countries must adopt this strategy and utilise internet to alleviate stigma and discrimination. The Internet has been pivotal in empowering adolescents living with HIV/AIDS by providing them with knowledge through published articles and blogs as they cope with their diagnosis and contemplating decisions regarding their diagnosis and treatment. In addition, Internet can be one global platform that adolescents living with HIV/AIDS can access to obtain significant information on common health-related concerns (Keles, McCrae, & Grealish 2020) WhatsApp has been a pivotal social media platform though it is limited by lack of connectivity and the use of cell phone numbers. There is need for a platform that resembles the famous WeChat which randomly selects people with common problems and interests. The WeChat platform may function as an important psychosocial support network linking up adolescents living with HIV/AIDS so that they share testimonies which can empower and invigorate their psychological well-being and self-confidence. Future research may also focus on how best the WeChat platform can improve the quality of life and the manner in which people living with HIV/AIDS can influence care and treatment decisions. The creation of more platforms where adolescents living with HIV/AIDS can share views enables the grouping of people with the same health-related issues; for instance, cancer patients or PLWH can share information and experiences despite their cell phone numbers as with We-Chat one need to shake his/her phone then people with same characteristics will appear. This will be effective to ALHIV as it will enables them to go and have online social groups without their confidentiality breached. Other than attending social groups then can attend online social groups for instance using zoom in if proper safe guards' strategies are developed this will be an effective way to minimise stigma and discrimination among adolescents living with HIV/AIDS and PLWHIV in general

### **6.3.5 Equality among people living with HIV/AIDS**

This recommendation is also directed to the GoZ and Chiredzi General Hospital as adolescents and PLWHA complained of being stigmatised and discriminated at the facility. The HIV/AIDS patients complained that green files they were given and the issue of the buildings that were too close to the road exacerbated the rate of stigma and discrimination. The study recommends that adolescents should be given a more confidential corner where they can access their medication and social support meetings safely. ART buildings must not be secluded; rather, there must be a strategic common place where all patients will be collecting medication, including people living with HIV/AIDS. By so doing, it will be difficult to single out HIV/AIDS patients from the rest of the patients.

More so, the study recommends that all patients, in spite of their seropositive status, must have the same files and must be treated equally. The green files that are currently given to people living with HIV/AIDS in Chiredzi are discriminatory and exacerbate stigma and discrimination at the health facility.

### **6.3.6 Strategic distribution of condoms**

Undoubtedly, adolescents start experimenting with sex when they are aged between 13 and 19 years. While reasons for poor condom distribution have been cited, there is need to adopt more effective condom distribution programmes. In Zimbabwe, sex among these adolescents is expected when they are married. Such cultural values often promote risky sexual behaviours. For example, adolescents in this research mentioned that they would avoid buying condoms at public places because they were afraid of being seen. In some places in Chiredzi District, condoms have been reported to be sold; thus, some participants reported lacking the money to buy them. This requires that stakeholders adopt a more strategic initiative of distributing condoms and one such effective strategy is to place the condoms in public toilets and even in schools. There is evidence in this research pointing to the fact that high school adolescents are sexually active but little is being done to assist them in their transition from adolescence into adulthood. Although sexuality and HIV/AIDS education is offered to adolescents in primary and secondary schools in Zimbabwe, most educators are not seriously imparting it as it is only mentioned for conformity to international standards. If condoms are strategically distributed where adolescents can access them without being noticed, new HIV infections among adolescents will be significantly reduced.

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## APPENDIX 1

<b>INFORMED CONSENT LETTER</b>
--------------------------------

School of Applied Human Sciences

College of Humanities,

University of KwaZulu-Natal,

Howard College Campus,

Dear Participant

### **INFORMED CONSENT LETTER**

My name is Christopher Jimu, I am a master's student in Psychology at the University of KwaZulu-Natal, Howard College Campus, and South Africa.

