GENDER-BASED VIOLENCE AND ADHERENCE TO ANTI-RETROVIRAL THERAPY AMONG HIV-INFECTED WOMEN ATTENDING CARE AND TREATMENT CLINIC, MBEYA TANZANIA 2017

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By

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A dissertation submitted in (partial) Fulfillment of the Requirements for the Degree of Masters of Science (Applied Epidemiology) of

Muhimbili University of Health and Allied Sciences
October, 2017

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Muhimbili University of Health and Allied Sciences dissertation entitled: ***Gender-based violence and adherence to anti-retroviral therapy among HIV-infected women attending care and treatment clinic, Mbeya Tanzania 2017,*** in fulfillment of the requirements of the degree of Master of Science in Applied Epidemiology of the Muhimbili University of Health and Allied Sciences.

……

Prof. Gideon Kwesigabo

(Supervisor)

……..

Date

DECLARATION AND COPYRIGHT

I, **Luoga, Alex Robert** declare that this **dissertation** is my own original work and that it has not been presented and it will not be presented to any other University for the similar or any other degree award.

Signature……..…… Date ……...

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DEDICATION

To my lovely family, **Iluminata Mgimba** my wonderful wife and my terrific kids **Revina, Rodgers,** and **Tulla Luoga** for their understanding and patience all the time I was doing this work.

I love you so much

ABSTRACT

Background: Approximately62% of women living with HIV receive antiretroviral therapy (ART) in Tanzania. To maximize the clinical benefits of ART and attain a successful treatment outcome, more than 95 % adherence level is necessary. However, sustaining high levels of adherence to ART is a challenge. Gender based violence is identified as one of the barrier to achieving that high level of adherence among women living with HIV/AIDS

Objective: This study aimed at determining the relationship between Gender Based Violence and ART adherence among women on ART attending CTC in Mbeya Region.

Methodology: Analytical cross-sectional study was conducted among HIV-infected women aged above 18years on ART attending CTC in Mbeya Regional hospital. A probability sample was drawn and interviewed after informed consent using structured questionnaire. Collected data was analyzed using Epi Info version 7

Results; A total of 411 participants were recruited into the study, 67% were in the age group 28-48years, 45.5% were married, 30% widowed, and 58.9% completed primary education, and 78% were self-employed. Sixty one (14.8%) had reported poor adherent to their ART treatment while prevalence of ever having any form of violence was (24.8%).

Poor ART adherence was more likely among clients with psychological violence (AOR=4.89, 95%CI:1.07-22.2), had history of alcohol use (AOR=5.54, 95%CI:1.3-4.6), or had stigma (AOR=7.55,95%CI:1.61-35.24), lack of disclosure of HIV sero-status(AOR=1.12,95%CI:0.21-5.81), and rural residence(AOR=0.52,95%CI:0.07-3.57), were not associated with poor adherence to ART.

Conclusion: The results indicated that gender based violence contributes to poor adherence to ART for women. Therefore routine screening of women for exposure to violence may be useful in clinical settings where HIV services are provided in order to increase adherence to ART.

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LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ARV	Anti-Retroviral
ART	Antiretroviral therapy
CD4	Cluster of Differentiations Cells type 4
CTC	Care and treatment centre
DC	District commissioner
DAS	District Executive Secretary
GBV	Gender based violence
IPV	Intimate partner violence
HIV	Human Immune Deficiency Virus
MUHAS	Muhimbili University Of Health and allied science
PLWHIA	People Living With HIV/AIDs
PMTCT	Prevention of Mother to Child Transmission of HIV
RAS	Regional executive secretary
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

OPERATIONALDEFINITIONS

Adherence: Taking drugs exactly as they are prescribed. It includes taking them at the right time and in the right doses(1)

Gender: The socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women(2)

Gender-based violence: Gender-based violence refers to all forms of violence that happen to women, girls, and men because of unequal power relations between them and the perpetrators of such violence. It also refers to violence that targets individuals or groups on the basis of their gender(3)

Intimate partner violence: The type of violence which occurs in the domestic sphere

Violence: All acts that cause direct physical, mental, or sexual harm or suffering and threats of such acts. May also be a means of control and oppression that includes physical harm and/or emotional, social, or economic harm

.

CHAPTER ONE

1.0 BACKGROUND

In Tanzania, Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) remain a considerable problem with an adult HIV prevalence of 5.1%(4). Due to the high prevalence of infection, the Tanzanian Government began disseminating free antiretroviral therapy (ART) in 2004. During the same year, the government began scaling up ART as stated in its five-year national Care and Treatment Plan. The aim was to provide ART for as many HIV-infected patients as possible. However, by 2009, only 34% of persons targeted for ART had initiated ART treatment(1).

ART slows disease progression and decreases morbidity and mortality. Suppression of viral replication caused by ART has also been associated with reduced risk of sexual transmission of HIV. The National Guideline for Comprehensive Care Services for Prevention of Mother-to-Child Transmission of HIV and Keeping Mothers Alive recommends that adherence in Tanzania – defined as taking drugs exactly as they are prescribed - be greater than 95%. Achieving >95% adherence to the drug regimen promotes a good virological response and prevents the emergence of viral resistance(5)because ART suppresses the amount of virus in the body (the viral load) but does not cure HIV or AIDS(6,7).

The inter-connections between Gender-Based Violence (GBV) and HIV as both a root cause and consequence of HIV are now widely acknowledged. Since HIV and AIDS emerged over 25 years ago, the percentage of HIV- positive women and girls within the general population of HIV- positive people has increased globally. In Sub-Saharan Africa, women constitute 60% ofpeople living with HIV/AIDS(8)In the recent global report on Violence against women released by the WHO 2013, it is demonstrated that women who have experienced GBV are likely to acquire HIV(9). GBV can increase the risk of transmission of HIV. Forced sex may directly lead to HIV transmission; women and girls may be unable to negotiate safer sex because of gender power inequalities. Also women living with HIV may also face increased levels of violence, due to stigma and discrimination(10)GBV may also interfere with the ability to access treatment and care, and the ability to maintain adherence to ARV treatment(8).

Globally, many factors have been associated with poor adherence, including medication side effects, low socio-economic status, healthcare system challenges, such as coverage issues, patient challenges related to age, knowledge, psychosocial issues, psychiatric illness, substance abuse, and lack of social support(11,12). Studies have identified a range of barriers to treatment adherence at different levels, including disclosing HIV status to partners, stigma and discrimination, lack of support, poverty, nutrition(lack of food), self-assessed lack of need for further treatment, perceptions of HIV and treatment(such as misconceptions and rumors related to ARVs), disruption in schedules, and program-level factors(1). Predictors of good adherence to HIV medications include availability of emotional and practical life support, including assigning treatment assistance at home(5).

Gender inequity is recognized as a major barrier to effective care, treatment, and prevention efforts. Factors affecting HIV-infected women's ability to access antiretroviral include Gender based violence(GBV), financial and time costs of traveling to service points, and the need to seek permission from partners to access services(13). From Demographic and Health Survey(DHS) in 2012 data from eight countries in Africa, 20 to 50% of married women experienced GBV(14). GBV may also interfere with the ability to maintain adherence to ARV treatment, as many women have to obtain permission from a husband or a relative to seek HIV care, which is difficult when women have to ask for money, take time away from household chores, or have not disclosed their infection status to families(1,13). Evidence also exists that living with HIV may constitute a risk factor for experiencing GBV, with an increase in violence following disclosure of HIV status. Fears of experiencing violence may potentially delay a person's decision to disclose her HIV status and seek treatment when necessary(15), which in turn has a significant impact on treatment adherence: when women are fearful of violence from their partners, they may be more likely to default on medications(16,17).

Violence against women is a common practice in Tanzania(18).The Tanzania Demographic Health Survey 2010 revealed that nearly half(45%) of Tanzanian women aged 15-49 years have experienced physical or sexual violence. The survey revealed regional prevalence variations of gender based violence: while Mara(72%) and Dodoma(71%) were shown to have high levels of physical and sexual violence, Unguja(7%) and Pemba(5%) had lower levels(19).More over 56% of ever-partnered

women in Mbeya and 41% in Dar es Salaam had ever experienced physical or sexual violence at the hands of a partner, in urban district of Moshi 21% of women reported having experienced GBV(20).

1.1 Statement of the problem

Adherence to anti-retroviral therapy (ART) is an essential component of treatment success, adherence rates of >95% are needed to maximize the benefits of ART, achieving such high rates over a long period of time is a challenge. Poor adherence to ART has gained great attention globally especial in sub-Saharan African countries including Tanzania as it may result in treatment failure and the emergence of drug resistant strains of HIV, leading to an increase in morbidity and mortality of people living with HIV and AIDS. In Tanzania Studies indicate that adherence to ART among PLWHA is consistently less than 80%(21,22).Studies across the world described GBV is among of the factors contributing to poor ART adherence among women living with HIV/AIDS (23)In Mbeya region the prevalence of HIV is high but its contribution to poor ART adherence is not known therefore this study aimed at examining the relationship between Gender Based Violence and ART adherence among women on ART attending care and treatment in Mbeya referral hospital, Tanzania.

