



FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

**KNOWLEDGE AND ATTITUDES OF PEOPLE LIVING WITH HIV/AIDS ON
ANTIRETRO-VIRAL THERAPY AT CHIZVIRIZVI CLINIC**

BY

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APPROVAL FORM



FACULTY OF SOCIAL SCIENCES

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RELEASE FORM

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DEDICATION

To my father and family, I love you very much and appreciate the sacrifices you made for me. I could not have asked for a better family, thank you for believing in me when I did not believe I could do it. I love you all.

ABSTRACT

The study sought to explore and describe knowledge and attitudes of people living with HIV/AIDS on ART. The research was driven by the realization that people living with HIV/AIDS in Chizvirizvi shown some observable signs of insufficiency of awareness like ART default which includes taking medication for a certain period of time and stopping when they feel fit and healthier and refusal to go on medication. The data was gathered through using descriptive research design, wherein self-administered questionnaires that contained items on knowledge, attitudes and adherence to the achievement of ART goals. The sample size for the case study consists of 60 male and female people living with HIV /AIDS who were randomly selected. Data presentation was done descriptively, with diagrams used as significantly as possible. The data was analysed by the application of descriptive statistics using SPSS version 16.0. The findings showed that PLWHA have knowledge on ART, however, their culture which believes in tradition affects their attitudes which results in non-adherence to medication. Having recognised the knowledge and attitudes, the researcher recommended that, a concentrated effort should be directed towards persons on ART, as part of the orientation of people on enrolment in the role out programme for ARV's to highlight misconceptions of what ARV's can and cannot do.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ADR	Adverse Drug Reactions
ART	Anti-Retroviral Therapy
ARV	Anti-Retro Viral
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
IBM	Information Motivation Behavioural
NGO	Non-Governmental Organisation
PEP	Post - exposure prophylaxis
PMTCT	Prevention of Mother to Child Transmission
PLWHA	People Living With HIV/AIDS
UNICEF	United Nations International Children Emergency Fund
WHO	World Health Organisation
ZJC	Zimbabwe Junior Certificate

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The researcher introduces the research on knowledge and attitudes of people living with HIV/AIDS on antiretroviral therapy and gives a background on what triggered the researcher to carry out the study. In this chapter, the researcher also highlights the problem statement, objectives, assumptions, hypothesis guiding the research, limitations and delimitations of the study.

1.2 Background to the study

Antiretroviral drugs are medications that hinder the duplication of HIV/AIDS, help to boost the immune system and lower the viral load in the blood (WHO, 2003). ART is a word that defines the management of HIV/AIDS. ART is a holistic treatment that does not only include antiretroviral drugs, but also understanding HIV/AIDS and ART, psychosocial support, preparing for and abiding to a course of ARV therapy, guaranteeing a balanced diet, soothing care and caring for the caregivers of PLWHA. When various drugs typically three or four are taken in combination, the approach is known as Highly Active Antiretroviral Therapy (HAART).

Prior to 1987, there were no ARVs for managing complications from HIV/AIDS. On the 26th of September 1997, two drugs namely zidovudine and lamivudine were introduced. In Zimbabwe, ART was introduced by some health practitioners and some non-governmental organisations in 2001 and they were only available to the privileged who could afford to pay for the high cost of drugs accessed from private clinics. The national ART rollout programme was launched and continued to offer affordable drugs despite the contemporary economic challenges. Chikwanha (2013) said that, in 2013, 600 000 HIV infected people had access to ARVs as the country put effort to fight the virus which killed about 250 million people worldwide.

From the advent of ARVs, people are making choices on adherence. There are various problems related to HAART which involve the development of drug resistance, difficulties of adhering optimally to the medication and its side effects. All these problems may lead to immunological failure and clinical progression of HIV/AIDS. Adhering to ART is thus very

important to achieving the goals of ART and to the survival of HIV/AIDS infected people (Mills et al, 2006)

The clinical effectiveness of ART in suppressing HIV and improving survival rates for those living with HIV/AIDS has been well documented. However, fruitful ART is reliant on sustaining high rates of adherence. Perfect pill taking is necessary to take full advantage of the benefits of ART, this means taking the correct dosage at the right times and observing dietary restrictions, anything less than this level of adherence causes viral resistance and hence treatment failure (Bangsberg, 2006). Even though ART can have an efficient suppression of viral load at reasonable adherence, non or sub-optimal adherence can lead to drug resistance that is the development of drug resistant strains of HIV (Maggido et al, 2007). If an individual takes ART unpredictably, he /she may obtain only the marginal benefits from the treatment, but will grieve from the side effects of the drugs (Nyambura et al, 2009) Patients have to understand ART before commencing treatment, a patient who completely stops taking ARVs rapidly lose any benefit they may have obtained in terms of increased immunity as the virus flourishes and CD4 cells are demolished (Nyambura et al, 2009).

Non – adherence to ART is thus a main public health worry as it causes virologic, immunological and clinical failure and it increases HIV transmission risk and drug resistant virus. Some of the major risk factors of non-adherence to ART include, forgetfulness, lack of knowledge on the benefits of the treatment, severity of side effects and the complexity of the medication (Mills et al 2006).

Pollit and Hungler (1999) postulates that, the key goal of HIV treatment is to slow HIV replication as much as possible and enable recovery of the immune system. If people living with HIV/AIDS do not possess adequate knowledge on ARVs, the motivation to adherence is reduced and defaulting and denial to take medication increases. Patient's awareness on and feelings towards ART influence their drive and uptake of ARVs. A good level of understanding about HIV by the patient, a belief that ART is effective and prolongs life, and recognition that poor adherence may result in viral resistance and treatment failure all impact favorably upon a patient's ability to adhere. Conversely, a lack of interest in using the available knowledge about HIV and a belief that ART may in fact cause harm adversely

affect adherence. The question is what knowledge and attitudes people living with HIV/AIDS have on ART. On the other hand, does the quality of adherence depend on the knowledge and attitudes? The effective delivery of HIV therapies however requires an understanding of patient knowledge and attitudes to design and implement appropriate behavioral interventions and treatment strategies. The researcher however seeks to find out the knowledge and attitudes PLWHA have on ART.

1.3 Statement of the problem

People living with HIV/AIDS tend to be showing some observable signs of insufficiency of awareness on ART which include ART default which is taking medication for a certain period of time and stopping when they feel fit and healthier and refusal to go on medication. Administering ART to people who do not have enough information can be a challenge to adherence.

1.4 Significance of the study

The study brings to light the knowledge and attitudes people living with HIV/AIDS in Chizvirizvi village have on ART. It is the researcher's hope that the research might be of practical help to the Ministry of Health and Child Welfare and the researcher.

The Ministry of Health and Child Welfare

- The study will provide information on whether the trainings and support rendered to ART programme in their districts have produced intended results and if the ministry is willing to implement what comes out of the research it improves the quality of services.

The Researcher

- The research will open the researcher's mind and equip her with information of how the knowledge and attitudes of people living with HIV/AIDS on ART can influence their motivation and uptake of ART.
- The researcher will also be able to make future objective recommendations and conclusions with a solid basis on the subject matter.

1.5 Purpose of the study

The purpose is to explore and describe knowledge and attitudes of people living with HIV/AIDS at Chizvirizvi Clinic on ART and find out the influence of knowledge and attitudes on adherence to the therapy.

1.6 Research hypothesis

1. Inadequate knowledge on ART leads to poor adherence to the therapy.
2. Negative attitude towards ART demotivates adherence to the medication.
3. Adherence is of paramount importance to the achievement of ART goals.

1.7 Delimitations

The research will focus on PLWHA of the 15-49 age groups in Chiredzi rural- Chizvirizvi village precisely, concentrating on the knowledge and attitudes they have on ART.

1.8 Limitations

The research is subject to some limitations which include complacency from participants under survey which is a common trait because people are usually not willing to disclose sensitive issues about their lives. Distance between the college (Midlands State University) and area under study (Chiredzi) is also going to be another limiting factor since the researcher is a full time student in Gweru who is expected to meet all the expectations of other modules despite her pursuing her research.

1.9 Assumptions

- Poor adherence to antiretroviral therapy by PLWHA is a result of inadequate knowledge and negative attitudes towards ART.

1.10 Definition of terms

AIDS occurrence of specific diseases caused by an HIV infection.

Adherence continuing in ART programme, attending to scheduled visits and taking medication as prescribed.

ART	a treatment of HIV and AIDS related illness which has the ability to stop the further replication of the HIV virus, allowing the body to strengthen its immune system again thereby slowing down the progression from HIV infection to AIDS.
Attitudes	manner, feeling, position, orientation of the mind with regard to ART
HIV	the human immunodeficiency virus is a lenti virus that causes the acquired immunodeficiency syndrome, a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive
Knowledge	being aware of ART
PMTCT	making sure women who are living with HIV do not transmit the virus to their babies. To accomplish this, all women of child-bearing age need to know their HIV-status, and pregnant women who have tested positive and their babies need special care, including antiretroviral treatment (ART).

1.11 Conclusion

The chapter provided an outline on the background of the study, objectives, the problem to be solved and the purpose of the study. It also provided the problems that are expected to be faced during the research process, the margins of the study, the hypothesis on which the research is rooted, assumptions, ethical considerations and definition of terms to be used in the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter looks on what other authors are saying about knowledge and attitudes of PLWHA on ART. The variables are revealed with reference to relevant literature and in which the major research hypothesis are answered. The chapter also focus on the differences between what other authors have said and what has been observed on the ground by the researcher.

2.2 ART defined

According to the Antiretroviral therapy literacy for community- based caregivers (n.d), antiretroviral therapy (ART) involves administering antiretroviral drugs (ARVs) which are medications that slow or block the duplication of HIV, help to improve the body's ability to fight HIV infection and decrease the viral load in the body. It further adds on to say that ART is a term used to describe the treatment of HIV/AIDS. ART is a holistic treatment, which not only involves taking ARV drugs, but understanding HIV/AIDS and ART, preparing for and complying to a course of ARV therapy, guaranteeing proper diet, psychosocial support, comforting care and caring for the caregivers of people living with HIV/AIDS. When a number of such drugs, typically three or four, are taken in combination, the approach is known as Highly Active Antiretroviral Therapy (HAART).

2.3 Goals of ART

WHO (2003) identified five goals of ART and these are clinical, virologic, immunological, therapeutic and epidemiologic. Clinical involves prolongation and the improvement of the quality of life, virologic is the achievement of maximum and durable suppression of viral load so as to hold the disease progression, immunological goal refers to the achieving of immune reconstitution that is quantitative and qualitative that is CD4 count in the normal range and pathogens specific to immune response. The therapeutic goal is the rational sequencing of drugs to maintain the healing option as well as epidemiological which is to reduce HIV transmission which is done through reducing infectivity that is making each act of unprotected sex less risky by reducing the amount of virus in the body system.

2.4 Principles of ART

ART is part of a comprehensive care plan with guiding principles in managing the condition. Internationally, it is suggested that patients should not commence ART too soon when the CD4 cell count is normal or too late when the immune system is irrevocably damaged (Mazibuko, 2008)

Secondly, the first regimen should contain a strong combination with confirmed effectiveness, bearable side effects and ease of management. Difficulty of regimen is the most frequently cited cause of adherence across a range of long-lasting medical illness (Meichenbaum & Turk, 1987) therefore simple regimens must be used. Regimen complexity embraces the number of pills, the frequency and timing of doses, dietary requirements, the number of different pills and pill size (Clinical Care options, 2007). Barlett, DeMasi, and Quinn, (2000) explain that when food limits are associated with a regimen, patients are 50 % less likely to follow optimally and that a lower pill burden has been strongly related with better virologic outcome.

The third aspect is considering the accessibility and affordability of drug combinations especially in areas where resources are limited. There should be an effective internal or international supply management system to the facility or patient. This management system needs synchronized labours from the stakeholders involved in the different levels of the comprehensive care programme and effective response mechanisms to guarantee a constant supply of routinely used medicines and recently approved medicines. Rabkin et al, (2005) additionally endorse that patients must be made to understand where, when and how to get medicines and providing on-site pharmacies helps patients to ensure easy access to a continuous supply of medicines. In line with this, in Zimbabwe, the Ministry of Health and Child Welfare piloted a nationally approved outreach programme in all health centres to guarantee that patients access their medicines nearer to their homes.