I am conducting a research on Adolescents living with HIV and AIDS in Zimbabwe; Experiences of disclosure, stigma, sexuality and social support to treatment adherence

Please note that

- Your confidentiality is guaranteed, as your inputs will not be attributed to you in person, but reported only as a population member opinion.
- The interview/questionnaire may last for about 45 minutes to 1 hour and may be split depending on your preference.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- The record as well as other items associated with the interview will be held in a password-protected file accessible to myself and my supervisors only. After a period of 5 years, in line with the rules of the University, it will be disposed by shredding and burning.

- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- Your involvement is purely for academic purposes only, and there are no financial benefits involved however transport costs will be reimbursed. R40/RTGS equivalent will be the reimbursement fee for each participant
- If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	Willing	Not willing
Audio equipment		

I can be contacted at:

Email: [219096166@stu.ukzn.ac.za](mailto:219096166@stu.ukzn.ac.za)

[chrisjimu@gmail.com](mailto:chrisjimu@gmail.com)

My supervisor is Dr Kaymarlin Govender who is located at HEARD, Westville Campus, University of KwaZulu-Natal.

Contact details: Email: [Govenderk2@ukzn.ac.za](mailto:Govenderk2@ukzn.ac.za) Cell: +27 83 799 1773

You may also contact the Research Office through:

P. Mohun

HSSREC Research Office,

Tel: 031 260 4557 E-mail: [mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

Thank you for your contribution to this research.

**DECLARATION**

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

.....

## APPENDIX 2

### PARENTAL CONSENT FORM

School of Applied Human Sciences  
College of Humanities,  
University of KwaZulu-Natal,  
Howard College

Dear Parent

My name is Christopher Jimu, I am a master's student in Psychology at the University of KwaZulu-Natal, Howard College Campus, South Africa.

I am conducting a research on Adolescents living with HIV and AIDS in Zimbabwe; Experiences of disclosure, stigma, sexuality and social support to treatment adherence. You are being asked to allow your child to take part in the above mentioned study.

Please take note that

- The confidentiality of the child is guaranteed as their inputs will not be attributed to them in person, but reported only as a population member opinion.
- The interview/questionnaire may last for about 45 minutes to 1 hour
- The record as well as other items associated with the interview will be held in a password-protected file accessible to myself and my supervisors only. After a period of 5 years, in line with the rules of the University, it will be disposed by shredding and burning.
- You can refuse to allow your child to take part or allow now and refuse later.
- If you decide to allow your child to take part in this study, then i will ask him/her some questions relating to his/her family, the medicines he/she is taking and telling others about their HIV

The involvement of the child is purely for academic purposes but R40/ RTGS equivalent transport costs will be reimbursed whenever possible.

Before you sign this form, please ask any questions about this study that you don't understand

You are making a decision whether or not to allow your child to take part in this study. Your signature indicates that you have read and understood the information provided above, have had all your questions answered and decided to allow your child to take part in this study and if you allow the interview to be recorded

	Willing	Not willing
Audio equipment		

I can be contacted at:

Email: [219096166@stu.ukzn.ac.za](mailto:219096166@stu.ukzn.ac.za)

[chrisjimu@gmail.com](mailto:chrisjimu@gmail.com)

My supervisor is Dr Kaymarlin Govender who is located at HEARD, Westville Campus, University of KwaZulu-Natal.

Contact details: Email: [Govenderk2@ukzn.ac.za](mailto:Govenderk2@ukzn.ac.za) Cell: +27 83 799 1773

You may also contact the Research Office through:

P. Mohun

HSSREC Research Office,

Tel: 031 260 4557 E-mail: [mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

Thank you for your contribution to this research.

**DECLARATION**

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and offer consent for my child to participate in the research project.

I understand that I am at liberty to withdraw my child from the project at any time, should I so desire.

**SIGNATURE OF PARTICIPANT**

**DATE**

.....

.....

## APPENDIX 3

### INTERVIEW GUIDE

The study aims to document and capture experiences of adolescents living with HIV and the challenges they are experiencing as a result of living with HIV and AIDS. We are interested in knowing the patterns facilitators, of adherence to medication, stigma and discrimination and disclosing of HIV status to others.