Figure 1: Conceptual framework illustrates factors influencing adherence to anti-retroviral therapy among HIV-infected women attending care and treatment clinic

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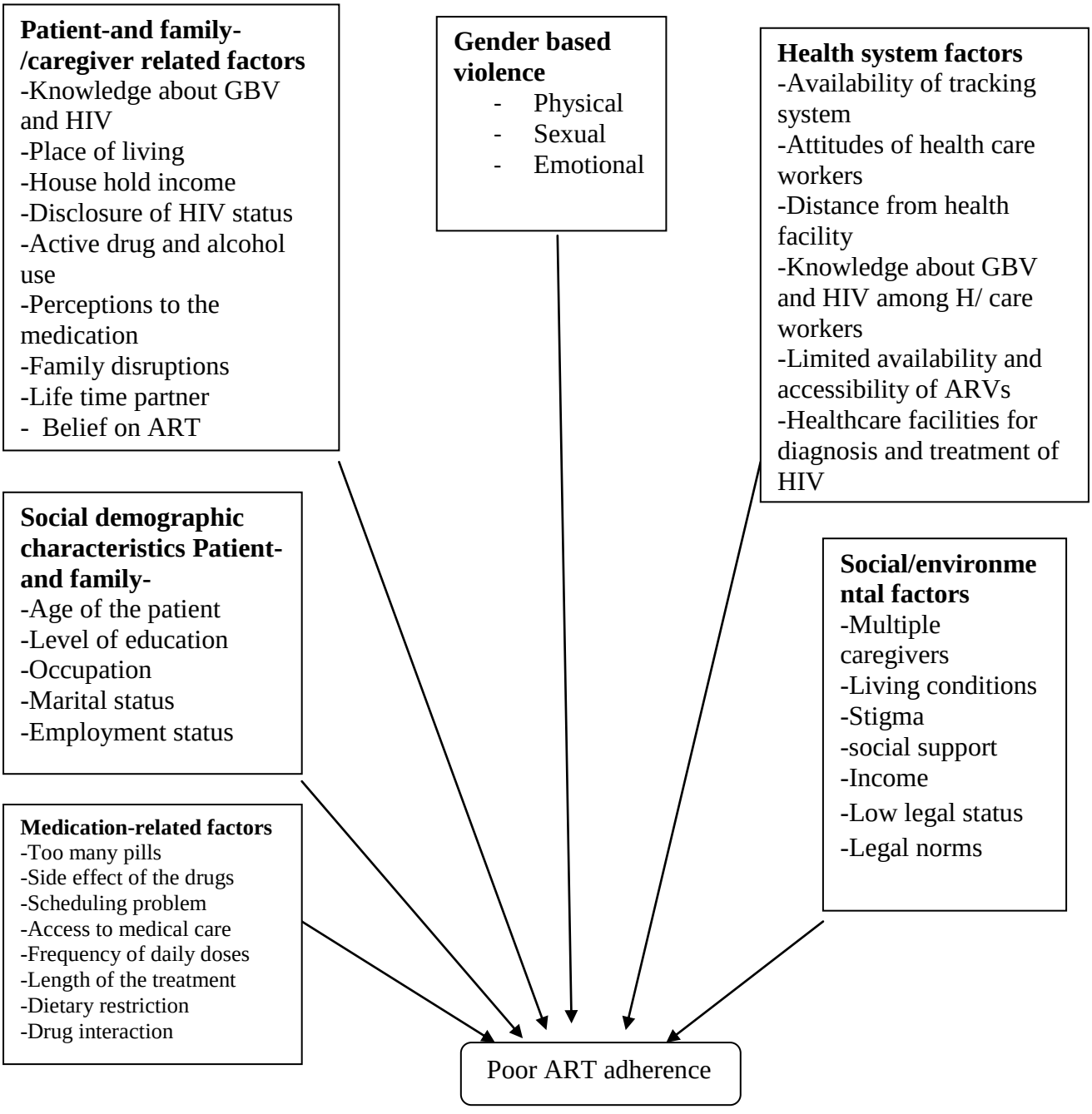

Source: Determinants of Adherence to ART among HIV-Infected Patients in Africa (2012)

The conceptual framework illustrates multiple factors of ART adherence such as, Patient- and family related factors, Health system factors, medication related factors, and how they facilitate or hinder ART adherence among women's CTC attendees. The modified model adapted from, Determinants of Adherence to ART among HIV-Infected Patients in Africa(24), Heise's Integrated Ecological Framework to Violence against Women, Go's Model of Domestic Violence, and the Model of Factors associated with Partner Abuse proposed by Oxfam International(25).

The conceptual framework demonstrated the aim of this study to explore association between GBV and ART adherence and the proportion of adherence and self report, the study will only focused on poor adherence as the outcome of interest.

As a result, the proposed model will include both approaches in illustrating the potential pathways of experiencing GBV and ART adherence. It displays that violence and HIV infection is not only an individual matter, but is constructed within a broader context of cultural and societal expectations and attitudes towards gender roles**.**

1.3 Rationale of the study

Poor adherence to ART among women infected with HIV is a problem. Gender based violence has shown to recently increase in prevalence in the world(20)with Africa being the most affected by gender based violence. However as few studies have investigated the relationship between GBV and ART adherence, little is as known about this relationship in Tanzania. Attention is required for the full understanding of the contribution of GBV to poor adherence to ART. This study aimed at further investigating the relationship between poor ART adherence and GBV to support interventions and increase access to and success of ARVs.

1.3 RESEARCH QUESTIONS

The following research questions were addressed in this study

- What are the magnitude and associated social demographic characteristics of poor adherence among HIV-infected women attending the CTC at Mbeya regional Hospital?

- What is the association between gender based violence and adherence to ART among women attending CTC at Mbeya Regional referral Hospital?
- What are the types of gender-based violence experienced by female patients on ART attending care and treatment centre at Mbeya regional referral Hospital?

1.4 OBJECTIVES

1.4.1 Broad objective

The aim of this study was to determine the association between experiences of gender based violence and ART adherence among women attending CTC at Mbeya regional referral Hospital, March. 2017.

1.4.2 Specific objectives

- To determine the magnitude and associated social demographic characteristics of poor adherence among HIV-infected women attending the CTC at Mbeya regional Hospital
- To identify the type of gender-based violence experienced by female patients on ART at Mbeya regional referral Hospital
- To determine the relationship between experiencing GBV and ART adherence among women clients attending CTC at Mbeya Regional referral Hospital

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Poor ART adherence among PLWHA

The challenges of adherence to ART identified include factors related to patients and their families, socioeconomic factors, medication, and healthcare systems, low adherence to treatment has been associated with higher hospitalization rates, productivity loss, disease progression, and death in both high-income and resource-limited settings(24)(22)

A study was done by Nsimba S. About barriers to ARV Adherence among HIV / AIDS Positive Persons taking Anti-Retroviral Therapy in Tanzania, the study examined several factors (barriers) affecting adherence to ARV medications by interviewing ARV users, health staff, and key informants. Some of the factors mentioned to constrain adherence include stigma, poor social support, wrong beliefs on HIV causation, lack of food, side-effects, inadequate counseling, long waiting time, costs related to transport and long distance to the facility. Factors facilitating adherence include adherence counseling, disclosure to the family members, social support, religion, good chain of drug supply, information and education(26).

A study done by Sasaki Y. on Adherence to antiretroviral therapy during the early months of treatment in rural Zambia, full adherence was associated with being female, having a spouse who were also on ART, and experience of food insufficiency in the previous 30 days. Some of the most common reasons for missed doses were long distance to health facilities, food insufficiency, and being busy with other activities such as work were associated with poor ART adherence. However, other studies have also shown that HIV-positive females often experience gender-related barriers to accessing health services, thus affecting ART adherence(27)(28).

Also in study conducted in Northern Ethiopia on level of adherence and predictors of adherence to the Option B + PMTCT revealed that mothers who were counseled on the correct intake of ARV medications had 4.7 times higher odds of adhering to Option B+ PMTCT care and support as compared to those who were not counseled properly. Disclosing their HIV status to their partner was also positively associated with good adherence(29)

Previous studies from India have demonstrated that sickness and economic instability as well as stock- out of ART as one of the factors associated with non adherence to ART(30).

A study done by Hansana V. about Adherence to Antiretroviral Therapy in India (ART) among People Living With HIV The results of the bivariate analysis revealed a statistically significant association with non-adherence in the 36 to 45 age group compared to those who were ≤ 35 years or who were more than 46 years old as well being a graduate of a secondary school was also observed to have a statistically significant association with non-adherence. Patients who had been diagnosed HIV infected for more than 60 months reported statistically significantly better adherence than those who became aware of their HIV infection in the 36 to 45 months prior to the survey. Use of illegal drug substances was found to be statistically significantly associated with non-adherence(23,24).

Study by done Victoria N. about HAARTadherent among HIV infected patients in Nigeria, the study further reveled that poor adherence to medication was contributed by side effects, fasting and simply forgot among others. The study identified poor availability of HAART and adverse effects to medication among others as strong contributing factors to non-adherence(33).

Study done by Hampanda K. on Intimate partner violence and HIV-infected women's non-adherence to ART in Lusaka, Zambia among women who were offered PMTCT during pregnancy the study revealed experiencing intimate partner violence was associated with decreased odds of adherence to PMTCT during and after pregnancy. Different forms of violence affected PMTCT adherence differentially. Physical violence had a less pronounced effect on non-adherence than emotional and sexual violence. A dose response relationship between intimate partner violence and non-adherence was also observed(34)

2.2 Types of GBV experienced by female patients

In a study done by S. Shamus, et al. on IPV after Disclosure of HIV among Pregnant Women in Harare, Zimbabwe, over 93% of women disclosed the HIV results to their partners. Factors associated with IPV were gender inequity, past IPV, risky sexual behaviors and living with relatives(35)

Durevall and Lindskog analyzed Demographic and Health Survey (DHS) data from eight countries, namely Malawi, Zambia, Zimbabwe, Kenya, Rwanda, Burkinafaso, Mali, and

Liberia, and found that 20-50% of married women experienced IPV. Similarly, research conducted in Tanzania has documented unacceptably high levels of physical and sexual violence against women(11,12), also amulticountry study sponsored by WHO reported that 56% of ever-partnered women in Mbeya and 41% in Dar es Salaam had ever experienced physical or sexual violence by their partner(20).