Fourthly, the patient's readiness to commence ART is of great importance (Mudiayi, 2007). Starting ART is not emergency so providers and health workers should take time to prepare patients before beginning ART. Preparation involves discussions about the medicines, the need for lifetime therapy, implications of suboptimal adherence and on-going care. In Zimbabwe, an assessment phase of prophylactic treatment is prescribed through new life post-test support services for a period of 2 weeks or more to guarantee patient's readiness to begin ART. In this phase, patient characteristics and behaviours with either positive or

negative effects can be well known and interventions tailor made for that patient implemented (Paterson, Swindells & Mohr, 2000).

There is a strong association between adherence and virologic response. Studies by Paterson et al (2000) found out that, 95% adherence was necessary to achieve untraceable virus with protease inhibitors. Generally, the goal of virology can be attained with adherence levels of 70-80%. These levels are very high and adherence decreases over time. The treatment exhaustion with chronic treatment results from the treatment having taken over the patient's life and requires exhausting levels of attention to follow (Rodriguez-Rosado, Jimenez-Nacher, Soriano & Gonzalez-Lahoz, 1998).

2.5 Criteria for initiating art

There are medical and psychological parameters that should be ascertained before one can be initiated on ART. The following description is taken from NDTPAC et al (2007). For a patient to be initiated on ART they should have a documented HIV positive test results with one of the following:

- Have a WHO clinical stage 4
- Have a CD4 count of 350 cells/mm³ and below irrespective of WHO staging.

According to NDTPAC et al (2007) the following psychological issues should be ascertained before initiating ART:-

- Compliance with cotrimoxazole
- Completion of pre-ART adherence counselling sessions
- Availability of treatment partner
- Adoption of positive living such as safer sex practices, refraining from substance abuse and having good nutrition.

ART initiation can be deferred if:-

- The patient has an inter-current opportunistic infection like TB,
- Patient requires further counselling for example alcohol problem
- Patient is terminally ill

2.6 Effects of defaulting ART on PLWHA

ART disruption brings about negative effects to PLWHA which include a decrease in CD4 count, increased resistance to medications and viral rebound (Deeks,2001).Disease progression is checked through virologic, clinical and immunological means so if an infected person's immunity drops and there is a rise in viral load, the disease progresses. HIV has a very high duplication and mutation rate, occasionally missing doses quickens viral duplication. This supports the fact that, defaulters face the challenge of virologic failure and disease progression. Non-adherent patients are likely defaulters of most treatment procedures and the danger of excess of consequences like virologic failure and resistance interrupt the accomplishment of the goals of ART.

2.7 ART knowledge on adherence to the therapy

Knowledge on ART refers to the information that people have on ART that is the awareness concerning anti-retroviral medications. PLWHA do not have just to take the therapy but have to know about the medication too as it influences compliance to their doses hence leading to the accomplishment of ART goals.

Higleyman (2011) says that, HIV preserves long term in the body in part because it can hide in viral reservoirs like resting memory T –cells, the brain and gut. Scholars theorised that, if ARV medications are commenced just after infection, before the formation of these reservoirs, disease progression may be decelerated. During the time when the HIV infection is untreated, viral load spreads at very high speed soon after infection but then relaxes at a fairly steady level called the viral set point.

According to the WHO (2003) the risk of mother to child transmission of HIV can be reduced to less than 5% through a mixture of prevention actions (PMTCT) comprising of ART for the pregnant mother and her new born baby, clean delivery conditions and safe baby feeding. The WHO goes on to say, that an HIV positive woman can breastfeed her baby in settings judged to be the safest infant feeding option. On the other hand, breastfeeding completely and she or her new born baby need to start ART at the same time.

In 2009 UNICEF recommended the UNAIDS call for a virtual elimination of mother to child elimination of HIV by 2015 aiming at making sure that less than 5% of children born by HIV positive mothers are HIV positive too and reducing the number of HIV infections among young children by 90% compared to 2009.

People who have possibly been exposed to HIV can have post-exposure prophylaxis prescribed to them. This extra ordinary HIV treatment inhibits the virus from establishing in the body of someone who has been exposed. According to WHO (2007) PEP is mostly vital to people who have been sexually abused or those who have been exposed to blood through a lancet injury or other accidents. PEP typically entails a month course of two or three different types of antiretroviral medicines that are also prescribed as treatment for PLWHA (BHIVA, 2011). There are a number of determinants of PEP efficiency which are late commencement, resistant virus and compliance. For PEP to work to its best, it should be taken as soon as possible that is within 72 hours of exposure to HIV. If it is left longer, the efficiency of the treatment is lessened. The person who would have transmitted HIV may have a drug resistant HIV which could make PEP inefficient and lastly, the person using PEP should take the treatment as recommended by the health practitioner of which the side effects of the medication make other people have challenges in adhering.

The use of ARVs is associated with side effects and its one of the causes of non-compliance (O'briem, Clark & Besch 2003). Quite a lot of issues influence side effects of ART. For instance when comparing men with women ,particularly women who innocently take ART and with CD4 counts above 250 cells/mm³ are likely to develop Stevens –Johnson syndrome, rashes and hepatotoxicity from nevirapine (Baylor&Johann –Liang,2005).Some factors which may also lead to the growth of ART side effects are, using medicines with overlapping and addictive harmfulness, circumstances that may rise the risk of or worsen side effects for example alcoholism (Millal, Phillips&Carosi,2008), also, drug-drug connections may lead to a arise in drug harmfulness.

Boateng and Awunyo (2012) argues that, patients' knowledge on ART encourage their compliance to the medication. Believing that ART is efficient and extends life, acknowledging that non – compliance causes viral resistance and treatment failure all positively affect a patient's adherence. In opposition, a belief that ART may cause harm unfavourably influence compliance (Safen etal ,2005).People's knowledge on ART is however influenced by an interaction of socio- economic and other aspects like patients' educational level and marital status .A low level of general education and poor literacy may negatively influence some patients' ability to adhere whereas a higher level of education has a positive impact(Catz, Heckman & Kochman ,1999).

2.8 Attitudes towards ART on adherence to the medication

Attitudes towards ART compliance refers to a person's negative and positive choices of the results of ART adherence behaviour (Ogden,2000).Optimistic feelings towards an action is closely related to its practice, whereas a negative feeling is not (Horne, Clatworthy, Polmear, & Weinman, 2001).Concerning ART compliance, negative feelings have been shown to be related to a general sample of PLWHA in the United States of America (Viswanathan, Anderson, & Thomas, 2005) and amongst African –American child bearing age females (Richter, Sowell, & Pluto, 2002).A research of one hundred and nine people on ART was conducted ,a quarter reported low compliance which was associated with issues of side effects and perceptions of the need of the medicine (Horne et al., 2004).Attitudes can be modified to come up with an increased adherence to ART.

A number of writers have recommended that the expectations of Western mind-set, on which many hypothetical representations are grounded, are imperfect in their application to African settings (Campbell, 2003) and hence to understanding ART compliance as well.

Swartz (1998) argues that , the groups "western" and "non-western" are our formations and do not reflect the variety of opinions (often mutually opposing)embraced by people hold and the unities that are across seemingly different groups of people. Regardless of these limitations, it is claimed here that there are contextual and ethnic issues unique to Zimbabwe that may affect ART acceptance and compliance in the situation of the countrywide roll-out.

Several Shanghai patients usually consult traditional doctors and their treatment includes an invocation of spirits in causing the patient's illness. In various African countries, including Zimbabwe, traditional doctors are amongst many health upkeep customers as genuine consultants (Walker, Reid, & Cornell, 2004).

In a traditional African conceptualisation of well-being and illness, diseases may be well-thought-out a mystical wonder connected to ancestors, living people, animals, vegetation, and other substances (Kale, 1995). According to the African context, these agents play a part in influencing a patient's health by either decreasing or improving his or her wellbeing. Imbalance of these powers may bring about sickness and it is believed that components that are took from animals, plants and other substances may recover the healthiness of a sick individual.

The reasons why traditional doctors are so popular consist of, inadequate health care services, insufficient hospitals and clinics, congested services, and belief in the cultural background in which the traditional doctor operates (Walker et al., 2004). The interventions provided by a traditional healer are thus clear to consumers of health care and in keeping with a complete understanding of a person as having social, physical and spiritual dimensions.

Walker et al., (2004), says that it is likely that ART compliance may be affected by these health seeking practices. For instance, interventions rendered by traditional doctors may prevent full compliance to ART either by sanction or by instilling doubt in patients about its efficiency, thus causing sub optimal adherence.

2.9 Adherence on the achievement of ART goals

Adherence to ART is important for effective treatment. With respect to HIV/AIDS care, adherence to HIV medication can be defined by Jani (n.d) as the capability of PLWHA to choose, start, manage and uphold a specified healing combination schedule to regulate HIV viral duplication and immune constitution. Haynes, Taylor and Sackett (1979) also defines adherence as the extent to which a person's conduct that is in following diets, taking medicines or performing changes in lifestyle concurs with health advice.

According to Roberts (2000), behaviour that is often considered non-compliant by medical practitioners can be viewed as sensible efforts by patients to manage their sickness outside the review room. Non adherence from the patient's viewpoint is usually reasonably, comprehensible and justified attributing social factors unrelated to the biomedical model influence his/her behaviour. Roberts (2000) goes on to say that, much of the poetry on non-adherence emphasizes the medical practitioner's conviction that the problem lies in the patient's behaviour or in the doctor-patient relationship.

The clear difference between patient's needs and the medical practitioners' professional interests corresponds with much assumption about the power of the biomedical establishment, especially its influence to genuine concepts of health and illness and to configure the patient's subjectivity. Most theories locate the sources of non-compliance in the doctor-patient interaction, patient knowledge or beliefs about treatment and to a lesser extent, the nature of the regimen or illness (Conrad, 1985).

The relationship between adherence and therapeutic achievement has been proven across HAART regimen. Through viral load suppression, CD4 count improve, morbidity and mortality among HIV –infected patients decrease, there is a restoration of the immune system and reduced side effects of the illness (Paterson et al, 2005). However, the achievement is influenced by the patient's capability to follow the ART regimen which depends on factors which may be within or beyond the clinical environment. A very high level of adherence is essential to assure treatment efficiency due to the fast duplication and transformation rate of HIV (Martin et al, 2008).

Poor adherence can lead to clinical, immunological and virologic failure with the later leading to the spread of drug resistant forms of the virus which is a public health concern. It can also lead to increased costs to health and society as a result of direct financial costs of failed treatment and higher hospitalisation rates. Indirectly there are costs of lost productivity of patients and a burden on family caregivers (Stevens, Kaye & Corrah 2004)

2.10 Theoretical framework

A theoretical framework is the abstract, logical structure of meaning that guides the development of the study and enables the researcher to link the findings to a body of knowledge (Naidoo & Willis, 2000). Theoretically, the study has been guided by the Information- Motivation -Behavioural skills (IMB) Model of Antiretroviral adherence.

2.11 The IMB Model of ART adherence

The IMB model of ART adherence identifies influences of ART adherence and non-adherence that are critical to the design application and evaluation of ART adherence promotion interventions. Fisher, Fisher, Amico and Harman (2006) asserts that, the fundamental content of the interventions must discourse contributing factors of ART adherence which include information, motivation and behavioural skills related to adherence. The IMB model proclaims that, well –informed, well – motivated patients who have ample skills for enacting complex patterns of adherence related behaviour adhere to their ART medication best. On the other hand, patients who are less informed, motivated and skilled show inadequate levels of adherence to ART.

2.12 Sub-components underlying the IMB model of ART adherence

Adherence information

- The regimen, correct HAART utilisation and adequate adherence.
- Side effects and drug interactions.
- Heuristics and implicit theories concerning adherence.

Adherence motivation

- **Personal:** attitudes /beliefs about outcomes of adherence and non- adherent behaviour and evaluation of these outcomes.
- **Social:** Perceptions of significant others' support for adherence and motivation to comply with significant others' wishes.

Adherence behaviour

- **Proper dosing:** percentage of HAART medication pills taken over number prescribed.
- **Optimal adherence:** at or above percentage adherence needed for HAART to control the virus.
- Adherence levels overtime.

Adherence behavioural skills

Objective and perceived abilities (self -efficacy for):

- Acquiring, self-cueing and self-administering HAART medications.
- Incorporating regimen into ecology of daily life.
- Minimizing side effects.
- Updating HAART adherence – related facts as necessary.
- Acquiring social support and instrumental support for adherence.
- Self –reinforcement of adherence overtime.