We value each of your opinions. Please bear in mind that there are no right or wrong answers. Please feel free to discuss what you think. Everything that will be discussed in the interview is confidential. The interview should last for about 45 minutes to 1 hour

You have the right to agree or disagree the recording of our discussion. However, if you agree this would not be shared with anyone at any point. I would also write some notes and your names will not be disclosed

**Date of Interview** .....

**Interviewer Name** .....

#### Key Demographics

**How old are you (the interviewer to tick the relevant box)**

Age	Please tick the relevant box of your age	
	13 years – 15 years	16 – 19 years

	Please Tick	Alive	Dead
<b>Parental Status:</b> a) both parents		<input type="checkbox"/>	<input type="checkbox"/>
b) Only father		<input type="checkbox"/>	<input type="checkbox"/>
c) Only mother		<input type="checkbox"/>	<input type="checkbox"/>

**Theme: Understanding about HIV/AIDS**

1. Please could you tell me what you know about HIV/AIDS?

**Prompts:**

- a) What do you mean by that? (for ambiguous responses like born with it)
- b) Can you tell me about your experience of getting HIV/AIDS?

**Theme: HIV Experience of stigma and discrimination, Disclosure and Adherence**

2. What are your experiences as a result of living with HIV? Explain

**Prompts:**

- a) Can you explain an experience that you feel you have been stigmatized or discriminated in the community or school?
3. Please explain your first experience when you first disclosed your status. Why did you choose to disclose to others?

**Prompts:**

- a) What might makes it difficult to disclose to others?

4. Explain what you think is the importance of taking ARV treatment as prescribed

**Prompts:**

- a) Can you explain how often do you visit the clinic?
- b) Do you use transport – Explain how do you raise the money?
- c) Tell me one incident that you have skipped your medication and explain the reason for skipping.

**Theme: The Role of Social Support**

5. Could you please explain what the support groups are saying about stigma and discrimination, disclosure and adhering to ARV medication?

**Prompts**

- a) Do you think the support you receive from social group is helping? Explain in what way?

**Theme: Influencing Policy**

6. What do you think should be done to address challenges faced by HIV infected adolescents?

Thank you for your help

## APPENDIX 4 : UKZN BREC APPROVAL



14 October 2019

Mr C Jimu (219096166)  
School of Applied Human Sciences  
College of Humanities  
[chrisjimu@gmail.com](mailto:chrisjimu@gmail.com)

Protocol: Adolescents living with HIV and AIDS in Zimbabwe: Experiences of disclosure, stigma, sexuality and social support to treatment adherence (Amended Title)  
Degree: Masters in Psychology BREC reference number: BE475/19

### EXPEDITED APPLICATION: APPROVAL LETTER

A sub-committee of the Biomedical Research Ethics Committee has considered and noted your application received on 17 July 2019.

The study was provisionally approved pending appropriate responses to queries raised. Your response received on 30 September 2019 to BREC correspondence dated 05 August 2019 has been noted by a sub-committee of the Biomedical Research Ethics Committee. The conditions have been met and the study is given full ethics approval and may begin as from 14 October 2019. Please ensure that site permissions are obtained and forwarded to BREC for approval before commencing research at a site.

This approval is valid for one year from 14 October 2019. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2-3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2015), South African National Good Clinical Practice Guidelines (2006) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC Terms of Reference and Standard Operating Procedures, all available at <http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx>.

BREC is registered with the South African National Health Research Ethics Council (REC-290408-009). BREC has US Office for Human Research Protections (OHRP) Federal-wide Assurance (FWA 678).

The sub-committee's decision will be noted by a full Committee at its next meeting taking place on 12 November 2019.

We wish you well with this study. We would appreciate receiving copies of all publications arising out of this study.