2.3 Relationship between experiencing GBV and ART adherence

A study done in Tanzania on assessing the relationship between experiencing GBV and the occurrence of HIV infection which included 245 HIV positive women found that the odds of reporting being a victim of at least one violent act was significantly higher among HIV-positive women than among HIV–negative women(15). GBV can increase the risk of transmission of HIV, forced sex may directly lead to HIV transmission; women and girls may be unable to negotiate safer sex because of gender power inequalities. Also women living with HIV may also face increased levels of violence, due to stigma and discrimination(10)GBV may also interfere with the ability to access treatment and care, and the ability to maintain adherence to ARV treatment(8).Another study was done in India aiming to assess the relationship between experiencing GBV and the occurrence of HIV infection found that one-third of married Indian women reported experiencing GBV with or without sexual violence from their husbands; 7.7% reported both physical and sexual violence, and 27.8% reported experiencing physical violence in the absence of sexual violence.

A study done by Hatcher about Intimate partner violence and engagement in HIV care and treatment among women in England result from meta-analysis studies showed GBV to be significantly associated with lower ART use. GBV was associated with poorer self-reported ART adherence in seven studies and lower odds of viral load suppression in seven studies(16).

A study was done by Nicodimos S. about association between Domestic violence and Adherence to Antiretroviral Therapy in Southern India, lifetime experience of any type of violence (psychological, physical or sexual) was reported by participants. The most common type of violence reported was psychological violence, followed by physical violence. Sexual violence was the least frequently reported. The association between adherence to ART and violence was different for females than for males. Women who

experienced violence were less likely to report ≥95% adherence to their ART medications whereas men who experienced violence were more likely to have ≥ 95% adherence(11).

IPV remained significantly associated with non-adherence to all women who experienced IPV compared to women who did not experience any IPV, Emotional violence was also associated with non-adherence during postpartum, women who experienced emotional violence had reduced odds of adherence to their medication, as well as giving the infant prophylaxis. Physical violence was only associated with decreased odds of adherence to giving infant prophylaxis. Women who experienced physical IPV had reduced odds of adherence to giving infant prophylaxis(34**).**

A study done by (Nicodimos 2013) in India on association between domestic violence and adherence to ART among CTC attendees defined adherence as taking medication as they are prescribed by health workers, self-report measures were use to assess adherence by assessing number of missed pills and number of missed day and the results was those who experienced violence reported <95% adherence to ART than participants who did not experience violence, this difference was not statistically significant, also there were no associations observed with any of the specific types of violence(11).

Experiencing intimate partner violence was associated with decreased odds of adherence to PMTCT during and after pregnancy. Different forms of violence affected PMTCT adherence differentially. Physical violence had a less obvious effect on non-adherence than emotional and sexual violence(13**).**

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study Design

Cross-sectional study design was conducted among HIV-infected women on ART who are attending CTC in Mbeya Regional referral hospital.

3.2 Study Area

The study was conducted in Mbeya region referral Hospital which is located at Mbeya city council. The hospital has a viral load machine and CTC department which operates from Monday to Friday with a cumulative total number of 2,793 female clients on ART. All patients attend CTC by appointment, and patient records are kept in file, registers, appointment books, and CTC2 database.

Mbeya region is among the regions of Tanzania with a high prevalence of HIV-infected persons. The region is divided in ten administrative districts, namely Chunya, Mbarali, Kyela, Rungwe, Mbozi, Momba, Ileje, Mbeya DC, Mbeya City and Busokelo.Mbeya Region is located on the South-West of Tanzania mainland, commonly known as Southern highland. To the north, it shares borders with Tabora and Singida Regions and on the East borders Njombe Region. To the South it shares borders with Ruvuma while on the West there is Malawi and Zambia countries, with Kasumulo and Tunduma in Kyela and Momba districts respectively.

3.3 Study Population

The study population consisted of HIV-infected women on ART aged≥18 years during the time of study attending CTC at Mbeya regional Hospital

3.4 Inclusion criteria

HIV-infected women attending CTC Mbeya Regional Hospital**:**

- Aged 18 years & above during time of study
- Initiated on ART for at least six months
- Who will be willing to participate in the study after the informed consent procedure

3.5 Exclusion criteria

- Women with mental disorders
- Women not attending CTC clinic during time of study

3.6 Sample Size determination

Since this study is descriptive, the formula for minimum sample estimation for descriptive studies will be used.

$$n = \frac{Z^2 P (1-P)}{E^2}$$

Where;

n= estimated sample size for infinite population

P=proportion of poor ART adherence (19% by A.Muya, P.Geldsetzer, E.Hertzmark et al. on poor adherence to Antiretroviral Therapy among HIV-Infected Adults in Dar es Salaam, Tanzania)

Z= Critical value for the standard normal distribution for the 95% confidence interval around the mean. =1.96 (at. CI .95%)

E=Margin of error on estimate (set at 4%)

n= 1.96 x 1.96 x 19(100-19)/4x4

n= 3.842x19x81/16

n= 370

n= 370+ 10% of non-respondents

n= 370/0.9

n= 411

Sample size will be 411 women on ART attending CTC at Mbeya regional hospital

3.7 Sampling Technique

Probability sampling adopted to recruit women into the study. All women who met inclusion criteria were provided a written consent on their visiting day at the clinic. Patients attending CTC on particular day formed the sampling frame after establishing the expected number per day, systematic sampling method were adopted to select a given number per day till the required sample is achieved.

3.8 Study Variables

3.8.1 Dependent Variables

Poor ART adherence

3.8.2 Independent Variables

The independent variables will be age, level of education, occupation, marital status, area of residence, stigma, disclosure status, life time partner, economic status, employment status, GBV, distance from health facility, social support, multiple care givers, medication side effect, and alcohol use

3.9 Data collection Methods and Technique

Data collection was carried out at CTC clinics in Mbeya Regional Hospital. Staffs were informed about the study, Participants were first informed about the study and its objectives, and those who agreed to participate were given the consent form to sign. For those who were able to read, they were given the Swahili version informed consent to read, and for those who were not able or they were not willing to read by themselves the principle investigator and research assistance were reading Swahili version informed consent for them. A structured questionnaire was used to collect information through interview, the information collected included; demographic data and factors that associate with poor adherence to anti-retroviral therapy, the questionnaire prepared in English and translated into a Swahili language by Principle investigator, the Swahili version was then used to interview study participants.

Data was collected by Research assistants and the Principal Investigator. Three research assistants were trained for one day on how to collect the needed data and one-day

pretesting of questionnaire was conducted at Mbeya regional referral hospital care and treatment clinic. The data was collected for period of two months from April to May 2017.

3.10 Training and Involvement of research assistants

Eight research assistants at CTC clinic were recruited to assist researcher in data collection. Qualifications for the research assistants were certificate, diploma holders; priority was for counselors with an experience in interacting with HIV/AIDS patients. Research assistants were trained for one day regarding the objectives of the study, population inclusion criteria, participant enrolment procedures, data collection techniques, interaction with the study interviewee, how to obtain informed consent, confidentiality, ethical guidelines, participants' rights, data collection tools, and data quality issues.

3.11 Data management and analysis plan

Data were cross checked during data collection to ensure completeness and accuracy. Data were entered, cleaned for errors and inconsistent (conflicting) answers, missing entries and duplicate entries to ensure high quality data and analyzed using Epi info version 3.1.5.First the descriptive analysis was conducted and the result was displayed in the form of tables. Characteristics of individuals with <95 %(with poor adherence) versus ≥95% adherence to ART and ever versus never experience of violence was compared using chi-squared tests for categorical variables and t-tests for continuous variables to assess statistical significance. logistic regression modeling was conducted to measure the association between the dependent variable and independent variables: patient factors (socio-demographic factors), medication and related characteristics (, missed dose and medication side effects), system factors include access and health care providers' related characteristics and social support, stigma, and disclosure status were among community related factors using odds ratio and 95 % confidence interval. Finally, Independent variables with P value of<= 0.25 at bivariate analysis were further advanced into multivariable logistic regression analysis in order to identify the factors associated with the adherence level. Statistical significance was set at P-value <0.05

3.12 Measures of Adherence

Adherence was defined as taking drugs exactly as they are prescribed and it includes taking them at the right time and in the right doses(1), although there is no gold standard by which to measure adherence to medication. Many studies employ a number of methods, either alone or in combination to measure adherence. The most common include: electronic drug monitoring (EDM) devices, pill counts, Biochemical markers, pharmacy refill records and various self-reporting tools such as Questionnaires and visual analogue(24,26,27,36)
Adherence measurement in this study based on patient recall of their compliance of the prescribed doses in over one month prior to the interview: This measure derived from the AIDS Clinical Trial Group (ACTG) assessment of adherence to antiretroviral medication and consistency of an inquiry about the number of missed doses over the past 30 days (Self reporting). This item was categorized into ≥ 95% (missing one or less doses) and < 95% adherence (missing more than one dose).

3.13 Measures of gender based violence

The lifetime violence measure adopted from the World Studies of Abuse in Family Environment (World SAFE study) (11). The current study administered a validated subset of the World SAFE study questions that dealt with family and intimate partner violence.

Participants were asked about their lifetime experience of violence. Participants who reported ever experiencing violence were asked about the types of violence to which they had been exposed (psychological, physical and sexual violence). **Psychological violence** defined as being “insulted, frightened, made afraid without touching, or abandoned “**Physical violence** defined as being “slapped, hit, kicked, or beaten”, **sexual violence** defined as “ever being forced to have sex against the person’s will” .Participants who have experienced any form of above mentioned type of gender based violence were categorized as experienced GBV within the past 6 months, past 12 months, experienced GBV after having been initiated on ART regardless of duration, and those who responded that they have never experienced GBV. Different types of GBV were also evaluated for their association with ART adherence.