Moderating factors affecting adherence

- Psychological health, for example depression.
- Unstable living conditions.
- Poor access to medical care services like medication.

- Supplies and insurance coverage.
- Substance use or addiction.

Health outcomes

- Efficient viral load suppression
- Decreased resistance to drugs
- Increase in CD4 count

Adherence information, motivation and behavioural skills work collectively in encouraging adherence behaviour. When a patient have the necessary information on adherence including correct ART use ,sufficient adherence, side effects and is motivated to adhere that is having favourable attitudes about ART adherence, has unfavourable attitudes towards non adherence and sees that important people in his /her life support his/her adherence ,he/she will enact specific adherence –related behavioural skills. These behavioural skills encompass performing of behaviours required for acquiring self-cueing and self-administering ART medications and integrating ART into daily life. Adherence behaviour in turn yields positive health outcomes for example ,affects CD4,viral load, likelihood of drug resistance and objective and subjective health which via feedback they are cycled back to affect successive levels of adherence in formation, motivation to adhere in the future behavioural skills for adherence and so on.

The IMB model is a meditational model, this means that adherence information and motivation work to their full capacity and are generally limited by an individual's level of adherence- behavioural skills to produce his /her adherence behaviour. An individual may be well-informed and well –motivated to adhere to ART but without adequate behavioural skills he/she will be unable to adhere to ART medications correctly and consistently. Additionally, there are various controlling factors that that may affect ART adherence which include severe damages in the mental functioning like severe depression, highly unstable living conditions ,lack of access to insurance coverage or medical care and services and severe substance use or addiction. The predictions of the IMB model are thought to be healthy with respect to these moderators .Nevertheless, at high levels, an individual may need assistance to address the moderator that focus for medication to occur. When a patient has acute clinical depression, he/she may need symptom relief through psychotherapy and /or antidepressants before being able to focus on adherence.

2.13 Previous studies

Researches on knowledge and attitudes on ART by people living with HIV have been done by other researchers before. In India, according to Chomat et al(2009) a research was conducted on knowledge ,beliefs and practices relating to treatment of HIV in Vellore to determine whether the knowledge ,attitudes and treatment practices of HIV infected individuals and their health care providers are aligned with current treatment recommendations. Indian women appeared to have less information about HIV treatments and had less access to financial and other resources compared to men. Women also reported a harder time leaving their home and family responsibilities to access care. Many stated that they were not seeking medical care because they lack symptoms .Others chose to sacrifice the limited resources for other needs like the health care of another member of the family. However, men were more informed of the available treatments and seemed to have greater access to them and they were more active and self –introduced to health care utilisation than women.

According to Boateng and Awunyo-Vitor (2012) a study was done in Ghana on knowledge, perceptions and practices on antiretroviral therapy in farming communities in HIV positive women. The study was conducted using 211 HIV positive women at the ART centres in two farming towns in the Ashanti Region, Ejura represented by 43% and Nyinahini represented by 57%.With respect to HIV prevalence, the Ashanti Region recorded the second highest in the country in 2011 (3.0%). More than 50% have been on treatment for less than 24 months with the maximum length on treatment being 156 months. Majority of the women were married and 13% had schooled to the secondary level with 35% having no formal education. Seventy-three per cent with farming being the most cited job. HIV positive women with formal education were significantly almost two times more likely to have a comprehensive knowledge on PMTCT and ART. Negative perceptions about ART were associated with low education level in the study. The women whose husbands had formal education were also more likely to have comprehensive knowledge on PMTCT and ART as compared to those with no formal education. It is evident that respondents' knowledge level plays an important role in their access to ART which supports the findings.

In Nigeria, a number of studies have assessed the knowledge and attitudes of health workers regarding adverse drug reactions (ADRs), however a research was done which evaluated the knowledge and attitudes of HIV infected patients on the ADRs in selected hospitals in Nigeria. The patients' knowledge of the adverse effects of their medication was reported to

be very poor (Agu, Oparah and Ochei, 2012). This was supported by other reporters that reported significant lack in patients' knowledge of their medications. Patients' experience of serious ADR effect on their lives physically and psychologically to the point that medicines were feared and avoided. Patients' reports of ADRs experienced were more detailed in the description of the reactions as they noted the effects of the ADR on their lives compared to those from health workers. The participants' knowledge that all medicines cause some kind of adverse effects had an important association with participant's sex, educational and employment status, age and marital status.

2.14 Justification of the study

The researcher feels that the knowledge and attitudes PLWHA in urban areas have on ART differs from those PLWHA in rural areas have. Conversely their employment and level of education contributes to the differing factors and these, the researcher wishes to find.

2.15 Conclusion

This chapter looked at literature done on the knowledge and attitudes PLWHA have on ART. It defined ART and scholarly views and opinions were discussed. A justification as to why the researcher wants to carry the study was given. Next, the researcher will look at the research methodology

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the research methodology which is defined by Babbie (1998) as an operational framework within which facts are placed so that their meaning may be seen more clearly and used by the researcher to obtain data. To be discussed are, the research paradigm and design, data collection procedure, data presentation and analysis, population, sample size and the sampling procedure as well as the research instrument giving insight to its strengths and weaknesses.

3.2 Research paradigm

A research paradigm involves an explanation on the approach to be used and the reasons why that have been chosen as the best to help in the study. The researcher decided to use the quantitative paradigm which is defined by Goodwin and Goodwin (2014) as a type of research in which results are presented as numbers which are typically in the form of descriptive and inferential statistics. The quantitative paradigm is applicable because the researcher is going to quantify the extent of certain variables to a phenomena and the empirical evidence gathered through this approach is the basis for knowledge thus findings are grounded in objective reality rather than in the researchers' personal beliefs or expectations and the numeric information gathered from formal measurements is easy to analyse with statistical procedures (Polit & Beck 2008).

3.3 Research design

Kumar (2001) defines a research design as a practical plan that is used by the researcher to answer questions accurately. The researcher used the descriptive survey method design because it helps describe the knowledge and attitudes of PLWHA on ART in rural areas. Kumar (2011) goes on to depict that a descriptive study tries to logically describe a situation, problem, phenomenon, service or programme. The main purpose of a descriptive study is to describe what is dominant in relation to the problem under study. A descriptive study aims at using words, numbers or both in explaining a condition in order to provide answers to questions concerning the topic being studied (Neuman, 2006).

Advantages

- The study is carried out in natural settings without any manipulation (Sim and Wright, 2002). The current study was carried out in a rural area where the respondents live and there was no interference that was done before data collection.

Disadvantages

- Descriptive research is unable to provide information on cause and effect relations (Aday & Cornelius, 2006)

3.4 Population

A population according to Shaughnessy, Zechmeister and Zechmeister (2000) is a set of all circumstances of interest which is supported by Gavin (2008) who says that, a population is a group of all the members of a uniquely definable group of people or things. In this study the population is the HIV positive people seeking post-test support services at Chizvirizvi clinic. The total population of Chizvirizvi village is 600 people. Of the 600 people, almost 180 are registered HIV positive patients at Chizvirizvi clinic. The sample frame for the study is 60 participants and this frame is more representative of the total population.

3.5 Population sample and sampling procedure

A population sample has been defined by Kumar (2011) as the number of individuals from whom the required information is obtained. In this research the sample size is 60 people living with HIV /AIDS in Chizvirizvi village. According to Kumar (2011) sampling is the picking of a few participants from a bigger group to become the basis for estimating the occurrence of information of interest to the researcher. The researcher used the simple random sampling to come up with a sample of 60 respondents. The researcher randomly nominated 60 participants from 180 people living with HIV which is the population sample. In the population, the list was created and every registered person living with HIV/AIDS was assigned a number from 1 to 180. From the list, every third (3rd) person was selected to make a total of 60 respondents.

3.6 Research instruments

Solso et al (1998) defines a research instrument as a testing device for gathering data required to find solutions to the problem under study. Questionnaires were used in this research.

Questionnaire

Gavin (2008) defines a questioner as a research instrument consisting of a series of questions and other prompts that the respondent has to provide with answers for the purpose of gathering information. There are two basic formats of questions, open or closed. Open ended questions have no prompt for the answer. These are good for finding out subjective data or when the range of responses is not tightly defined. However they require a higher level of literacy in the respondents and it is always possible that respondents will not fill in the questions. Close ended questions according to Dyer (1995) provide the backbone of most questionnaires. The range of possible responses to a question is completely determined by the researcher and respondents are simply required to select one from a range of possible answers.

Advantages of questionnaires

- People are more truthful while responding to the questions regarding sensitive issues in particular due to the anonymity of their responses.
- Cheap, time saving and flexible, a lot of responses can be obtained in a short time.
- Responses are standardized making data analysis easy.

Disadvantages

- Some of the people who receive questionnaires do not return them (Evans, 2007).
- Not all answers given on closed ended questions match the respondent exactly so they do not give room to elaborate on the answer.

3.7 Ethical considerations

Polit and Beck (2008) define ethics as a system of proper standards concerned with the degree to which research procedures observe professional, legal and social obligations to the study participants. For any study, the study procedure from identification to publication of the study should follow ethical standards of research. The institution and respondents' rights should be upheld. In this research, it involved aspects such as confidentiality, informed consent, anonymity and withdrawal.

Protecting the rights of the participants

Informed consent

Procurement of informed consent from human participants is vital when conducting a research. Important ideas and content of the research were conveyed from the researcher to the participants and the participants' agreement to take part in the research was reached. Informed consent consists of four elements that are disclosure of important information, comprehension, competency and voluntarism (Burns and Groove, 2005)

Confidentiality and anonymity

Confidentiality is defined as the managing of private information so that participants' identities are not related to their replies and are never openly revealed while anonymity is when the participant's identity cannot be related even by the researcher with his/her individual responses (Burns and Groove, 2005). To guarantee confidentiality and anonymity, the researcher assured the respondents that all data obtained from them during the course of the research will not be revealed to anyone. All the questionnaires were free from personal identifiers like names and addresses.

Right to withdrawal from the study

Polit and Beck (2008) asserts that research participants have a right to ask questions, ask for clarification, refuse to give information and withdraw from a study at any time without loss of benefits. In this study, the researcher notified the participants of their right to withdraw from the study at any time they wish. They were also assured that their withdrawal will not affect their access to all health services offered by Chizvirizvi clinic to themselves and their families.

Protecting the rights of the institutions

To follow the ethical standards, approvals to conduct the research were obtained from Chizvirizvi Clinic which is the institution from which the study participants receive their medical care. Approval was also obtained from Midlands State University Psychology Department and a clearance letter was issued to help in carrying out the research

3.8 Data collection procedure

According to Schutt (1999), data collection procedure involves granting approval from the relevant authorities before meeting the subjects. It also involves making appointments with research subjects for example through telephone, or letters. In this research, the researcher

was given permission by the Chiredzi opportunistic infections clinic, new life centre, and support group leaders to identify participants in order to carry out the study. This was done through making appointments with both influential members of the departments mentioned and participants at convenient meeting places to administer questionnaires.

Before collecting data from the participants the researcher first informed the participants the purpose and aims of the study. The researcher also assured the respondents total confidentiality as a way of encouraging them to maximize their cooperation without fearing identity exposure. Questionnaires were distributed to the selected participants and the researcher ensured that questionnaires reach the targeted individuals by distributing the forms personally. The questionnaires were completed and returned to the researcher on the same day to reduce costs and increase the return rate.

3.9 Data presentation and analysis

According to Burns and Grove (2005), data analysis is defined as a process that is conducted to reduce, organize and give meaning to the collected data. Gwimbi and Dirwai (2003) support the idea by saying that data presentation and analysis help make sense out of large amounts of raw data. Questionnaires were checked for completeness as missing data affects the validity of the research. The researcher presented the data using bar graphs and pie charts. Descriptive analysis was also done and this was done through analyzing statistical data and brief interpretations of the attained data were given under every figure.

3.10 Conclusion

The researcher was able to discuss in detail how the study was carried out highlighting the research paradigm, research design, defining the target population as well as sample size and sampling method. The research instrument was again looked at and finally, the data presentation and analysis procedures.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents findings of the study. Descriptive analysis was used and the data was presented in frequency tables, graphs and charts. The data from people living with HIV/AIDS was analysed to give an overview of the knowledge and attitudes they have on ART.