Yours sincerely,

Professor V Rambiritch  
Chair: Biomedical Research Ethics Committee

CC: Postgrad Admin: [stb@ukzn.ac.za](mailto:stb@ukzn.ac.za) Supervisor: [Govenderk2@ukzn.ac.za](mailto:Govenderk2@ukzn.ac.za)

Biomedical Research Ethics Committee  
Professor V Rambiritch (Chair)  
Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Telephone: +27 (0) 31 260 2406 Facsimile: +27 (0) 31 260 4809 Email: [brec@ukzn.ac.za](mailto:brec@ukzn.ac.za)  
Website: <http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx>

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## APPENDIX 5 : MRCZ APPROVAL

Telephone : 791792, 791193  
Telefax : 263-242-790715  
E-mail : [mrcz@mrcz.org.zw](mailto:mrcz@mrcz.org.zw)  
Website : <http://www.mrcz.org.zw>



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

### APPROVAL

MRCZ/B/1794

23 September 2019

Christopher Jimu  
18 F - Robert Street  
Private bag 802  
Triangle

**RE: - Adolescents living with HIV and AIDS in Zimbabwe: Experience of disclosure, stigma, sexuality and social support to treatment adherence.**

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

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

1. Completed MRCZ 101 new application form
2. Study protocol
3. Informed consent forms
4. Data collection tools

• **APPROVAL NUMBER** : MRCZ/B/1794

This number should be used on all correspondence, consent forms and documents as appropriate.

- **TYPE OF MEETING** : EXPEDITED
- **APPROVAL DATE** : 23 September 2019
- **EXPIRATION DATE** : 22 September 2020

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

• **SERIOUS ADVERSE EVENT REPORTING:** All serious problems having to do with subject safety must be reported to the Institutional Ethical Review Committee (IERC) as well as the MRCZ within 3 working days using standard forms obtainable from the MRCZ Offices or website.

• **MODIFICATIONS:** Prior MRCZ and IERC approval using standard forms obtainable from the MRCZ Offices is required before implementing any changes in the Protocol (including changes in the consent documents).

• **TERMINATION OF STUDY:** On termination of a study, a report has to be submitted to the MRCZ using standard forms obtainable from the MRCZ Offices or website.

• **QUESTIONS:** Please contact the MRCZ on Telephone No. (0242) 791792, 791193 or by e-mail on [mrcz@mrcz.org.zw](mailto:mrcz@mrcz.org.zw)

**Other**

- Please be reminded to send in copies of your research results for our records as well as for Health Research Database.
- You're also encouraged to submit electronic copies of your publications in peer-reviewed journals that may emanate from this study.
- In addition to this approval, all clinical trials involving drugs, devices and biologics (including other studies focusing on registered drugs) require approval of Medicines Control Authority of Zimbabwe (MCAZ) before commencement

Yours Faithfully,

  
MRCZ SECRETARIAT  
FOR CHAIRPERSON  
MEDICAL RESEARCH COUNCIL OF ZIMBABWE

MEDICAL RESEARCH COUNCIL OF ZIMBABWE

2019 -09- 23

**APPROVED**

DR. EDZ CY SIKHOSHEVA, HARARE

PROMOTING THE ETHICAL CONDUCT OF HEALTH RESEARCH

Scanned by CamScanner

## APPENDIX 6 : GATEKEEPERS CLEARANCE

Ref: Staff:  
Telephone: 2389/5022  
Telegraphic Address  
E-mail: [chiredzihosp@gmail.com](mailto:chiredzihosp@gmail.com)



MINISTRY OF HEALTH CHILD CARE  
CHIREDDI GENERAL HOSPITAL  
P.O. BOX 142  
CHIREDDI

27 September, 2019

**TO : CHRISTOPHER JIMU (219096166)**

Your request dated 26 September 2019 to carry out research with adolescents living with HIV at Chiredzi General Hospital was noted.

As head of office I have no objection to the request and I am glad to inform you that your request proposal has been approved.

However may I emphasise the need for ethical research conduct and maintain client confidentiality and privacy.

I also expect you to respect the sexual, reproductive health and rights of the clients considering that it is a vulnerable group.

You will also be expected to present your research findings to the Chiredzi Hospital Management team.

Happy research.