3.14 Ethical Considerations

Ethical clearance of conducting this research obtained from Muhimbili University of Health and Allied sciences (Ethical review board), permission of conducting this research in Mbeya Region obtained from Regional Medical Officer and Regional authorities DAS and RAS.

Participant's names and identifiers were not included in the data collection tools in order to maintain confidentiality. Participation in the study was voluntary and patient or relative who consented to participate in the study had to sign the consent form. Two copies was signed one left with the client another with researcher. The study was conducted in a private place where confidentiality was attained. Objective of the study, risks, confidentiality and its expected benefits was explained to the study subjects.

CHAPTER FOUR

4.0 RESULTS

4.1 Demographic characteristics of study population

A total of 411 HIV positive women receiving ART were enrolled in the study, and the median age of responded was 39years, where 140 (34.1%) was in age group 28-38 years. Most of study participants187 (45.5%) were married, 126(30.7%) were widowed approximately more than half of them 242(58.9%) had completed primary school, while 299(72.2%) were self-employed. Nearly all of the participants (80.5%) had disclosed their HIV status. More than half of the participants 287(69.8%)were from urban while 124(30.2%) were from rural areas (Table1).

Table 1: Socio demographic characteristics of women attending care and treatment clinic at Mbeya Regional Referral Hospital, 2017

Characteristics	Category	Number	%
Age group(Yrs)	18-28	62	15.1
	28-38	140	34.1
	38-48	137	33.3
	48+	72	17.5
Marital status	Married	187	45.5
	Single	51	12.4
	Widowed	126	30.7
	Separated	39	9.5
	Divorced	8	1.9
Occupation	Employed in public sector	66	16.1
	Employed in private sector	46	11.2
	Self employed	299	72.7
Education level	None	50	12.2
	Primary	242	58.9
	Secondary	97	23.6
	Tertiary	22	5.4
Residence	Rural	124	30.2
	Urban	287	69.8

4.2 Factors associated with poor adherence to Anti Retrial Viral Therapy

Majority of the respondents had positive perceptions of ART treatment and maintaining adherence; In this study the overall adherence were 85.2%,majority of respondents reported they had not missed more than single dose in the previous month. Of the 411 participants 103(25%) had measured viral load recently, 84(81.5%) had viral load <1000, and about 19(18.4%) participants had viral load >1000(Table: 2).

4.3 Reasons for missing two or more ART doses.

The most common reasons for missing two or more ART doses reported by study participants were being busy with activities 81.5%, travelling 6.1%, other reasons includes; fear 7.5% and being sick 4.8%.

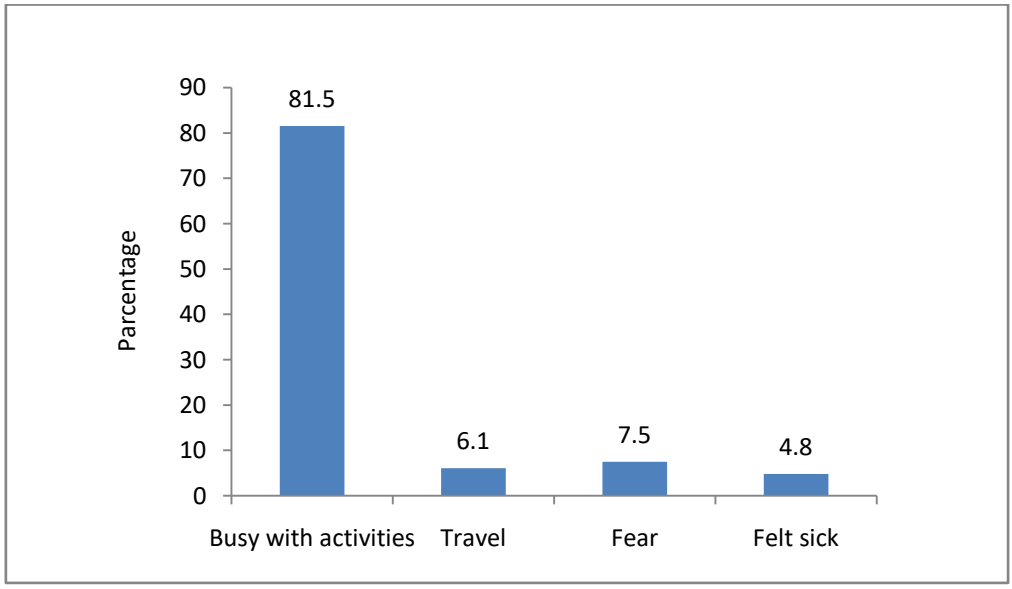

Figure 2 : Reasons for missing two or more ART doses

In bivariate analysis, none of the socio-demographic factors was found to be associated with poor adherent to ART. But somewhat women who were currently not married were likely to have poor ART adherence than married women but this association was not significant(OR=1.66, 95% CI: 0.64-2.93) (Table 2).The Odds of women with history of alcohol use were two times higher more likely to have poor ART adherence than those who did not take alcohol (OR=2.28, 95%CI: 1.31-3.97).Similarly participants from rural areas (OR=1.91,95%CI:1.09-3.33),living>10km(OR=1.67,95%CI:1-2.63),Perceived

stigma (OR=2.4,95%CI:1.37-4.2). Moreover individuals who didn't disclosed their HIV status (OR=2.84,1.56-5.14),women who reported feeling difficult to take medication (OR=3.46,95%CI:1.89-6.33), while lifetime partner, having viral load >1000 copies, having family support ,being satisfied with health care provider, not associated with poor adherence (Table3).

In multivariate analysis, the Odds of having poor adherence to ART were 5 times higher among women with Psychological violence than women who didn't have psychological (AOR=4.89, 95%CI; 1.07-22.2)(Table 4), while the Odds of having poor ART adherence were three times higher among women who reported drinking alcohol compared to patient who didn't have history of alcohol drinking(AOR=3.69(0.9-15.09)also the odds of having poor adherence to ART were 7 times greater among women who reported having self perceived stigma compared to women who didn't have self perceived stigma (AOR=7.55,95%CI:1.61-35.24) . More over the odds of having poor adherence to ART were two times greater to women with viral load >1000 copies compared to women with viral load <1000 copies (AOR=2, 95%CI: 0.32-13.352), (Table 3).

Table 2: Socio-demographic factors associated with ART adherence among women attending care and treatment clinic at Mbeya Regional Referral, 2017

Characteristics	Poor ART Adherence N (%)	Crude OR CI 95%	p. value	Adjusted OR 95%CI	P. value
Age(Yrs)					
<=35	153(17.6)	1			
>35	258(13.2)	0.7 (0.4-1.22)	0.21	1.52(0.31-7.26)	0.59
Education level					
None /Primary	292(15.4)	1			
Secondary and above	119(13.5)	0.85(0.46-1.57)	0.61	0.77(0.14-4.5)	0.76
Occupation					
Employed in public /private sector	112(13.4)	1			
self-employed	299(15.4)	1.12(0.62-2.2)	0.61	1.89(0.33-10.6)	0.46
Marital status					
married	184(11.4)	1			
Not married	227(17.6)	1.66(0.64-2.93)	0.07	1.14(0.25-5.05)	0.85
Income					
>Tsh.100,000/=	179(15.1)	1			
<=Tsh.100,000/=	229(14.6)	0.96(0.55-1.67)	0.9	0.48(0.11-2.02)	0.32
Residence					
Urban	291(12.2)	1			
Rural	124(21)	1.91(1.09-3.33)	0.02	0.52(0.07-3.57)	0.51

Table 3: Other factors associated with ART adherence among women attending care and treatment clinic at Mbeya Regional Referral, 2017

Characteristics	Poor ART Adherence N (%)	Crude OR CI 95%	p. value	Adjusted OR 95%CI	P.value
Disclosure					
Yes	331(11.8)	1			
No	80(27.5)	2.84(1.56-5.14)	0.001	1.12(0.21-5.81)	0.88
History of alcohol use					
No	277(11.2)	1			
Yes	134(22.4)	2.28(1.31-3.97)	0.002	3.69(0.9-15.09)	0.06
Life time partner					
one	340(13.5)	1			
More than one	71(21.1)	1.71(0.89-3.27)	0.10	0.49(0.05-4.16)	0.51
Distance from H/F					
<10km	252(10.7)	1			
>10km	70(21.4)	2.26(1.3-3.93)	0.003	5.65(0.75-42.03)	0.09
Stigma					
No	297(11.5)	1			
Yes	112(23.7)	2.40(1.37-4.2)	0.001	7.55(1.61-35.24)	0.01
Feeling difficult to take medication					
No	340(11.5)	1			
Yes	71(31)	3.46(1.89-6.33)	0.001	1.07(0.2-5.75)	0.92
Satisfied with health provider					
Yes	219(13.2)	1			
No	I92(16.7)	1.31(0.76-2.25)	0.33	1.29(0.34-4.77)	0.07
Resent viral load					
<1000	84(19.1)	1			
>1000	19(21.1)	1.13(0.33-3.87)	0.84	2(0.32-13.35)	0.44
Family support					
Yes	126(11.9)	1			
No	285(16.1)	0.76(0.37-2.66)	0.26	0.43(0.08-2.27)	0.32

Table 4: Assessing the Association of violence with ART adherence

Type of violence	Poor adherence	Crude OR		Adjusted OR	
	N (%)	95%CI	P.value	95%CI	P.value
Physical violence					
No	360(13.3)	1			
Yes	51(25.5)	2.22(1.1-47)	0.02	1.16(0.13-10.77)	0.89
Sexual violence		1			
No	383(14.1)	2.03(0.82-5)	0.11	0.11(0.08-9.24)	0.88
Yes	28(25.0)				
psychological violence		1			
No	329(10.3)	5.00(2.38-7.61)	0.001	4.89(1.07-22.20)	0.03
Yes	27(32.9)				

4.4 Violence

Lifetime experience of any type of violence (psychological, physical or sexual) was reported by 102 (24.8%) participants. The most common type of violence reported was psychological violence (19.9%), followed by physical violence (12.4%); sexual violence was the least frequently reported (6.8%).59 participants had experienced more than one type of violence making a total of 102 who experienced any type of violence (table.3)

Table 5: Prevalence of different forms of Gender based violence among the study population

Types of violence	n	%
psychological	82	19.9
Physical	51	12.4
sexual	28	6.8

4.5 Characteristics associated with violence

In univariate analysis, women who were currently not married were more likely to report violence than those who were not married (OR=1.78,95%CI : 1.11-2.85) (table4), similarly

to participants from rural areas(OR=2.17, 95%CI: 1.36-3.46), those who didn't disclose their HIV status(OR=1, 95%CI:18-3.39), feeling difficult to take medication(OR=2, 95%CI: 1.16-3.46), Participants from >10km (OR=1.67, 95%CI; 1-2.63), Life time partner (OR=3.16, 95%CI:1.85-5.41), Self perceived stigma(OR=2.17,95%CI:1.35-3.49),and life time partner (OR=3.16,95%CI:1.85-5.41.Ever having experienced violence was not associated with alcohol use, education, age and house hold income.