4.2 Presentation

4.2.1 Response to questionnaires

A total of 60 questionnaire sheets were distributed to the sample population and all of them were responded to and returned. 100% of the distributed questionnaires was responded to so it was a complete representation of the sample.

4.2.2 Presentation of demographic data

Respondents' Sex

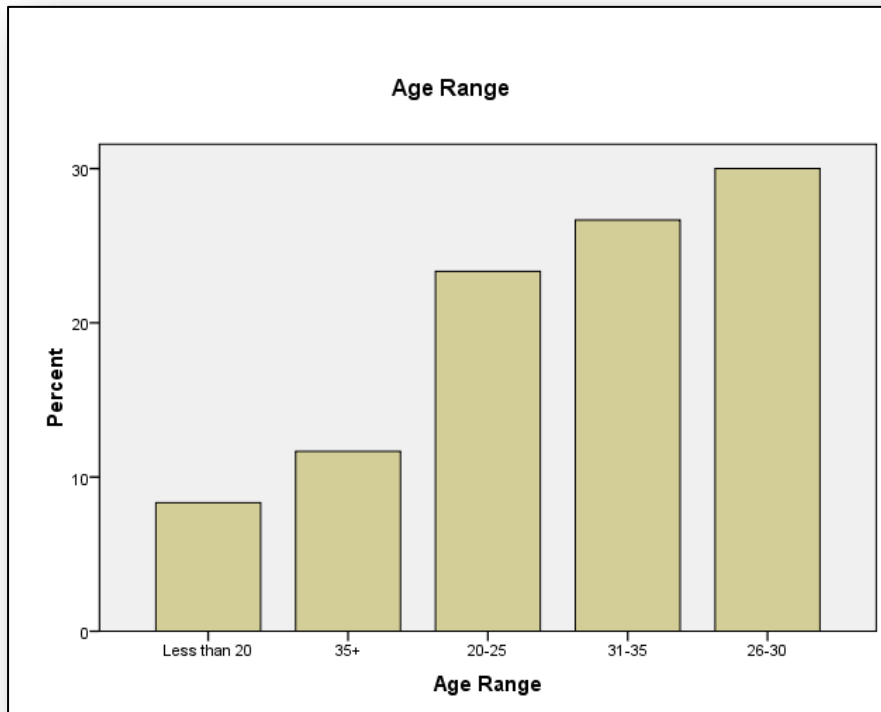
Table 4.1 Respondents' sex

	Frequency	Percentage
Male	24	40
Female	36	60
Total	60	100

There were 36(60%) females compared to 24(40%) males as indicated in Table 4.1 above. The study revealed that more females participated compared to males. The majority of PLWHA registered at Chizvirizvi clinic are females.

Respondents by age

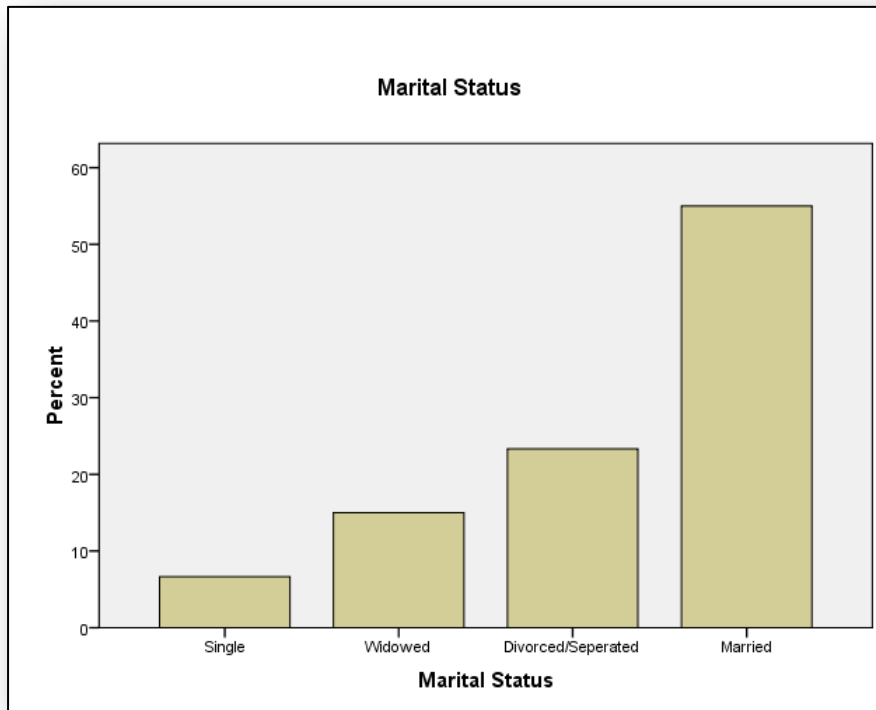
Figure 4.1 Age Range



The highest number of respondents were in the 26-30 age group with 18 respondents (30%), age group 31-35 with 16 (26,7%) respondents followed by age group 20-25 with 14 (23,3) respondents. The less than 20 age group had the lowest frequency of 5 (8, 3%) respondents, Therefore, the majority of people who participated in this study were of the 26-30 age groups.

Marital Status

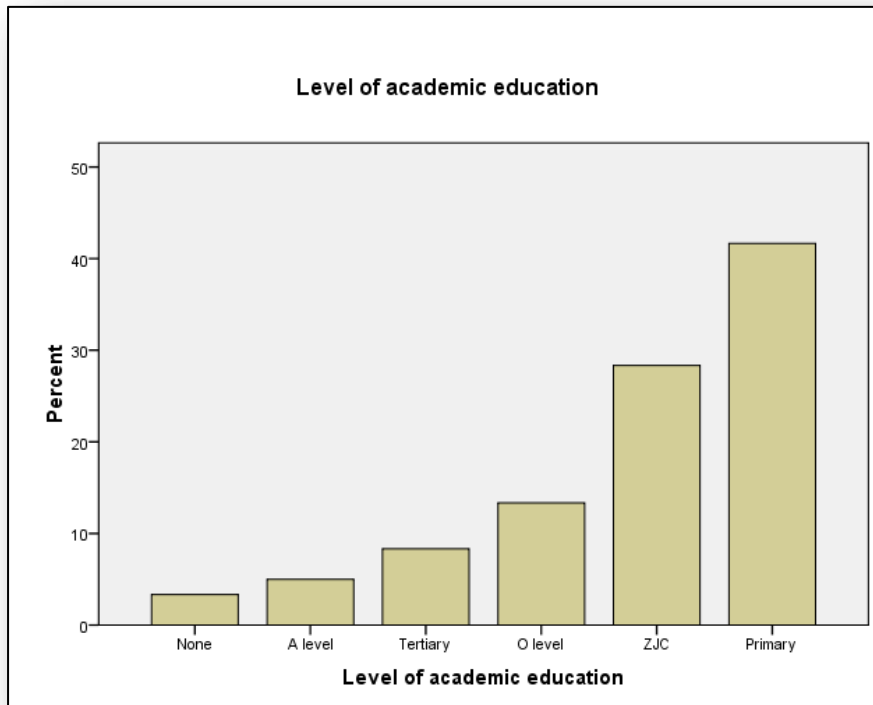
Figure 4.2 Marital Status



33(55%) of the respondents were married, 4(6, 7%) were single, 14(23, 3%) were divorced and 9(15%) were widowed. Hence, most of the PLWHA who are on ART in Chizvirizvi are married.

Educational qualifications

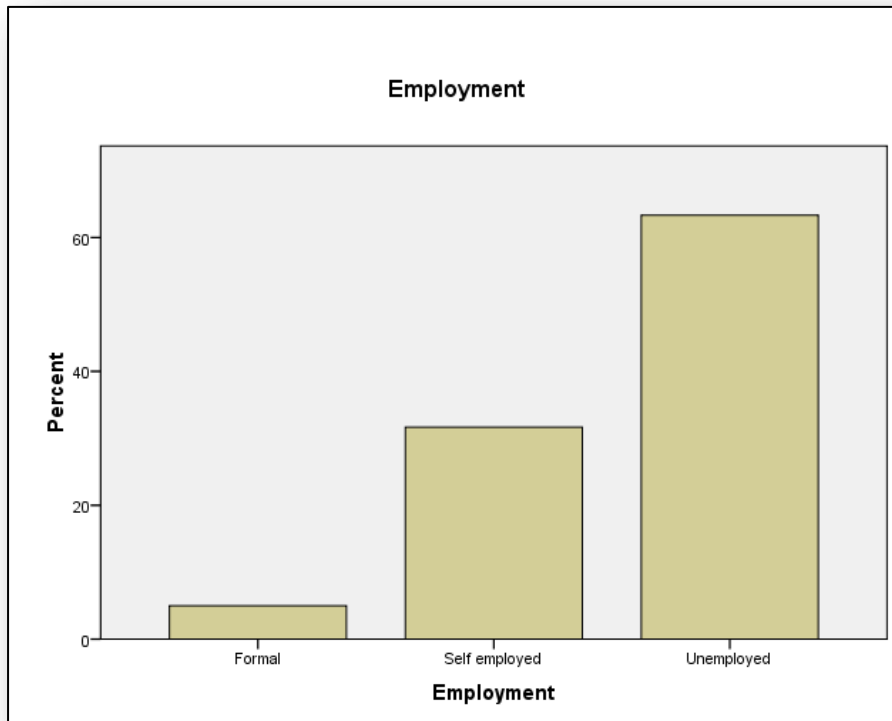
Figure 4.3 Educational Qualifications



2(3, 3%) of the respondents never attended school, 25 (41,7) attained education up to primary level, 17(28,3) studied up to Zimbabwe Junior Certificate 8(13.3) are holders of ordinary level certificates and 3(5%) attained an advanced secondary level and 5(8, 3%) possess tertiary level qualifications. Therefore, one can say that the majority have at least passed through school.

Employment status

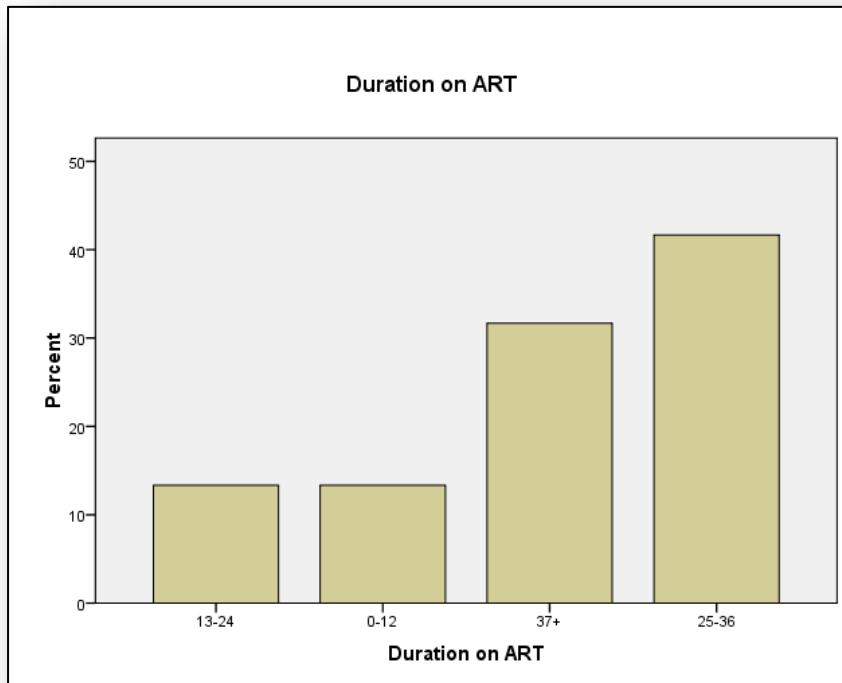
Figure 4.4 Employment Status



The unemployed category dominated with 38 respondents (63, 3%). Self-employed respondents constituted 19(31, 7%) of the total population that was studied. The formally employed section had the least frequency of 3(5%) so, most of the respondents in this study were unemployed