DR D.M. TARUMBWA  
**MEDICAL SUPERINTENDENT**

[tarumbwadavid1@gmail.com](mailto:tarumbwadavid1@gmail.com)



## **APPENDICITIS 1 GWARO RETENDERANO**

Muri kukumbirwa kuti mupinde muchirongwa chekubvunza vanhu vari kurarama neutachiona hweHIV. Ongororo iyi iri kuitwa pavana nevati samhukei vane makore ari pakati pe 13 kusvika 18 vari kurarama neutachiona hweHIV. Tichabvunza mibvunzo inosanganisira kumwa mapiritsi eutachiona anova maARV, kuzvibudisa pachena kuburikidza nekurarama neutachiona uyewo kuti vanhu vari munharaunda vanotora sei vanhu verudzi urwu.

### **KUPINDA KWENYU MUCHIRONGWA ISARUDZO YENYU**

Gwaro retanderano iri rinopa umbowo hwuri pamusoro pechirongwa chataurwa pamusoro. Kana manzwisisa nezvechirongwa uyezve kana mabvuma kupinda muongororo, muchakukumbirwa kusaina zita renyu kana kuisa X pagwaro retanderano iri.

Kuburukidza nekusaina bepa iri munotendera kuti

- Kupinda kwenyu muongororo iyi isarudzo yenyu
- Munzwisisa nezvechirongwa chamataurirwa
- Kuti masarudza mega kupinda muongororo iyi, uye hamuna kumanikidzwa

### **CHINANGWA CHEONGORORO IYI**

Chinangwa chikuru cheongororo iyi ndechekuda kuziva mararamiro amunoita maererano neutachihwona hweHIV HIV, Tiri kuda kuti mutiudze zvamunofunga maererano nekurarama neutachihwona. Tinoda kuziva zvakare kuti vamunogara navo vanotii nekurarama kwamunoita neutachiona kungava kuchikoro kana mudunhu ramunogara. Izvi zvinosanganisa nhau yekutaurirana hama dzepedo nezveutachiona hwenyu uye kui mungavaudza here kana kuti kwete.

### **NJODZI**

Hapana njodzi inotarisirwa kuti ingangoita kana mapinda muongororo iyi kunze kwekungotadza kugadzikana pamunenge muchibvunzwa imwe mibvunzo.

### **KUBHADHARWA**

Muchadzorerwa mari yenyu yebhazi yamasevenzesa kuti musvike pano.

Muripo wacho i40/kana madhora eRTGS anoenderana neR40 yekuSouth Africa

**KANA MUNE MUBVUNZO KANA ZVINETSWA**

Kana maita mubvunzo mave kumba maererano neongororo iyi munoridza runhare panhamba dzinoti 077 7 026296.

**PEJI YOKUSAINA**

Kana maverenga gwaro retenderano iri uye kana manzwisisa umbowo huri mariri, sainai zita renyu kana kuisa X

.....	.....	.....
Zita remunhu apinda muchirongwa (print)	Sainecha	Date
.....	.....	.....
Zita remushandi weongororo (print)	Sainecha	Date
.....	.....	.....
Zita reachapa uchapupu (print)	Sainecha	Date

**BVUMIRANO YEKUTORWA MAZWI**

**Ndinozwisisa kuti ndichatorwa mazwi pandinenge ndichipindura zviru maererano netsvagurudzo iyi**

Ndinobvuma kutorwa mazwi

**Hongu**

**Kwete**

\_\_\_\_\_  
Zita remunhu abvuma kutorwa mazwi (*nyora zvinoonekwa*)

\_\_\_\_\_  
Date



## **APPENDICITIS 2: GWARO RETENDERANO RINE RUZIVO REMUBEREKI**

### **NHANGA NYAYA**

Muri kukumbirwa kuti mwana wenyu apinde muchirongwa chekubvunza vanhu vari kurarama neutachiona hweHIV. Ongororo iyi iri kuitwa pavana nevati samhukei vane makore ari pakati pe 13 kusvika 19 vari kurarama neutachiona hweHIV. Tichabvunza mibvunzo inosanganisira kumwa mapiritsi eutachiona anova maARV, kuzvibudisa pachena kuburikidza nekurarama neutachiona uyewo kuti vanhu vari munharaunda vanotora sei vanhu verudzi urwu.