In multivariate analysis, the odds of having gander based violence were five times higher in patients who reported having history of alcohol use compared to patients who had no history of alcohol use (AOR=5.18, 95%CI: 1.63-16.44), Also the odds of having violence were eight times higher among women who had more than one partner compared to those having one partner (AOR=8.01,95%CI;1.62-39.42) more over women with income >Tsh.100000/= were two times more likely to have gender based violence than women with income < Tsh.100000/= (AOR= 2.27(0.89-.71) while characteristics such as income, stigma, distance from health facility, family support were not associated with violence.

Table 6: Magnitude of violence (GBV), and associated factors in Socio Demographic characteristics

Characteristics	Prevalence of any form of violence N (%)	Crude OR CI 95%	p. value	Adjusted OR 95%CI	P. value
Age(Yrs)					
>35	153(17.7)	1			
<=35	258(13.1)	0.70(0.4-2.22)	0.22	0.85(0.24-2.98)	0.80
Education level					
Secondary and above	112(20.5)	1			
None /Primary	299(26.4)	0.90(0.55-1.49)	0.69	1.10(0.29-4.05)	0.88
Occupation					
self-employed	297(26.4)	1			
Employed in public /private sector	112(20.5)	1.38(0.82-2.35)	0.20	1.64(0.44-.06)	0.45
Marital status					
married	247(19)	1			
Not married	227(29.5)	1.78(1.11-2.85)	0.01	0.79(0.24-.54)	0.70
Income					
>Tsh.100000/=	179(21.8)	1			
<=Tsh.100000/=	232(27.2)	1.33(0.84-2.11)	0.21	2.27(0.89-.71)	0.07
Residence					
Urban	287(20.2)	1			
Rural	124(35.5)	2.17(1.36-3.46)	0.001	1.57(0.27-9.04)	0.6

Table 7: Magnitude of violence (GBV) and associated factors in the studied population

Characteristics	Prevalence of any form of violence N (%)	Crude OR CI 95%	p. value	Adjusted OR 95%CI	P. value
Alcohol use					
No	186(23.5)	1			
Yes	134(27.6)	1.24(0.77-0.98)	0.36	5.18(1.63-16.44)	0.005
Disclosure					
Yes	331 (22.1)	1			
No	80 (36.3)	2.00(1.18-3.39)	0.008	1.20(0.27-5.38)	0.80
Distance from H/F					
<10km	282(21)	1			
>10km	159(30.8)	1.67(1-2.63)	0.02	0.26(0.04-.55)	0.14
Feeling difficult to take medication					
No	340(22.4)	1			
Yes	71(36.6)	2.00(1.16-3.46)	0.01	0.66(0.16-2.23)	0.44
Life time partner					
one	340(20.6)	1			
More than one	71(45.1)	3.16(1.85-5.41)	0.001	8.01(1.62-39.42)	0.01
Satisfied with health care					
Yes	219(13.2)	1			
No	192(30.2)	1.72(1.09-2.7)	0.01	0.97(0.34-2.74)	0.95
Family support					
Yes	75(20.6)	1			
No	336(26.7)	1.26(0.69-2.32)	0.26	1.31(0.39-4.35)	0.43
Viral load					
<1000	84(35.7)	1			
>=1000	19(36.8)	1.05(0.37-2.95)	0.92	1.24(0.28-.41)	0.76
Stigma					
Yes	298(20.5)	1			
No	114(35.9)	2.17(1.35-3.49)	0.001	0.48(0.28-.41)	0.25

CHAPTER FIVE

5.0 DISCUSSION

The study intended to examine the relationship between Gender Based Violence and poor adherence to ART among women on ART, in this study the proportion of poor ART adherence among women attending care and treatment clinic were 14.8%.Furthermore our study examined the association of violence and ART adherence to women on ART, and the prevalence of ever having violence were (24.8%).

In the recent study factors like gender based violence, disclosure status, alcohol use, and perceived self stigma were independently association with the level of poor adherence than other factors(37)(38). This finding is slightly different from study done in Tanzanian settings where age, education, level, and marriage were independently significantly associated with ART adherence(28)similar to study done in Ethiopia where factors like residence, educational status, substance use and occupation had significant association with the level of adherence at the same time sex, age, marital status and distance from the hospital had no significant association(39).

Despite the adherence level is less than the recommended level; the obtained result was higher than other studies in different parts of Tanzania such as in Dares -salaam(32) while some studies shows adherence rate higher than our study(28).

Also the adherence rate in this study is lower than study done in Mbeya on adherence to highly Active Antiretroviral Therapy (HAART) Among HIV/AIDS Adult Patients Attending CTC and the adherence level were (90-100%)(40). In this study, we did not find an association between adherence to ART and socio-demographic characteristics. These findings similar to another study done on factors associated with non-adherent to antiretroviral therapy among HIV infected people in Pwani Region, eastern Tanzania(41). This is also similar to that seen in other areas, such in Lilongwe, Malawi(85.6%) women said they adhere to ART (42). South west Ethiopia(36.19%) had poor adherence and (63.8%) had good adherence to their ART treatment(39), and other developing countries(adherence ranges from 40% to 70%)(43).

Perceived stigma as a psychosocial barrier to adherence has been shown in this study to manifest itself as hidden acts of discrimination, harassment and violence. PLWHAS often face stigma and discrimination from the community including their own family members‟.

Fear of stigma may force PLWHAS to hide their HIV status even to close members of the family. The result of this study showed that women who had perceived stigma had more likely to have poor ART adherent than none stigmatized and showed statistically significant association.

Further more psychological violence and physical violence were independently associated with level of ART adherence; therefore Violence can also cause a disorganized living environment, making women at increased risk of forgetting to take their ART medications properly(11)**.**

The prevalence of exposure to violence in women that we observed was substantially lower than in previous reports from Tanzania**,** the Tanzania Demographic Health Survey 2010 observed high prevalence of GBV nearly half (45%) of Tanzanian women aged 15-49 years have experienced physical or sexual violence. The survey revealed regional prevalence variations of gender based violence: while Mara(72%) and Dodoma(71%) were shown to have high levels of physical and sexual violence, Unguja(7%) and Pemba(5%) had lower levels(18). Similarly over 56% of ever-partnered women in Mbeya and 41% in Dar es Salaam had ever experienced physical or sexual violence at the hands of a partner.

Furthermore, Shrivastava et al. found that 36.9% of women living in urban slums of Mumbai experienced psychological/verbal violence being the most common type (11), again comparable to our findings where physiological violence were the leading type in our study**.** The differences in prevalence of violence in Tanzania may be due to differences cultural beliefs of violence. Women with HIV infection constitute a higher risk group of people in general and the two conditions (HIV infection and domestic violence) may have common background. In other countries, the prevalence of violence ranges from 37-55%. In rural Uganda 36.6% of HIV infected women, reported experiencing intimate partner violence (44) which was more comparable to the our findings. Furthermore we were only able to demonstrate associations between violence and adherence and cannot determine whether one caused the other.

6.2 Study limitation

- We relied on self-report to collect sensitive information on violence and ART adherence, thus creating potential for recall bias that may lead to overestimation of adherence level.
- Experience of violence is often considered a private family matter, therecould be underreporting.
- In this study the sampling frame were drawn from appointment registers, clients who missed the CTC the day of interview might have gender violence, due to time constrain we didn’t make follow up.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This study revealed that, the proportion of poor ART adherence and Gender based violence among women who attend Mbeya care and treatment clinic is still high, also the study showed that, psychological violence, residence, distance from health facility, feeling difficult to take medication, self-perceived stigma, alcohol use were associated with poor adherence to ART. Reason for missing two or more than two ART doses were, being too busy, travelling and being sick. These problems also existed in other related researches conducted in Tanzania and other countries with the same factors even if their severity were different.

6.2 Recommendation

The results indicated that gender based violence contributes to poor adherence to ART for women. Therefore routine screening of women for exposure to violence may be useful in clinical settings where HIV services are provided in order to increase adherence to ART.