Duration on ART

Figure 4.5 Duration on ART

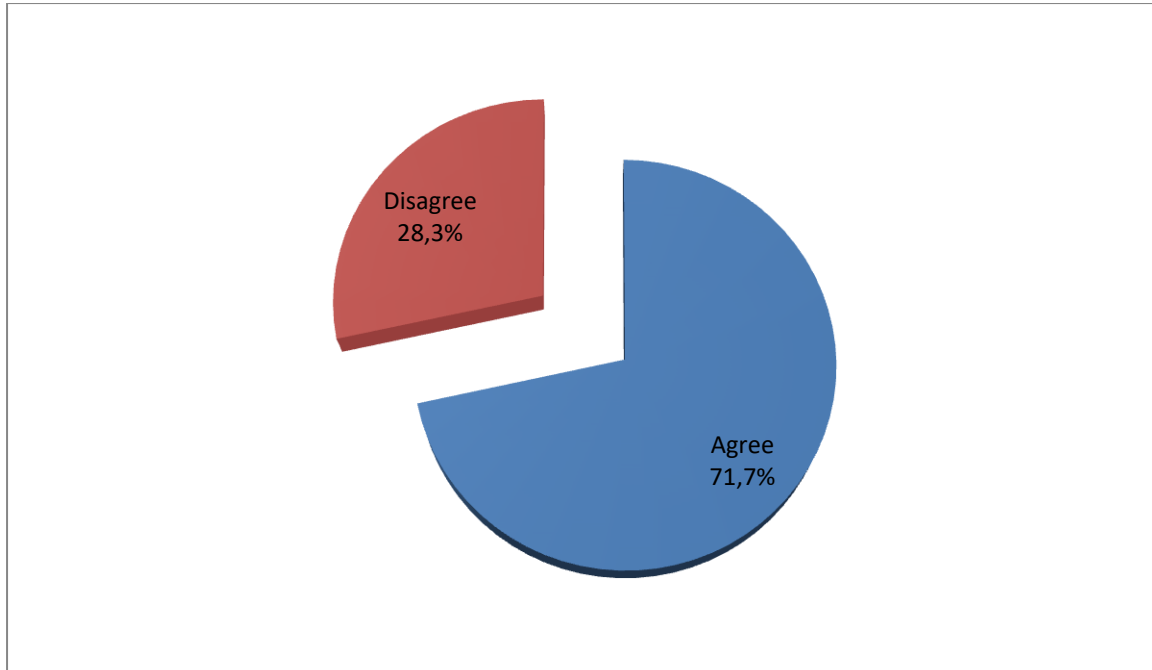


Most of the participants were of the 25-35 duration class which had 25(41,7%) followed by 19(31,7%) from the 37+ group and both the 13-24 and the 0-12 months had 8(3,3%).Therefore, one can safely say that most of the PLWHA who are on ART in Chizvirizvi have more than two years on the therapy.

4.2.3 Responses to knowledge on ART

Taking ART prevents disease progression

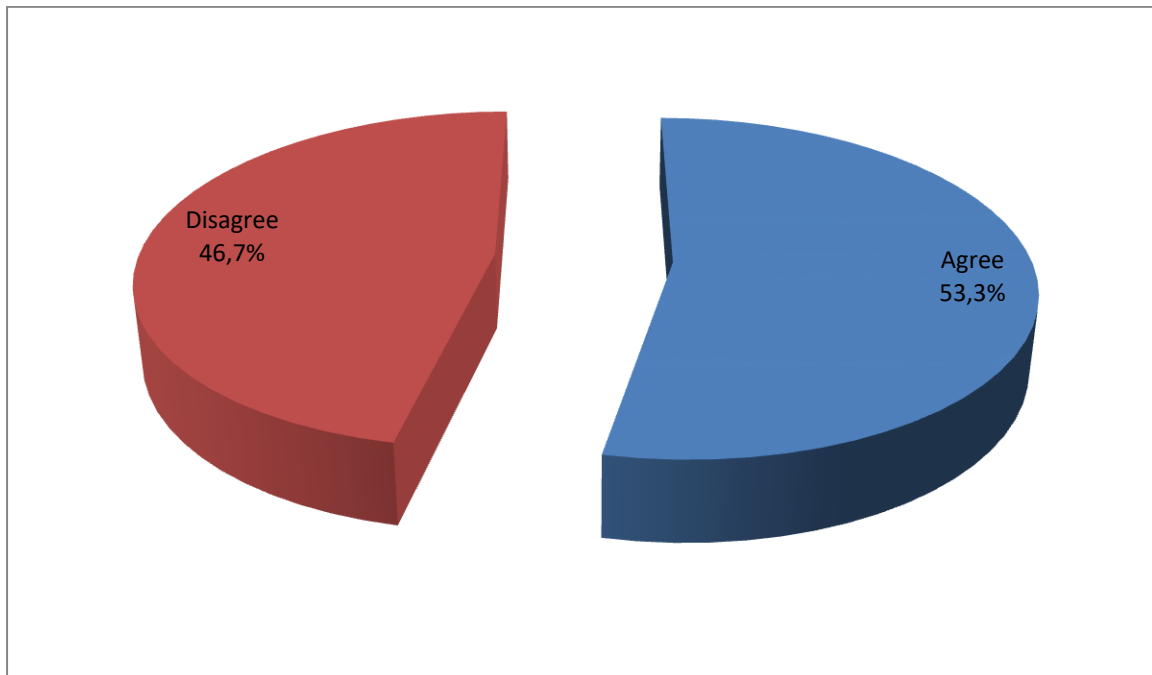
Figure 4.6 Taking ART prevents disease progression



71, 7 % of the respondents agreed that taking ART prevents disease progression whereas 28,3% disagreed on the same notion which is illustrated by Fig 4.6 above. It can be said that the majority of the respondents as represented by the 71, 7% are knowledgeable on ART and how it prevents disease progression.

ART has some side effects

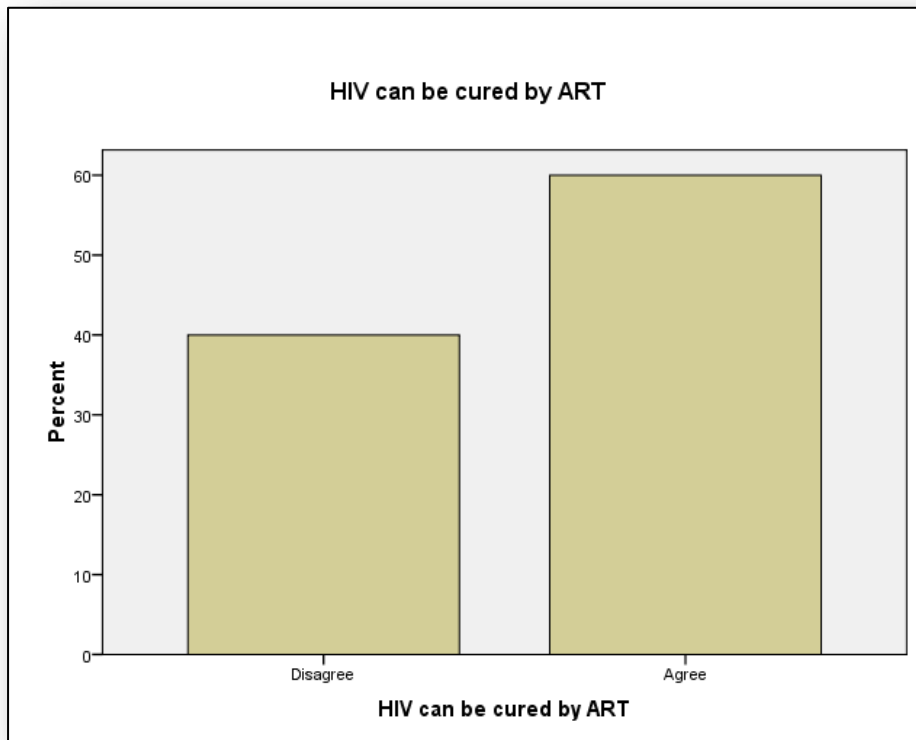
Figure 4.7 ART has some side effects



Participants' responses on the variable that ART can cause side effects was 32(53, 3%) who agreed and 28 (46, 7) who disagreed. This indicates that PLWHA at Chizvirizvi clinic are taught on the side effects of ART as indicated by the responses.

HIV can be cured by ART

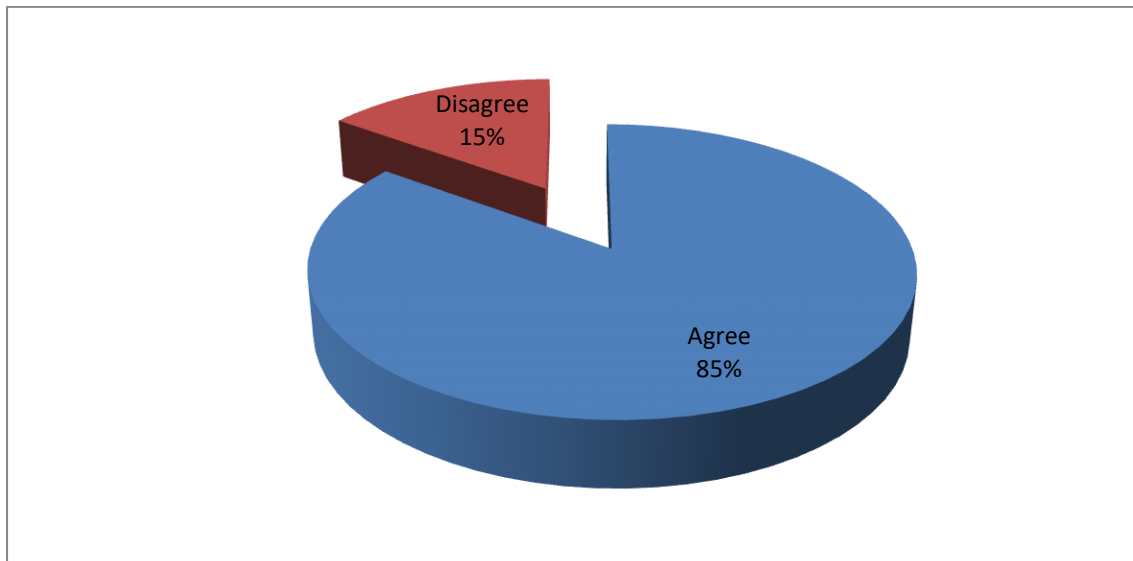
Figure 4.8 HIV can be cured by ART



60% of the respondents agreed that ART can cure HIV whereas 40% disagreed. The belief that HIV can be cured by ART was associated with lower educational levels which is evidenced by majority of respondents that agreed being holders of Zimbabwe Junior Certificate qualifications and below.

Not starting ART when indicated can make you sick

Figure 4.9 Not starting ART when indicated can make you sick

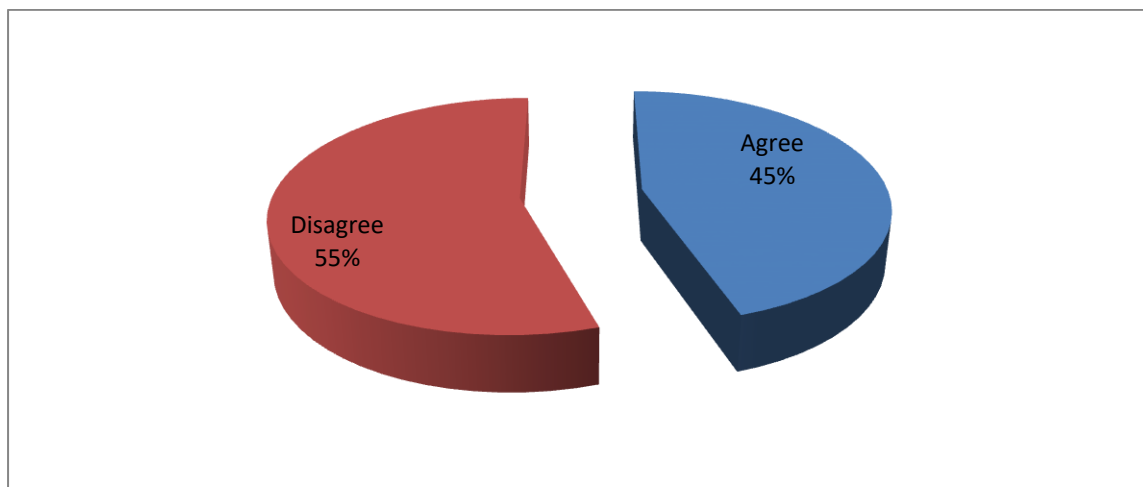


85% of the population agreed to the notion that not starting ART when indicated can make you sick whereas 15 % disagreed. From the results, it is clear that, respondents are knowledgeable of the benefits of ART when taken in time.