### **KUPINDA KWENYU MUCHIRONGWA ISARUDZO YENYU**

Gwaro retanderano iri rinopa umbowo hwuri pamusoro pechirongwa chataurwa pamusoro. Kana manzwisisa nezvechirongwa uyezve kana mabvuma kuti mwana wenyu apinde muongororo, muchakukumbirwa kusaina zita renyu kana kuisa X pagwaro retenderano iri. Muchapiwa rimwe gwaro kuti muende naro kumba. Musati mabvuma kuti mwana wenyu apinda muongororo iyi, zvaka kosha kuti muzive

zviri kutevera izvi:

- Kupinda kwemwana wenyu muongororo iyi isarudzo yenyu
- Munogona kusarudza kuti mwana apinde muongororo iyo kana kuti hamuchada atove pakati pekubvunzwa

### **CHINANGWA CHEONGORORO IYI**

Chinangwa chikuru cheongororo iyi ndechekuda kuziva mararamiro anoita vana maererano neutachihwona hweHIV, Tiri kuda kuti vatiudze zvavanofunga maererano nekurarama neutachihwona. Tinoda kuziva zvakare kuti vanogara munharaunda vanotii maererano nekurarama kwavanoita neutachiona kungava kuchikoro kana mudunhu ravanogara. Izvi zvinosanganisa nhau yekutaurira hama dzepedo nezveutachiona uye kui vangavaudza here kana kuti kwete.

## **NJODZI**

Hapana njodzi inotarisirwa kuti ingangoita kana mwana apinda muongororo iyi kunze kwekungotadza kugadzikana pavanenge vachibvunzwa imwe mibvunzo.

## **KUBHADHARWA**

Muchadzorerwa mari yenyu yebhazi yamasevenzesa kuti musvike pano.

Muripo wacho i40/kana madhora eRTGS anoenderana neR40 yekuSouth Africa

## **KANA MUNE MUBVUNZO KANA ZVINETSWA**

Kana maita mubvunzo mave kumba maererano neongororo iyi munoridza runhare panhamba dzinoti 077 7 026296.

## **PEJI YOKUSAINA**

Kana maverenga gwaro retenderano iri uye kana manzwisisa umbowo huri mariri, sainai zita renyu kana kuisa X

.....	.....	.....
Zita remunhu apinda muchirongwa (print)	Sainecha	Date
.....	.....	.....
Zita remushandi weongororo (print)	Sainecha	Date
.....	.....	.....
Zita remubereki (print)	Sainecha	Date

## **BVUMIRANO YEKUTORWA MAZWI**

**Ndinozwisisa kuti mwana achatorwa mazwi paanenge achipindura zviru maererano netsvagurudzo iyi**

Ndinobvuma kuti atorwe mazwi

**Hongu**

**Kwete**

---

Zita remunhu abvuma kutorwa mazwi (*nyora zvinoonekwa*)

---

Date

---

Sainecha

Time

---

Date

---

Zita remushandi wechirongwa (*please print*) Sainecha

Date-----

**APPENDICITIS 3: GWARO REMUBVUNZO.**

Muri kukumbirwa kuti mupinde muchirongwa chekubvunza vanhu vari kurarama neutachiona hweHIV. Ongororo iyi iri kuitwa pavana nevati samhukei vane makore ari pakati pe 13 kusvika 22 vari kurarama neutachiona hweHIV. Tichabvunza mibvunzo inosanganisira kumwa mapiritsi eutachiona anova maARV, kuzvibudisa pachena kuburikidza nekurarama neutachiona uyewo kuti vanhu vari munharaunda vanotora sei vanhu verudzi urwu

Mune mvumo yekuramba kuti mazwi enyu atapwe uyewo kubvuma kana mada. Pakutaurirana kwedu ipai maonero enyu kumibvunzo ichabvunzwa hatina minduro dzatinoti dzakashata. Kana mabvuma kuti mazwi enyu atapwe haasi kuzonzwika neumwe munhu kunze kwangu chete nemukuru wangu wandinoshanda naye vaKaymarlin Govender Tinongoda maonero enyu chete. Mibvunzo ino ichatora mamins makumi manomwe neshanu (45) kana kusvika paawa rimwe chete (1 hour).