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HIV infection in rural Uganda: critical implications for policy and practice. BMC women's health. 2011 Nov 17;11(1):50

APPENDIX I: QUESTIONNAIRE (English version)

Serial No…….……

Care and Treatment Clinic number ……

Patient Particulars

1. How old are you? (Age in years) …….

2. Level of Education……..

    1. None,
    2. Primary education,

3. Secondary education,
4. Higher education

3. Occupation of the patient …….

1. Employed in public sector
2. Employed in private
3. Housewife
4. Business Salaried
5. Daily laborer
6. Farmer

4. Are you currently?

1. Married
2. Single
3. Widowed
4. Separated
5. Divorced

5.Religion:

1. Christian
2. Muslim

Others (Please mention) _____

6. House hold income per month

1. < Tsh.100, 000/=
2. Tsh.100, 000 to 200,000/=
3. >Tsh.200, 000/=

HIV status diagnosis and CD4 Cells Count /Viral load

7. HIV tested/diagnosed …….(Date) …….

8. Date of ARV initiation……

9. CD4 counts before 6 months …….date…….

10. Most recent CD4 count……..date……. ….

11. Base line viral load…….date…….

12. Most recent viral load…….date……

Are you worried about other people finding out your HIV status? 1=Yes

13. Disclosure of HIV status to anyone

    1. Yes

    2. No

    Reasons for no disclosure……then (skip to Q14)

14. If yes, to whom have you disclosed your HIV status (circle all that apply)

    1. Partner

    2. Child

    3. Parents

    4. Relatives/Friends

15. Tick the Person(s) living with you in the same house

    1. Alone
    2. Parents
    3. Spouse/partner
    4. Children
    5. Relative/friends
    6. Other, specify:

16. How many household members have you told? ……..

17. Place of primary residence

    1. Rural
    2. Urban

18. Distance from that residence to the health facility is:

    1.≤10 km

    2. >10 km

19. Type of transport

    1. Walk
    2. Bicycle
    3. Motor bicycle
    4. Bus

20. How much do you spend for transport to the hospital for each clinic visit?

    Tshs _____

    ART Adherence

21. When did you start taking ART medication.....?

22. Adherence to clinic attendances

1. Never missed
2. Missed due to lack of fare
3. Missed due to other reasons

23.Do you sometimes find it difficult to remember to take your medication?

1. Yes
2. No

24. When you feel better, do you sometimes take a break from your medication?

1. Yes
2. No

25.Many patients have troubles in taking their ARV doses as prescribed; did you miss any of ARV doses in the last three days?

1. Yes
2. No

If yes, how many doses did you miss? _____

26Sometimes if you feel worse when you take the medicine, do you stop taking it?

1. Yes
2. No

27. Have you been late in taking your ARV drugs?

1. Yes
2. No

If yes, by how long? _____ (Hours/Minutes)

28. in the past 1 week: Have you missed taking your ARV drugs?

1. Yes
2. No

If yes, how many doses did you miss? _____

29. Have you missed taking ARVs in the past 1 month?

1. Yes
2. No

How many days did you missed your ART? _____

30. Since you started ART, have you ever missed taking ARVs?
    1. Yes
    2. No
31. What was the reasons for forgetting to take ARV medicine ……
    1. being busy with activities
    2. Other specify……
32. Do you have people who remind you to take ARVs?
    1. Yes
    2. No

    How many are they? _____

    Who are they? Specify_____
33. Do you use anything to remind you when to take ARVs?
    1. Yes
    2. No
34. What are the important things to consider when you're taking ARVs?

    Mention……

35. How many partners do you have in your lifetime?
    1. One
    2. More than one
36. What is health status since you started taking ART?
    1. Worse
    2. Stable
    3. Better
37. Have you ever had side effects of ARV medicine?
    1. No
    2. Yes

    If yes, what are the side effects? ……
38. Have you ever taken alcohol in your life?
    1. Yes
    2. No

39. If yes, are you currently taking alcohol?
    1. Yes
    2. No

    If no, when did you stop taking alcohol?_____ (Weeks/months ago)

40. Have you ever taken any drugs abuse in your life?
    1. Yes
    2. No

    If yes, which drugs abuse...?

41. Are you currently taking any drugs abuse?
    1. Yes
    2. No

    If yes, please specify...?

42. Have you ever taken a traditional medicine for treatment of HIV?
    1. Yes
    2. No

43. Have you ever taken a traditional medicine together with ARVs?
    1. Yes
    2. No

44. Are you currently taking any traditional medicines?
    1. Yes
    2. No

    Why traditional medicines? .....

45. Does taking ARVs interfere with your everyday activities?
    1. Yes
    2. No

46. Meeting with counselor in the past 6 month
    1. Yes
    2. No

47. Time spend with Health provider
    1. >10 minutes
    2. <10 minutes

48. Did you satisfied with health provider servicers?

1. Yes
2. No

49. Do you belong to any organization of people living with HIV and AIDS or any organization providing social or psychological support?

1. Yes
2. No

If yes, what support do you get from this organization? Specify

50. Age at first sex sexual intercourse……..

Gender-based violence

Now I would like to ask you questions about some other important aspects of a woman's life. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women in Tanzania. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else will know that you were asked these questions.

Now if you will permit me, I need to ask some more questions about your relationship with your (last) husband/partner or Family members. If we should come to any question that you do not want to answer, just let me know and we will go on to the next question.

51. **(Does/did) your (last) husband/partner or family member ever**:

a) Say or do something to humiliate you in front of others? 1. YES 2.NO

b) Threaten to hurt or harm you or someone close to you? 1. YES 2.NO

c) Insult you or make you feel bad about yourself? 1. YES 2.NO

52.**(Does/did) your (last) husband/partner or family member ever do any of the following things to you**?

a) Push you, shake you, or throw something at you? 1. YES 2.NO

b) Slap you?

c) Twist your arm or pull your hair? 1. YES 2. NO

d) Punch you with his fist or with something that could hurt you? 1. YES 2. NO

e) Kick you, drag you or beat you up? 1. YES 2. NO

f) Try to choke you or burn you on purpose? 1. YES 2. NO

g) Threaten or attack you with a knife, gun, or any other weapon? 1. YES 2. NO

h) Physically force you to have sexual intercourse with him even when you did not want to? 1. YES 2. NO

i) Force you to perform any sexual acts you did not want to? 1. YES 2. NO

53. B How often did this happen during the last 12 months: 1. often, 2. only sometimes, 3. not at all

54. Have you ever experienced gender based violence after disclosure?

1. Yes

2. No

3. Does not apply / I did not disclose

55. When did you last experience gender based violence?.....

KIAMBATISHO I: DODOSO (Kiswahili version)

DODOSO II:

Kumb. Na.....

Namba ya utambulisho kwenye kitabu cha Matunzo na matibabu kliniki (CTC).....

Maelezo ya mgonjwa

1. Una umri wa miaka mingapi? ……

2. Kiwango cha elimu ya mgonjwa.....

    1) Hakusoma
    2) ElimuyaMsingi
    3) Elimuyasekondari
    4) Elimuyajuu

3. Kaziyamgonjwa.....

    1) Ume ajiriwa na salikali
    2) Umeajiliwa katika sekta binafsi
    3) Ajira binafsi

4. Hali ya ndoa

    1) Umeolewa
    2) Hujaolewa
    3) Mjane
    4) Mmetengana
    5) Taraka

5. Dini yako

    1) Mkristo
    2) Muislamu
    3) Nyinginezo(taja)……..

6. Kipatochako kwa mwezi ni Tsh.ngapi?

    1. <Tsh.100, 000/=
    2. Tsh.100, 000 - 200,000/=
    3. >Tsh.200, 000/=

Utambuzi na hali ya maambukizi ya VVU na kiwango cha seliza CD4 naViral load

7. Kwa maraya kwanza lini ulipimwa na kukutwa na maambukizi ya VUU? (Tarehe)…….

8. Tarahe ya kuanza matibabu ya vvu……

9. Kiwango cha seliza CD4 zaidi ya miezi 6..... .Tarehe……

10. Kiwango cha CD4 seli ya hivi karibuni .....Tarehe…….

11. Kiwango cha viral load cha mwanzo……tarehe……..

12. Kiwango cha viral load cha hiviaribuni…….tarehe…….

13. Umeshawa julisha ndunguzako kuhusu maambukizi ya vvu

    1. Ndiyo
    2. Hapana (Kama hapana Jibu swali la 14)

14. Kama ndiyo ume mweleza nani haliyako ya maambukizi ya VVU?, weka alama ya vema kwa mtu uliye mweleza

    1. Mpenzi wako
    2. Mtoto
    3. Wazazi
    4. Ndugu/Marafiki

15. Weka alama ya vema kwa mtu unaye ishinaye nyumba moja

    1. Wazi
    2. Mpenzi
    3. Watoto
    4. Ndugu au mrafiki
    5. Wengine tafadhari taja……..

16. Umesha wajulisha ndugu zako wangapi kuhusu hali yako ya ko ya maambukizi?.....

17.Mahali unapoishi

    3. Kijijini
    4. Mjini

18. Una ishi umbali gani to kituo cha afya?

    1. Chini ya kilomita 10
    2. >Zaidi ya kilomita 10

19.Aina ya usafiri unaotumia kwenda CTC

1. Unatembea kwa miguu
2. Baiskeli
3. Pikipiki
4. Basi

20. Unatumia ghalama kiasigani kwenda kwenye kituo cha afya? .....

(Ufuasi wa dawa)ART Adherence

21. Ulianza lini kutumia dawa za kupunguza makali ya VVU? .....

22. Kuhusu mahudhurio katika kliniki ya CTC

1. Umehudhuria bila kukosa hata sikumoja
2. Sikuhudhuria kwa kukosa naliuli
3. Sababu nyinginezo

23. Je, Wakati mwingine huwa unajisikia vigumu kukumbuka kumeza dawa?

1.Ndiyo 2.Hapana

24. Je, Wakati mwingine ukijisikia vizuri, huwa una pumzika kunywa dawa

1. Ndiyo 2. Hapana

25. Wagonjwa wengi hupata taabu kumeza dawa za ARV kama walivyo pangiwa na mtoa huduma; Katika siku tatu zilizo pita ulisha sahau kumeza dawa

1. Ndiyo
2. Hapana

Kama ndiyo dozi ngapi ulisahau kunywa?.....