4.2.4 Responses to levels of knowledge towards ART

HIV can be controlled by ART

Figure 4.10 HIV can be controlled by ART

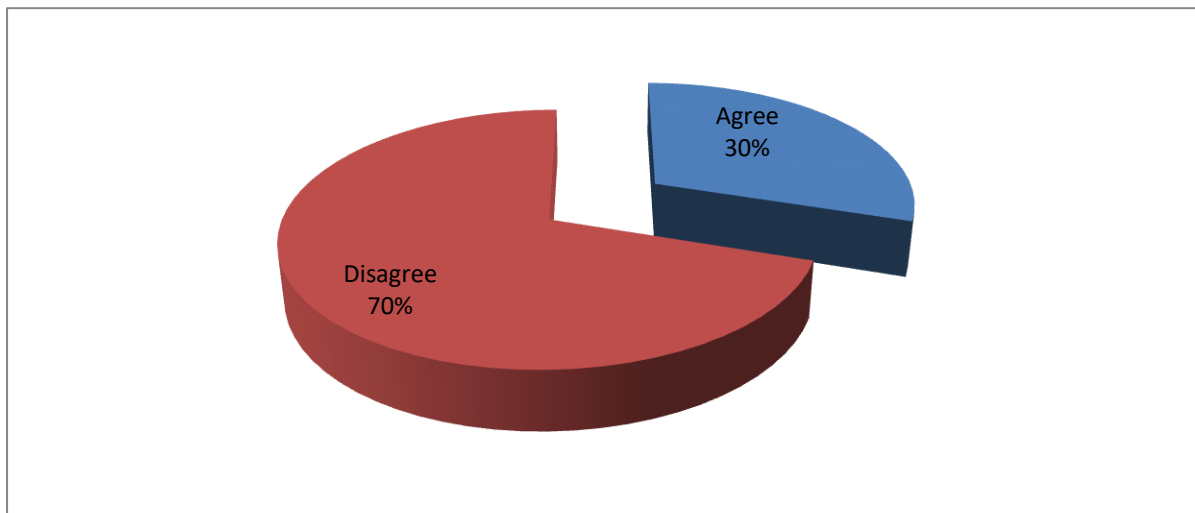


45% of the respondents agreed to the given statement that HIV can be controlled by ART. However, 55% disagreed to that statement, hence one can conclude that, the level of

education reached by the respondents has an influence on this idea as evidenced by the majority who agreed being holders of ZJC up to tertiary education qualifications.

HIV can be prevented by ART after rape

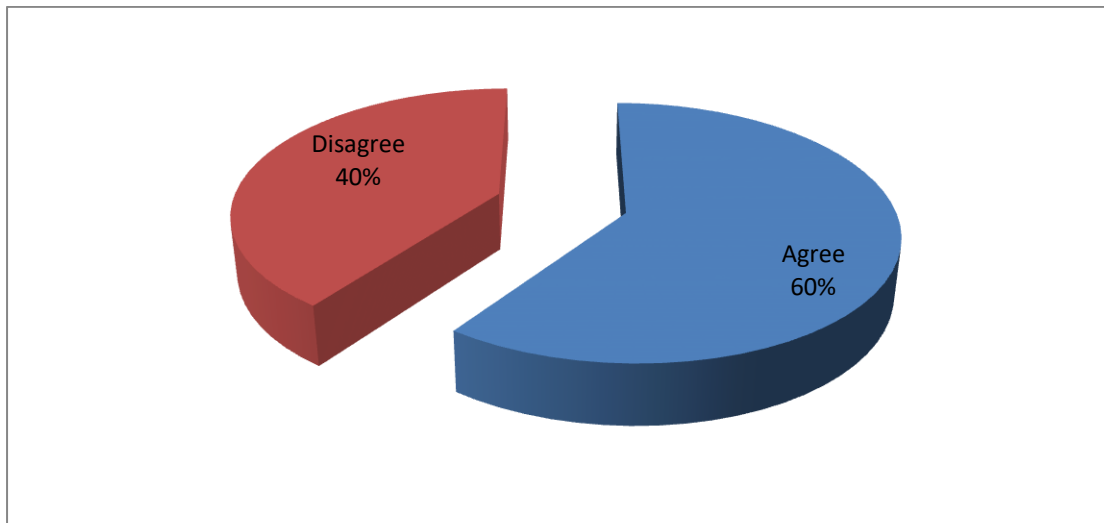
Figure 4.11 HIV can be prevented by ART after rape



30% agreed on the idea that HIV can be prevented by ART after rape and 70% disagreed. The majority of those few who agreed are formally employed people and those who attained advanced level and tertiary education meaning that, level of knowledge on ART medication in Chizvirizvi has a lot to do with educational qualifications attained.

ART prevents mother to child transmission

Figure 4.12 ART prevents mother to child transmission

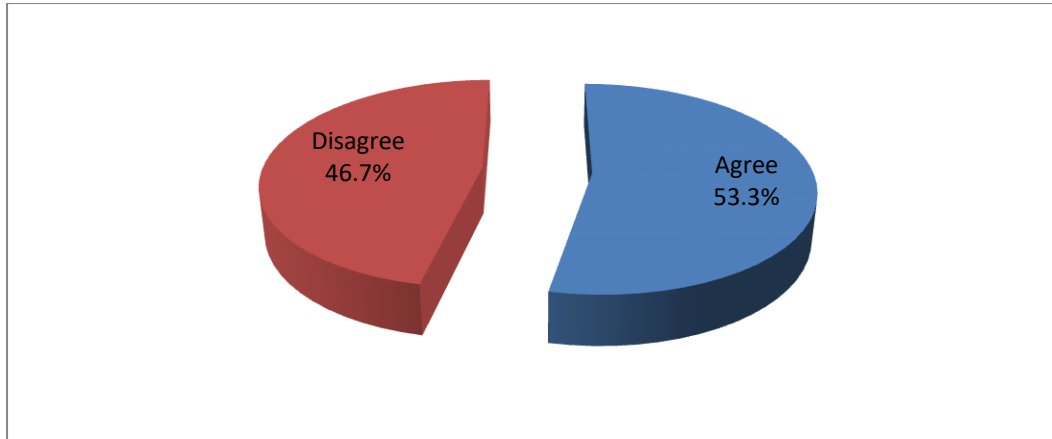


The majority of respondents that is 60% agreed that mother to child transmission can be prevented by ART. However, 40% disagreed, therefore, from the responses; one can say that knowledge on ART and PMTCT is influenced by the duration respondents have been on ART medication. The more years spend, the more counselling sessions attended and therefore more knowledge attained.

4.2.5 Responses to attitudes towards ART

If you are currently on ART, have you ever thought of stopping?

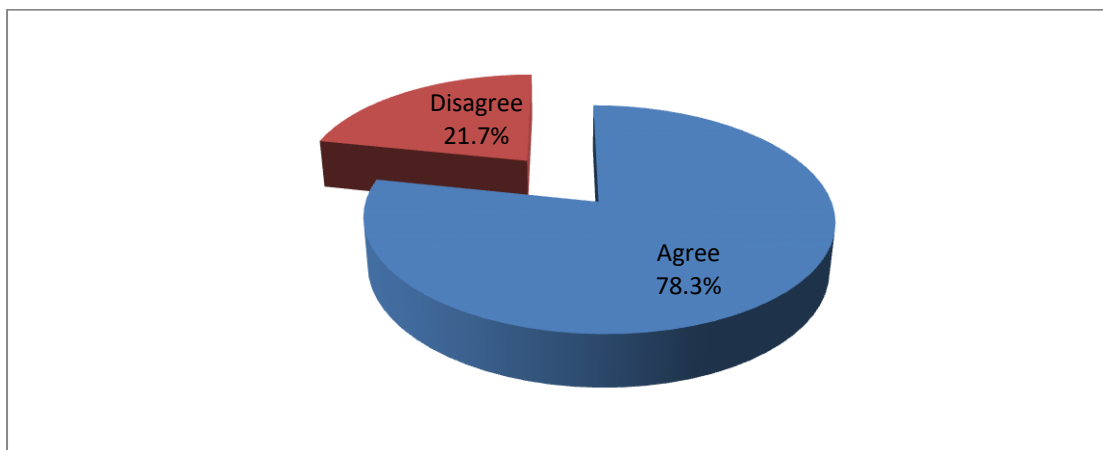
Figure 4.13 If you are currently on ART, have you ever thought of stopping?



Of the 60 respondents, 53, 3% agreed whereas 46, 7% disagreed that, at one point from the time they commenced ART, they had thoughts of stopping the medication. This could be explained by the fact that, respondents have knowledge that ART causes side effects so quitting medication is a way of running away from those side effects.

Can people with HIV be cured with traditional means?

Figure 4.14 Can people with HIV be cured with traditional means?

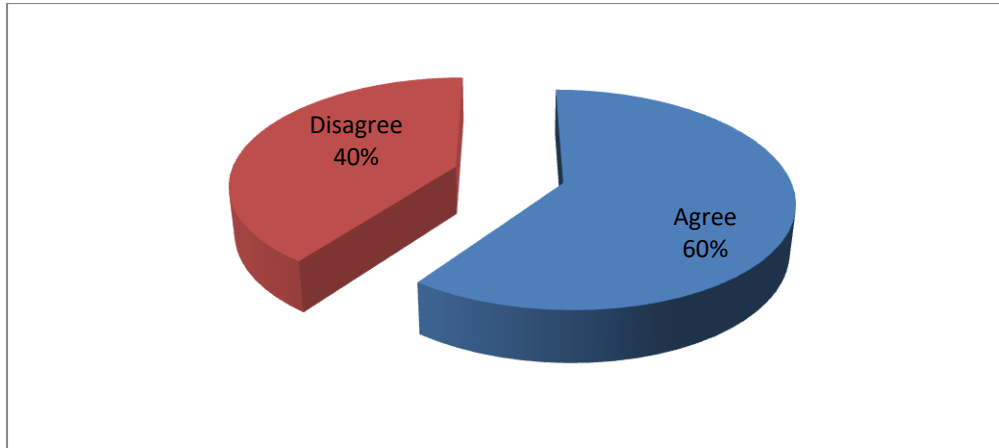


In response to this item, it is clear that majority of the respondents agreed that HIV/AIDS is curable traditionally 78, 3% and 21, 7% disagree on the same notion. Hence one can conclude that the majority of respondents believe that, by consulting traditional healers, they can get cured of HIV/AIDS.

4.2.6 Responses to the importance of ART adherence

Taking ART on schedule prevents you from being sick

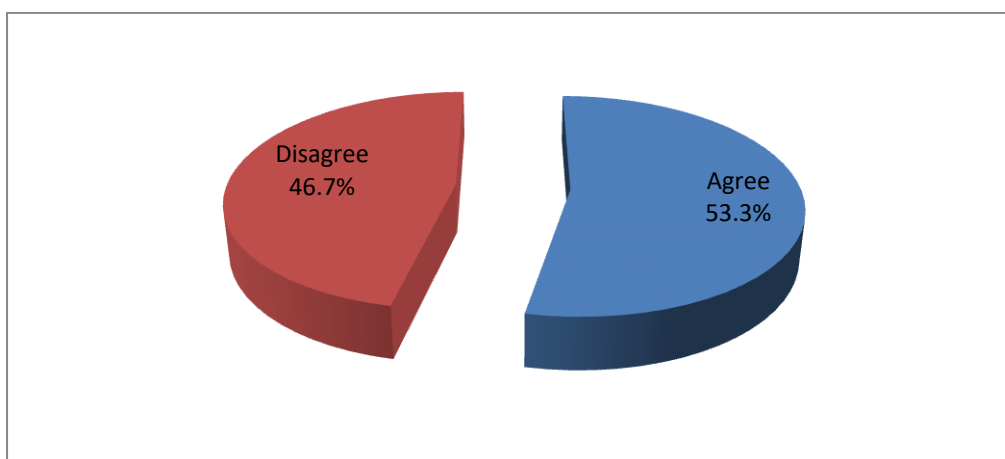
Figure 4.15 Taking ART on schedule prevents you from being sick



Patient knowledge on the importance of adherence was also assessed. 60% of the patients agreed that taking ART on schedule prevents sicknesses and 40% of the respondents disagreed on the same variable. Therefore, in this study, the researcher can say that, knowledge on ART adherence is high and it is associated with the length of time on the therapy.