Zuva ramabvunzwa -----

Zita remunhu abvunza -----

Mubvunzo : Une makore mangani

Makore	Sarudza pakakodzera panoenderana nemakore	
Makore 13 kusvika 15	Makore 16 kusvika 17	18 years – 19

**Sarudza pakakodzera**

**Vapenyu**

**Vakashaya**

**Mubereki** : a) Vese vabereki



b) Baba

c) Baba kana mai

**Musoro ; Kunzwisisa nezveutachiona HweHIV**

Tinokumbirao kuti utiudze manzwisisiro aunouita nezveutachiona hweHIV ?

**Mibvuno yemukati**

- a) Unorevei kana uchiiti wakazvarwa nacho?
- b) Tinokumbirao kuti utiudze maererano nekuziva kwawakaita nezveutachiona ?

**Musoro: Rusarura kuudza dzimwe hama nezveutachiona nekutevedzera mashandisirwo ekumwa mapiritsi emaARV**

2. Ndezvipi zvaungatiudze maererano nekurarama neutachiona hweHIV zvaunounosangana nazvo  
Tsanangura zvizere

**Mibvunzo yemukati:**

- a) Pane here paunoti wakambosarurwa kungava kuchikoro kana munahararunda yaunogara nekuti uri kurarama neutachiona hweHIV
3. Ungatiudzawo here pawakatanga kuziva kuti ukurarama neutachiona. Pane wawakatauriraro here , nemhakayei wakafunga kumuudza?

**Mibvunzo yemukati:**

- a) Ndezvipi zvaunofunga zvinotadzisa vanhu kutaurira hama dzimwe kuti vari kurarama neutachiona kunyangwe vamungadanana navo?
4. Tiudzewo maonero ako maererano nekutora mapiritsi emaARV zvakafanirwa uye zvakakodzera

**Mibvunzo yemukati:**

- a) Tiudzewo kuti unoenda kuchipatara kangani pamwedzi?
- b) Unokwira bhazi here kana umwe muchovha – Tiudze kuti mari yemuchovha unoiwanepi?
- c) Tiudzewo kamwe chete paungava wakadarikira kumwa mapiritsi emaARV uye chikonzero chacho ?

**Musoro: Kurudziro inobva kuhama kana kwamunokurudzirwa nekukuridzirana**

5. Pane here vari kukupai yambiro yekurarama neutachiona. Vanoti chii panhau yerusarura nekurarama neutachiona

## **Mibvunzo yemukati**

- b) Unofunga nhaurirano dzamuri kuita idzi dziri kukubatsirai here. Tsanangura zvizere

## **Musoro. Zvingaitwa kuvana nevati samhukei vari kurarama neutachiona**

6. Ndezvipi zvaunofunga zvingaitwa kune vana nevati kurei zvizhoma vane makore ari pakati pe 13 ne22 vari kurarama neutachiona

Tinotenda nemhiduro dzenyu

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01 July 2020

To Whom It May Concern,

**Re: Editor's Letter**

The letter serves to outline the scope of activities that were done during editing of a master's dissertation titled:

**Adolescents living with HIV and AIDS in Chiredzi District, Zimbabwe: Experiences of disclosure, stigma, sexuality and social support to treatment adherence**

The following activities were done;

- Grammar check
- Sentence construction
- Spelling check
- Punctuation
- In-text referencing

As a professional editor, I pledge that the above aspects of the manuscript were, to the best of my knowledge, meticulously and correctly done at the time the work was sent to the student. I am not responsible for any corrections that were made after the editing process.

Faithfully,

Kemist Shumba (Ph. D)