26. Wakati mwingine ukijisikia vibaya sana wakati wakunywa dawa, je una acha kunywa dawa?

1. Ndiyo
2. Hapana

27. Umesha wahi kuchelewa kumeza dawa?

1. Ndiyo
2. Hapana

Kama ndiyo nikwamuda gani…….Masaa/Dakika

28. Katika wiki moja iliyo pita ulisha wahi sahau kumeza dawa?

1. Ndiyo
2. Hapana

Kama ndiyo, dozi ngapi ulisahau kumeza.....

29. Je ulisha wahi sahau kumeza dawa kwa mwezi ulio pita?

1. Ndiyo
2. Hapana

Kama ndiyo,ni siku ngapi hukunywa dawa?…….

30. Tangu uanze kutumia dawa umesha wahi sahau kunywa dawa?

1. Ndiyo
2. Hapana

(Kama hapana jibu swali la 22)

31. Sababu zipi zilizo pelekea usahau kunywa dawa?

1. Kazi nyingi
2. Sababu nyingine eleza.....

32. Je una watu wanao kukumbusha kumeza dawa?

1. Ndiyo
2. Hapana

Kama ndiyo,wako wangapi?…….

Na niakina nani? Taja……

33. Unatumia kitu chochote kukumbusha kunywa dawa

1. Ndiyo
2. Hapana

34. Mambo muhimu ya kuzingatia kwa mtu anaye tumia dawa za kupunguza makali ya vvu ni..

Taja……..

34. Una wapensi wangapi?

1. Mmoja
2. Zaidi ya mmoja

36. Hali yako ya afya ipoje tangu uanze kutumia dawa za kupungza makali ya VVU?

1. Mbaya
2. Nzuri
3. Nzuri sana

37. Ulisha wahi sikia madhara ya dawa za kupunguza makali ya VVU?

1. Ndiyo
2. Hapana

Kama ndiyo ni madhara gani ya taje …….

38. Ulisha wahi kunywa pombe katika maisha yako
    1. Ndiyo
    2. Hapana

39. Kama ndiyo, unaendelea kunywa pombe
    1. Ndiyo
    2. Hapana

Kma hapa lini uli acha kunywa pombe……(miezi au wiki zilizopita)

40. Ulisha wahi tumia madaw ya kulevya
    1. Ndiyo
    2. Hapana

Kama ndiyo,ni dawa ipi taja……

41. Kwa sasa una tumia dawa yeyote ya kulevya
    1. Ndiyo
    2. Hapana

Kama ndiyo tafadhali taja……..

42. umesha wahikunywa dawa zakieyeji kwaajili ya matibabau ya VVU?
    1. Yes
    2. Hapana

43. umesha wahikunywa dawa zakieyeji pamoja na ARV kwaajili ya matibabau ya VVU?
    1. Ndiyo
    2. Hapana

44. Kwasasa unatumia dawa yeyeote ya kienyeji
    1. Ndiyo
    2. Hapana

45. Je kunywa dawa za kupunguza makali ya VVU kunaingilia utendaji wakazi zako za kila siku?
    1. Ndiyo
    2. Hapana

46. Umesha kutana na mshauri nasihi katika miezi sita iliyo pita?

1. Yes
2. No

47. Je hukaa na mtoa huduma za afya kwa muda gani
    1. Dakika kumi
    2. Chini ya dakika kumi

48. Je unaridhika na huduma zinazo tolewa?
    1. Ndiyo
    2. Hapana

49. Je, umejiunga na shirika lolote linalojihusisha watu waishio na VVU
    1. Ndiyo
    2. Hapana

    Kama ndiyo nihudumagani unazipata? .....

50. Ulikuwa na miaka mingapi ulipoanza kufanya mapenzi.....

Ukatili wa kijinsia

Sasa na penda kuku uliza maswali muhimu juu ya maisha ya mwanamke. Najua kuwa baadhi ya maswali yatahusu maisha binafsi.

Hatahivyo majibu yako ni muhimu ilikujua halihalisi ya maisha ya wanawake wanao ishi na maambukizi ya VV Tanzania. Napenda kuku hakikishia kuwa majibu utakayo toa nisiri , na hayata tolewa kwa mtu yeyote na hakuna atakaye jua kuwa wewe uliulizwa maswali haya.

Kama utaniruhusu, Nita kuuliza maswali juu ya uhusiano kati yako na mwenza wako pamoja na ndugu wa familia yako. Kama swali nitakalo kuulizahuto penda kujibu, basi tuta endelea na swali lina lofuata.

51. **Je,Mwenza/mpenzi au ndugu wa familia wana fanya ya fuatayo juu yako?**

a)Wanasema au kufanya kitu ili kuku dhalilisha mbele za watu? 1. NDIYO 2. HAPANA

b) Wana kukutishia,kukuumiza au,kuku dhuru au kumzuru yeyote ambaye yuko karibu sana nawewe ? 1. NDIYO 2. HAPANA

c) wana kutukana au kukejeli na kufanya ujisikie vibaya? 1. NDIYO2. HAPANA

52. Je,Mwenza/mpenzi au ndugu wa familia wana fanya ya fuatayo juu yako?

a) wanakupiga,wana kukutikisa au kuku tupia kitu chochote? 1. NDIYO2. HAPANA

b) Wana kupiga makofi?1. NDIYO2. HAPANA

c) Wana kunyonga mkono au kuvuta nywele zako? 1. NDIYO2. HAPANA

d) Wana kupiga ngumi au na kitu chochote ili kuku umiza? 1. NDIYO2. HAPANA

e) Wana kupiga mateke,wanakuvuta au kukupiga? 1. NDIYO2. HAPANA

f) Jalibu kukunyonga au kuku choma moto kwa kukusudia? 1. NDIYO2. HAPANA

g) Kutishia kuku dhuru kwa kisu ,bunduki,au silaha yoyote? 1. NDIYO2. HAPANA

h) Kuku lazimisha kufanya tendo landoa wakati wewe hupendi? 1. NDIYO2. HAPANA

i) Kuku la zimisha kufanya vitendo vinavyo husu mapenzi bila ridhaa yako? 1. NDIYO2. HAPANA

53. Je matendo haya yame tokea marangapi katika miezi 12 iliyo pita?

1. Mara kwa mara
2. Mara chache
3. Haya tokei kabisa

54. Ulisha wahi nyanyaswa kijinsia baada ya kuwajulisha kuwa una maambukizi ya VVU?

1. Ndiyo
2. Hapana

55. Ni lini ulipo nyanyanswa kijinsia?.....

APPENDIX II

INFORMED CONSENT (English Version)

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES-DICTORATE OF RESEARCH & PUBLICATIONS

ID-NO: …… /……/…….

Consent to participate in this study

Greetings, my name is …….. from Muhimbili University of Health and Allied Sciences, Dar es Salaam. At the moment, we are carrying out a study on Gender-based violence and adherence to anti-retroviral therapy among HIV-infected women attending care and treatment clinic, Mbeya Region

Purpose of the study

This study aims to collect information on Gender Based Violence and ART adherence among women on ART attending care and treatment in Mbeya Region. You are being asked to participate in this study as stake holder and a resident from the study site. We should be grateful if you are willing to participate by answering questions from the study.

What participation involves

If you agree to participate in this study the following will occur

1. You will sit with trained interviewer and you will be required to answer question that have been prepared for the study through interview in order to obtain the intended information to inform policy maker on how to improve care to HIV infected women on ART

2. No identifying information such as name will be collected from during this interview.

3. You will be interviewed only once for approximately 30 minutes in private setting.

Confidentiality

I assure you that all the information collected from you will be kept confidential. Only people working in this research study will have the success to the information. We will ensure that any information included in your report does not identify you as respondent as we will not put your name or other identifying information on the records of the information youprovide**.**

Risks

You will be asked questions about gender based violence and adherence to ART among women attending care and treatment clinic. Some questions could potentially make you feel uncomfortable. You may refuse to answer any particular question and stop the interview at any time. We do not expect any harm to happen to you because of participation in this study

Rights to withdraw and alternatives

Your participation in this study is completely voluntary. If you choose not to participate in the study or if you decide to stop participating in the study you will not get any harm. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdraw from the study will not involve penalty or loss of any benefit to which you otherwise entitled.

Benefits

The information you provide is extremely important and valuable. It will help policy maker and health workers at every level to improve care to HIV infected women on ART. There is no direct benefit however; individual benefit it will be obtained through intervention programs which can be conducted in this particular area.

In case of injury

We are not anticipating that any harm will occur as the result of your participation in this study

Compensation

There will be no compensation of time spent during the interview; however your participation is highly appreciated**.**

Who to contact

If you have any questions about this study, please don't hesitate to contact

ALEX LUOGA, the principal investigator, MUHAS, P.O.BOX 65001.Dar es salaam. Tel: 0756526420

Director Research Publication MUHAS, (Dr. J.Masalu)

P.O.BOX 65001.Dar es salaam.

Prof. Gideon Kwesigabo, The supervisor of this study and lecturer at MUHAS P.O.BOX 65001 Dar es salaam (Tel no: 0713443212)

DR. James Gibson, TFELTP Supervisor (Tel No. 0685677580)

Do you agree to participate and answer questions in this study?

Participant agrees ( )

Participant disagrees ( )

I _____ have read/understood the contents in this form. My questions have been answered. I agree to participate in this study.