Missing doses of ART leads to disease progression

Figure 4.16 Missing doses of ART leads to disease progression

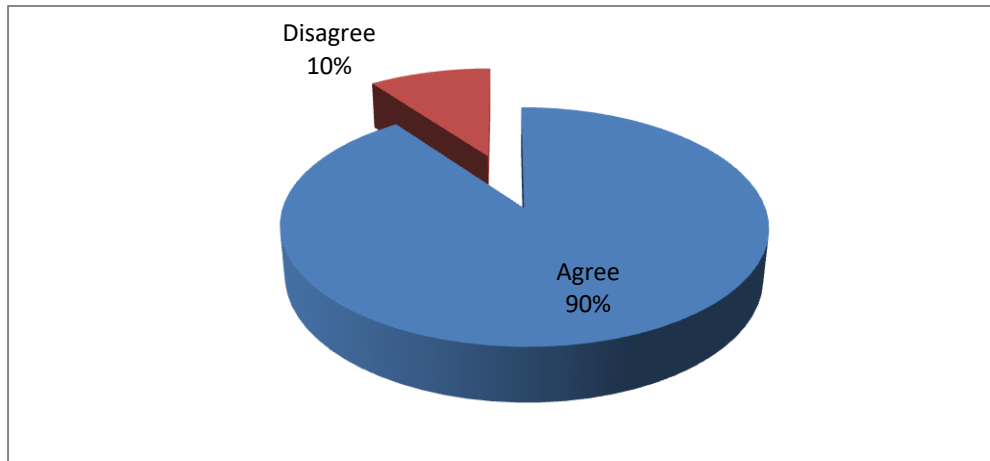


There was a somewhat even distribution of responses on this item where 53, 3% agreed and 46, 7% disagreed that missing ART doses lead to disease progression. The explanation that can be deduced from the frequencies on ART causing side effects and those on the notion that

the missing of ART doses lead to side effects have a relationship. This explanation suggests that ART adherence is influenced by knowledge on side effects caused by the therapy.

Missing doses of ART increases the risk of transmitting HIV

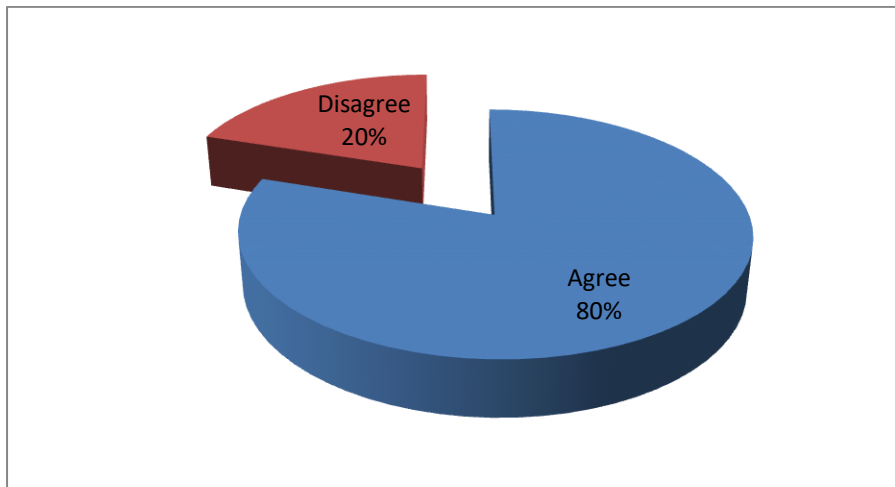
Figure 4.17 Missing doses of ART increases the risk of transmitting HIV



With regard to the knowledge that missing doses of ART increases the risk of transmitting HIV, frequency distributions indicated that almost all respondents are knowledgeable about compliance to ART prescribed by the health professionals as being essential (90%). Only 10% disagreed that missing doses increases the risk of HIV transmission. This could be explained by the fact that majority of the respondents had been on ART for more than 2 years plus the continuous provision of HIV/AIDS education and adherence counselling to the patients at any encounter with the healthcare providers at Chizvirizvi clinic.

Optimally adhering to ART makes HIV virus undetectable in the blood

Figure 4.18 Optimally adhering to ART makes HIV virus undetectable in the blood



Most participants (80%) agreed that the HIV virus can become undetectable in the blood when one adheres optimally to the medication however, only 20% disagreed on the same idea thereby suggesting that respondents have knowledge on adherence to the therapy and the implications of adherence.

4.3 Conclusion

This chapter presented the findings of the research as well as the analysis and interpretation of data. Every item on the questionnaire was presented in form of graphs and charts. The next chapter will provide the research discussions, conclusions and recommendations.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a discussion of the findings obtained in the previous chapter in relation to the hypothesis and the literature review. It is divided into three sections. The first section is on the discussion of the findings, the second section provides the conclusions and the third part provides the recommendations and areas of further research.

5.2 Discussion of Results

The research meant to examine the knowledge and attitudes people living with HIV/AIDS at Chizvirizvi clinic have on ART and find out the influence of knowledge and attitudes on adherence to the therapy.

5.2.1 Influence of knowledge on ART towards adherence

ART side effects are said to be one of the causes of non-adherence to the medication (Obriem, Clark & Besch 2003). Most of the side effects are beyond people's control since they are caused by genetic factors and drug- drug interactions but some are caused by humans on their own so, if people on ART choose to follow instructions given to them by the health practitioners in relation to managing HIV/AIDS ,it allows them to curb some of the side effects caused by ARVs.

As indicated in the literature review, disease progression can be prevented by taking ART as stated by Highleyman (2011) who supports that view by saying that, if HIV medications are commenced just after HIV infection, disease progression may be decelerated. Results obtained showed that information on ART and the prevention of disease progression is reaching patients probably through adherence counselling provided whenever people on ART visit the clinic for their monthly medical supply

Knowledge that missing ART doses increases the risk of transmitting HIV was very high and among those with more than four months on ART compared to those below .This result is only noteworthy and is grounded on a sample of respondents on ART, it shows that those with more than 4 months on ART had at one point thoughts of stopping ART. In any occasion, this outcome calls for proper and tailor-made education communications stressing that reduced ART adherence leads to drug resistance and disease progression.

WHO (2007) as stated earlier in chapter 2, asserts that post exposure prophylaxis (PEP) is mostly vital to people who have been sexually abused and it is effective provided it is administered within 72 hours from exposure. However, in this study, respondents showed limited knowledge on the issue of PEP as evidenced by the minority group making just 30% who agreed that HIV can be prevented by ART after rape.

From the results, it shows that a greater percentage of respondents agreed that an HIV positive mother can give birth to HIV negative babies which is in line with WHO (2003) which says that the risk of mother to child transmission can be reduced to 5% through a mixture of prevention actions. It is important that people know and encourage their contemporaries to save their babies from HIV by seeking medical attention in time in order to come up with an HIV free generation.

5.2.2 Influence of attitudes on ART towards adherence

The results of this study shows that people's attitudes on ART medication is directly affected by their culture as stated in the literature review that, in a traditional African conceptualisation of well-being and illness, diseases may be well-thought-out a mystical wonder connected to ancestors, living people, animals, vegetation, and other substances (Kale, 1995). The researcher found out that the majority of the respondents agreed that people with HIV can be cured with traditional means. The belief that traditional doctors can cure HIV is fuelled by their culture as they consult traditional healers for assistance when they face health problems. Of the 46 respondents who agreed that HIV can be cured by traditional means, 42(91,3%) were women meaning that women in Chizvirizvi are attached and believe in their culture more than men.

To add on that, a greater percentage (60%) reported to have had thoughts of stopping to take medication in one point from the time they commenced ART. Basically, it shows that, PLWHA as they are represented by the respondents, have negative feelings towards ART which affects their adherence to their adherence to the medication. Negative feelings towards ART make people susceptible to discomfort which comes from myths about ART. From the results of the study, 20(62, 5%) respondents, female respondents agreed to have had thoughts of stopping ART at one point.

5.2.3 Adherence and the achieving of ART goals

From the results on missing doses on ART leads to disease progression, females constituted the larger percentage of respondents who agreed with the view and males constituted the smallest percentages. Therefore, it shows that females have knowledge on ART adherence because it shows that they are aware of the negative effects of non-compliance. This is in line with what Stevens et al (2004) said that poor adherence to ART can lead to clinical, immunological and virologic failure which leads to the spread of drug resistant forms of virus.

The researcher found out that the majority of the respondents agreed with the fact that missing doses of ART increases the risk of transmitting HIV hence it shows that respondents are knowledgeable on the consequences on non-adherence. Deeks (2001) in support states that, ART disruption brings about negative effects to people living with HIV which include a decrease in CD4 count, increased resistance to medication and viral rebound. Deeks (2001) goes on to say that defaulters face the virologic failure challenge which leads to disease progression.

From the literature in the second chapter, it has been shown that one of the goals of ART is the virologic aim which is supported by WHO(2003) to be the achievement of maximum and durable suppression of the viral load which when accomplished, makes the HIV virus reach an extent of being undetectable in the blood stream. In this research, it has been found that respondents display problems with knowledge pertaining to ART adherence, as demonstrated by figure 4.18 where an insignificant percentage of 20% of the respondents pointed out that they disagreed to that optimally adhering to ART makes HIV virus undetectable in the blood.

It has been shown that adherence stops disease progression and prevents sicknesses in people living with HIV/AIDS. Highleyman (2011) said that, when HIV is untreated, viral load spreads at very high speed soon after infection, but then relaxes at a very steady level called the viral set point. The current study has demonstrated that, knowledge on the importance of ART adherence is associated with the length of time a person has been on ART.

5.3 Conclusion

From the findings in this study it can thus be safely concluded that the majority of the respondents have knowledge on ART that has been sufficiently provided to them by health

workers however, their culture which believes in tradition affects their attitudes which results in non-adherence to medication.

5.4 Recommendations

- Effort should be intensified into public health campaigns that are aimed at promoting acceptance of ART by changing peoples' negative attitudes towards ARVs. These efforts should be directed more at those who are HIV positive and those on taking care of them. These educational efforts could eventually bring about the desired behavioural change and thus lead to a decrease in ART default rate.
- Programmes and efforts aimed at providing health information to the public should continue and be strengthened as knowledge and practices may change over time.
- A concentrated effort should also be directed towards persons on ART, as part of the orientation of people on enrolment in the role out programme for ARV's to highlight misconceptions of what ARV's can and cannot do.
- There is a need to incorporate ART education in secondary level schools' health programmes, so that young people get to know, accept and use ART on their own and help their family members with information. It may also be worth health educators' to ascertain commitment to the use of ARVs among PLWHA as well as pointing out to members of the public that reason based on scientific knowledge should reign over attitude and even group pressure when it comes to the use of ARVs.
- There is need to use questionnaires translated to native language of the respondents because in this study it was a bit difficult administering English questionnaires to the Shanghai people.

5.5 Conclusion

The main thrust of this chapter was to discuss the research findings from the questionnaire in relation to the literature review. The chapter has also brought out the discussions and drew conclusions from such. Recommendations were put forward for the PLWHA and health workers.

REFERENCE LIST

- Antiretroviral therapy literacy for community- based caregivers.* (n.d) retrieved from <http://www.safaids.net/files/LEM%202>.
- Ary, D., Jacobs, L.C., Razavieh, A. and Sorensen, C. (2006). *Introduction to research in education.* Canada: Thompson Wadsworth
- Babbie, E. (1998) *The practice of social research.* Belmont: Wadsworth publishing company.
- Baylor M,S. Johann-Liang R.(2004) *Hepatotoxicity associated with nevirapine use. J Acquired Immune Defic Syndr.* 35(5):538-539. Available at http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15021321.
- BHIVA (2011) *UK guideline for the use of post-exposure prophylaxis for HIV following sexual exposure.*
- Boateng, D. and Awunyo-Vitor, D (2012) *Public health research*
- Campbell, C. (2003). *Letting them die: How HIV/AIDS prevention programmes often fail.* Wetton, South Africa: Double Storey Books.
- Catz. S. T, Heckman, A and Kochman, (1999) “*Adherence to HAART therapy among older adults living with HIV disease*” in *proceedings of the Fourth International Conference on the Biophysical Aspects of HIV infection, Ottawa*
- (CONNECT)_*Diploma in systemic family counseling manual Aids Patient Care STDS* 14: 477-84.
- Conrad. (1985) *The meaning of medications: Another Look at Compliance.*
- Dhakal, K. S. and Aryal, B.(2012) *International Journal of Pharmaceutical & Biological Archives.*3(3)534-538
- Dyer, C. (1995) *Beginning research in psychology. A Practical Guide to Research Methods and Statistics* Oxford: Blackwell.