Signature of participant _____

Signature of witness (if participant cannot read) _____

Signature of research assistant _____

Date of signed consent _____

INFORMED CONSENT (Swahili Version)

CHUO KIKUU CHA SAYANSI ZA AFYA MUHIMBILI-KURUGENZI YA UTAFITI NA MACHAPISHO

Namba ya Utambulisho……/……./…….

Ridhaa ya kushiriki katika utafiti huu

Habari! Jinalangu naitwa…….natoka Chuo Kikuu cha Sayansi za Afya Muhimbili Dar-es salaam. Tunafanya utafiti kuangalia Kutambua uhusiano uliopo kati ya kunyanyasika kijinsia kwa mwanamke mwenye maambukizi ya VVU na matumizi ya dawa za kupunguza makali ya VVU Mbeya.

Malengo ya utafiti

Utafiti huu unalengo la kukusanya taarifa zitakazoelezea uhusiano uliopo kati ya kunyanyasika kijinsia kwa mwanamke mwenye maambukizi ya VVU na matumizi ya dawa za kupunguza makali ya VVU katika Mkoa wa mbeya. Hivyo unaombwa kushiriki katika utafiti huu ukiwa miongoni mwa jamii inayo kaa katika mkoa huu.

Ushiriki una husishanini?

Ukikubali kushiriki katika utafiti huu yafuatayo yata tokea

1. Uta kaa namsaili/mtafiti aliye pewa mafunzo ya jinsi yaku hoji nakujibu maswali ya husuyo ufahamu wako kuhusu unyanyasaji wa kijinsia na matumizi ya dawa za kupunguza makali ya VVU kwa wanawake.

2. Hakuna taarifa zozote za utambulisho zitakizo kusanywa wakati wa usahili isipokuwa umri na kiwango cha elimu

3. Utahojiwa mara mojatu kwa takribani dakika 30 kwenye sehemu ya faragha.

Usiri

Naku hakikishia kwamba taarifa zote zitakazo kusanywa kutoka kwako zi takuwa ni siri, ni watu wanaofanya kazi katika utafiti huu tu ndio wana weza kuziona taarifa hizi. Tuna

kuhakikishia ya kwamba taarifa zitakazo jumuishwa kwenye ripoti yetu hazita kuwa zina toa utambulisho wako.Hatuta weka jina lako au taarifa yoyote ya utambulisho kwenye kumbukumbu ya taarifa utakazo tupatia.

Madhara

Utafiti huu hauna madhara yeyote yanayo tegemewa kutokana na kujumuika kwako katika utafiti huu. Baadhi ya maswali yana weza kuku fanya usijisikie vizuri hivyo unaweza kukataa kujibu swali lolote naunaweza kusimamasha usaili wakati wowote.

Hakiyakujitoanambadalawowote

Ushiriki wako katika utafiti huu ni wahiari. Kamautachagua kutoshiriki au utaamua kusimamisha ushiriki wako hauta pata madhara yeyote.Unaweza kusimamisha ushiriki katika muda wowote hatakama ulisharidhia kushiriki.Kukataa kushiriki au kujitoa katika utafiti hakukufanyi upoteze stahiliyeyote unayo takiwakupata**.**

Faida

Taarifa utakayo tupatia nimuhimu sana na yenye thamani kwa kuwa itasaidia kuongeza uelewa wetu kuhusuu ufahamu, juu ya unyanyasaji wa kijinsia kwa wanawake wanao tumia dawa za kupunguza makali ya VVU. Pia taarifa utakayotupatia itasaadia kuandaa mpango na mikakati ya kuboresha huduma zinazo tolewa kwa wanawake wanao tumia dawa za kupunguza makalli ya VVU

Endapo utaumia

Hatutegemei madhara yeyote kutokea kwa kushiriki kwako katika utafiti huu

Fidia ya muda

Hakutakuwa na fidia ya muda uliotumika wakati wa kufanya mahijiano au majadiliano katika utafiti huu, ijapokuwa ushiriki wako katiaka utafiti huu utashukuriwa na kutathiminiwa.

Watu wa kuwasiliana nao

Kama unamaswali katika utafiti huu usisite kuwasiliana

ALEX LUOGA, Mtafitimkuu, Chuo Kikuu Cha Afya Muhimbili, S.L.P 65001, Dar essalaam(Simu no. 0756526420)

Mkurugenziwa Tafitina Machapisho,ChuoKikuu Cha Afya Muhimbili, Dr.J.Masalu S.L.P 65001, Dar es salaam.

PROF. GIDEON KWESIGABO, Msimamizi muelekezi wautafiti pia Muhadhiri Chuo Kikuu cha tiba na sayansi (Simu no. 0713443212)

DR.JAMES GIBSON, Msimamizi muelekezi wautafiti kutoka katika taasisi ya epidemiolojia TFELTP (Simu no 0685677580)

Unakubali kushiriki na kujibu maswali yatafiti hii

Mshiriki amekubali ( )

Mshirika amekataa ( )

Mimi_____nimesoma nimeilewa hiifomu, maswali yangu yamejibiwa.Na kubali kushiriki katiaka utafiti huu.

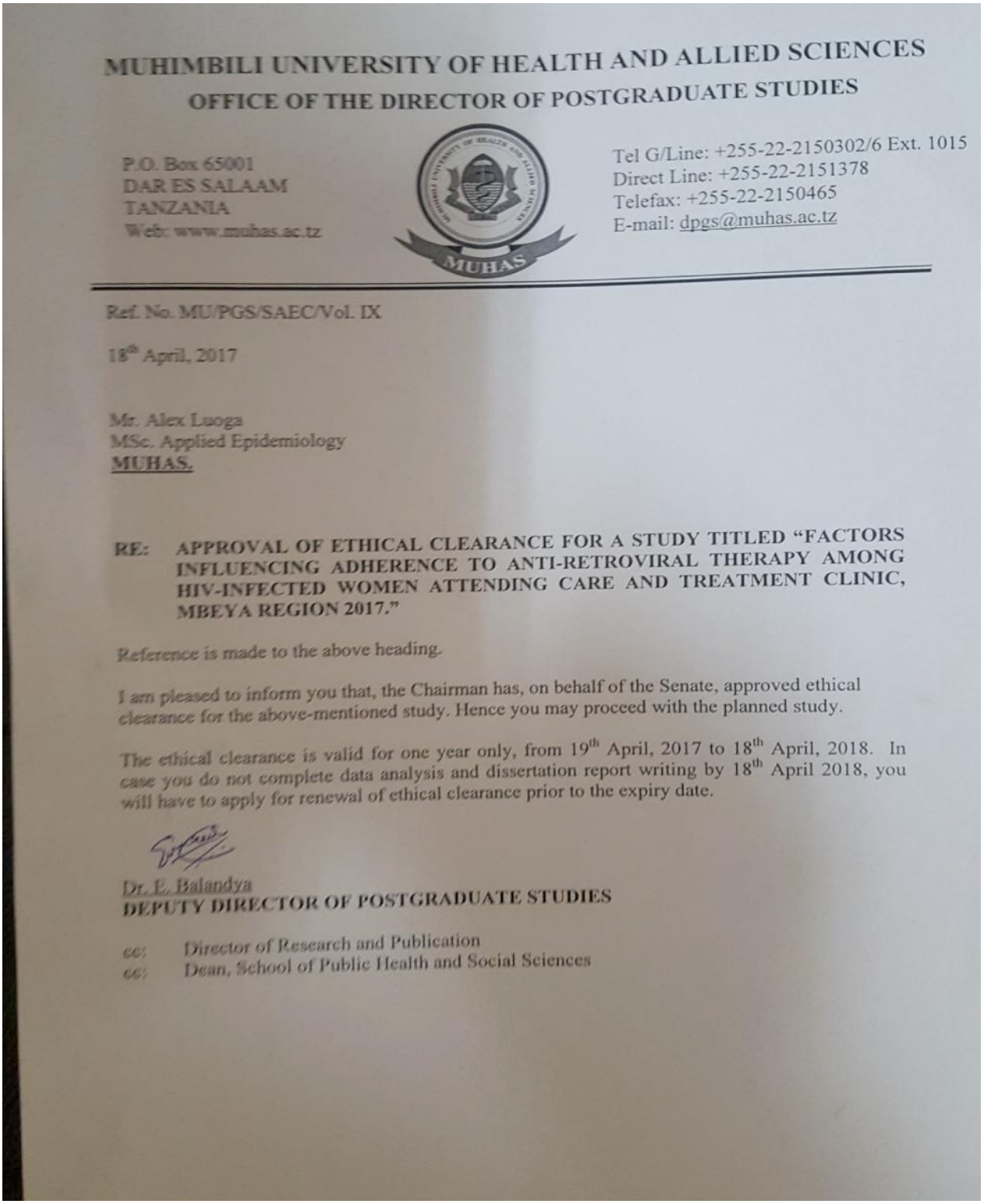
Sahihi ya Mshiriki _____

Sahihi ya shahidi (kama hawezi kusoma na kuandika)

_____

Sahihi ya mtafiti msaidizi _____

APPENDIX 111: SCANED ETHICAL CLEARENCE FORM



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Ref. No. MU/PGS/SAEC/Vol. IX

18th April, 2017

Mr. Alex Luoga
MSc. Applied Epidemiology
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "FACTORS INFLUENCING ADHERENCE TO ANTI-RETROVIRAL THERAPY AMONG HIV-INFECTED WOMEN ATTENDING CARE AND TREATMENT CLINIC, MBEYA REGION 2017."

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from 19th April, 2017 to 18th April, 2018. In case you do not complete data analysis and dissertation report writing by 18th April 2018, you will have to apply for renewal of ethical clearance prior to the expiry date.

Dr. E. Balandya
DEPUTY DIRECTOR OF POSTGRADUATE STUDIES

cc: Director of Research and Publication
cc: Dean, School of Public Health and Social Sciences