- Fisher, J.D, Fisher, W.A, Amico, R. and Harman, J.J, (2006) An information-motivation- behavioural skills model of adherence to antiretroviral therapy *Health Psychology*, 25:462–473.
- Gavin, H. (2008) *Understanding research methods and statistics in psychology*. New Delhi: Sage Publications.
- Godwin, C.J. (2011) *Research in psychology .Methods and design international student version 7th edition* Singapore: Wiley.
- Haslam, S.A and McGarty. (2003) *Research methods and statistics in psychology* New Delhi: Sage Publications.
- Hayden, J.A. (2009) *Introduction to health behaviour theory*. Sudbury: Jones and Bartlett.
- Haynes, B. R, Taylor, D.W and Sackett, D.L. (1979). *Compliance in Healthcare*. Baltimore: Highleyman, L. (2011) Immediate ART during early HIV infection may delay HIV progression. *Journal of Infectious Diseases*.
- Jani, A.A.(n.d) Adherence to HIV treatment regimens: Recommendations for Best
- Kale, R. (1995). South Africa's Health. Traditional healers in South Africa: A parallel health care system. *British Medical Journal*, 310, 1182-1185.
- Kozier, B, Erb, G, Blais, RN & Wilkinson, JM. (2008). *Fundamentals of nursing: Concepts, Process and Practice*. 5th edition New York: Addison-Wesley.
- Mallal S, Phillips E, Carosi G, et al. HLA-B*5701 *Screening for hypersensitivity to abacavir*. N Engl J Med. 2008;358(6):568-579. Available at http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=18256392.
- Martin, M. Del Cacho, E, Codina, C, Tuset, M, De Lazzari ,E, Mallolas, J, Miro, JM, Gatell, JM & Ribas, J. (2008) Relationship between adherence levels, type of the antiretroviral regimen, and plasma HIV type 1 RNA viral load: *A prospective cohort study*. *Aids Research and Human Retroviruses* 24(10):1263-1268.
- Naidoo, J., & Willis, J. (2000). *Health promotion: Foundations for Practice*. London. Bailliere: Trindall.

- O'Brien ME, Clark RA, Besch CL, et al. Patterns and correlates of discontinuation of the initial HAART regimen in an urban outpatient cohort. *J Acquired Immune Deficiency Syndr.* 2003;34(4):407-414. Available at http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14615659.
- Ogden, J. (2000). *Health psychology: A Textbook*. Groot Brittanje: Biddles.
- Paterson, D.L, Swindells, S. Mohr, J. Brester, M. Vergis, E.N, Squier, C, Wagener, M.M, & Singh, N.(2000) Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine* 133(1):21-30.
- Polit, D. F. & Beck, C.T. 2008. *Nursing research: Generating and Assessing Evidence for Nursing Practice*. 8th edition. Philadelphia: JB Lippincott. Practices. www.alpha.org/ppp/hiv/Best_Practices.pdf.
- Richter, D. L., Sowell, R. L., & Pluto, D. M. (2002). Attitudes toward antiretroviral therapy among African American women. *Journal of Health Behaviour*, 26, 25-33
- Roberts, K.J. (2000) *Physician beliefs about antiretroviral adherence communication*.
- Safren, S.A., Kumarasamy N, . James R, .Raminani S.,. Solomon S, and Mayer K.H.(2005) “*ART adherence, demographic variables and CD4 outcome among HIV positive patients on antiretroviral therapy in Chennai, India*”, *AIDS Care*, vol.17, no.7, pp.853-862., 2005.
- Schutt, R. K, (1999) *Investigating the social world: The Process and Practise of Research* 2nd edition. Thousand Oaks: Pine Forge Press. *Sci Med* 1985; 20(1):29-37.
- Shaugnessy, J. J, Zechmeister, E.B and Zechmeister, J.S. (2000) *Research Methods in Psychology* 5th Edition. Singapore: McGraw Hill.
- Shorne, R., Clatworthy, J., Polmear, A., & Weinman, J. (2001). Do hypertensive patients' beliefs about their illness and treatment influence medication adherence and quality of life? *Journal of Human Hypertension*, 15, s65-s68.
- Solso, R. L., Johnson, H.H. and Beal, M. K. (1998) *Experimental Psychology a Case Approach* .6th edition New York.: Longman.

Stevens. Kaye, S. & Corrah, T. (2004). Antiretroviral therapy in Africa. *British Medical Journal* 328(7434):280-282.

Swartz, L. P. (1998). Culture and mental health: *A Southern African view*. Cape Town: Oxford University Press.

The Johns Hopkins University Press.

Viswanathan, H., Anderson, R., & Thomas, J., (2005). Evaluation of an antiretroviral medication attitude scale and relationships between medication attitudes and medication non-adherence. *AIDS patient care and STDs*, 19, 306-316.

Walker, L., Reid, G., & Cornell, M. (2004). *Waiting to Happen: HIV/AIDS in South Africa*. Lynne Rienner Publishers: Colorado.

Weidle. P, Ganea. C, Irwin.K, McGowan. J. P, Ernst. J.A, Olivio, N & Holmberg, S.D (1999) Adherence to antiretroviral medications in an inner-city population. *Journal of Acquired Immune Deficiency Syndromes* 22(5):498-502.

WHO / ILO (2007) *Post-exposure Prophylaxis to Prevent HIV Infection*.

Midlands State University



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FACULTY OF SOCIAL SCIENCES DEPARTMENT OF PSYCHOLOGY

Date: 20/08/14

To whom it may concern

Dear Sir/Madam

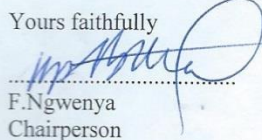
RE: REQUEST FOR ASSISTANCE WITH DISSERTATION INFORMATION
FOR MHAKA MUNYARADZI MELODY
BACHELOR OF PSYCHOLOGY HONOURS DEGREE

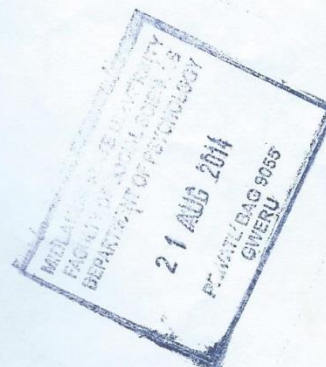
This letter serves to introduce to you the above named student who is studying for a Psychology Honours Degree and is in his/her 4th year. All Midlands State University students are required to do research in their 4th year of study. We therefore kindly request your organisation to assist the above-named student with any information that they require to do their dissertation.

Topic: KNOWLEDGE AND ATTITUDES OF PEOPLE LIVING WITH HIV/AIDS ON ANTI-RETRO-VIRAL THERAPY AT CHIZURIZI CLINIC

For more information regarding the above, feel free to contact the Department.

Yours faithfully


F. Ngwenya
Chairperson



Questionnaire

My name is Munyaradzi Melody Mhaka and I am pursuing an Honours Degree in Psychology at Midlands State University. I am carrying out a research on knowledge and attitudes of people living with HIV/AIDS on Anti Retro-viral therapy. Please feel free to respond to the questions below and be assured that all responses shall be treated with utmost confidentiality.

Please read each statement and tick the correct response.

Do not write your name on the questionnaire

Section A: Demographic data

- | | | |
|--------------------------------|--------------------|--------------------------|
| 1. Age Range | Less than 20 | <input type="checkbox"/> |
| | 20-25 | <input type="checkbox"/> |
| | 26-30 | <input type="checkbox"/> |
| | 31-35 | <input type="checkbox"/> |
| | 35+ | <input type="checkbox"/> |
| 2. Sex | Male | <input type="checkbox"/> |
| | Female | <input type="checkbox"/> |
| 3. Marital Status | Single | <input type="checkbox"/> |
| | Married | <input type="checkbox"/> |
| | Divorced\Separated | <input type="checkbox"/> |
| | Widowed | <input type="checkbox"/> |
| 4. Level of academic education | None | <input type="checkbox"/> |
| | Primary | <input type="checkbox"/> |
| | ZJC | <input type="checkbox"/> |
| | O level | <input type="checkbox"/> |
| | A Level | <input type="checkbox"/> |
| | Tertiary | <input type="checkbox"/> |
| 5. Employment | Formal | <input type="checkbox"/> |

Self employed
Unemployed

6. Are you currently on ART?

Yes
No

7. If yes to question 7, for how longmonths /years

Section B: Knowledge on ART

- | | | |
|--|----------|--------------------------|
| 1. Taking ART prevents disease progression | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |
| 2. ART can cause side effects | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |
| 3. HIV can be cured by ART | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |
| 4. Not starting ART when indicated can make you sick | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |

Section C: Levels of knowledge towards ART

- | | | |
|--|----------|--------------------------|
| 1. HIV can be controlled by ART | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |
| 2. HIV can be prevented by ART after rape | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |
| 3. ART prevents mother to child transmission | Agree | <input type="checkbox"/> |
| | Disagree | <input type="checkbox"/> |

Section D: Attitudes towards ART

- | | | |
|--|-----|--------------------------|
| 1. If you are currently on ART, have you ever thought of stopping to take medication | Yes | <input type="checkbox"/> |
| | No | <input type="checkbox"/> |

2. If you are not on ART, would you be comfortable to start? Yes
No

3. Can people with HIV be cured with traditional means Yes
No

Section E: Importance of ART adherence

1. Taking ART on schedule prevents you from being sick Agree
Disagree

2. Missing doses of ART leads to disease progression Agree
Disagree

3. Missing doses of ART increases the risk of transmitting HIV Agree
Disagree

4. Optimally adhering to ART makes HIV virus undetectable in Agree
the blood Disagree

F.A.C.T.



By love serve one another
Galatians 5: 13

FAMILY AIDS CARING TRUST (CHIREZI)

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EMAIL: factchr@mweb.co.zw
factprograms@zol.co.zw

27 August 2014

TO WHOM IT MAY CONCERN

RE: CONFIRMATION OF APPROVAL TO CARRY OUT ACADEMIC RESEARCH

This serves to confirm that Mhaka Munyaradzi Melody has been granted permission to gather data for her academic research from Chizvirizvi Clinic and only for the purpose of that research.

Yours faithfully

F. Hove
.....

F.Hove
Acting Director

DATE	ACTIVITY	SUPERVISOR'S SIGNATURE	STUDENT'S SIGNATURE
24/03/14	TOPIC DISCUSSION	<i>Mhaka</i>	<i>Mhaka</i>
14/04/14	SUBMISSION OF PROPOSAL	<i>Mhaka</i>	<i>Mhaka</i>
18/04/14	DISCUSSION OF PROPOSAL	<i>Mhaka</i>	<i>Mhaka</i>
21/04/14	SUBMISSION OF PROPOSAL	<i>Mhaka</i>	<i>Mhaka</i>
24/06/14	SUBMISSION OF CHAPTER 1-3	<i>Mhaka</i>	<i>Mhaka</i>
13/08/14	DISCUSSION OF CHAPTER 1-3	<i>Mhaka</i>	<i>Mhaka</i>
15/08/14	SUBMISSION OF CHAPTER 1-3	<i>Mhaka</i>	<i>Mhaka</i>
19/08/14	QUESTIONNAIRE	<i>Mhaka</i>	<i>Mhaka</i>
21/08/14	DISCUSSION OF QUESTIONNAIRE	<i>Mhaka</i>	<i>Mhaka</i>
18/09/14	DISCUSSION OF CHAPTER 4-5	<i>Mhaka</i>	<i>Mhaka</i>
4/10/14	SUBMISSION OF CHAPTER 4-5	<i>Mhaka</i>	<i>Mhaka</i>
13/10/14	TURNITIN	<i>Mhaka</i>	<i>Mhaka</i>
15/10/14	FIRST DRAFT	<i>Mhaka</i>	<i>Mhaka</i>
20/10/14	FINAL DRAFT	<i>Mhaka</i>	<i>Mhaka</i>