

**HIV SERO STATUS DISCLOSURE AND ASSOCIATED
FACTORS AMONG PEOPLE LIVING WITH HIV/AIDS
ATTENDING A CARE AND TREATMENT CENTRE IN
KISARAWA DISTRICT HOSPITAL, TANZANIA**

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KISARAWA DISTRICT HOSPITAL, TANZANIA**

By

Jamilla A. Mwanga

**A Dissertation Submitted in (partial) Fulfillment of the Requirements
for the Degree Master of Public Health of the Muhimbili University of
Health and Allied Sciences**

Muhimbili University of Health and Allied Sciences

November, 2012

CERTIFICATION

The undersigned certify that he has read and hereby recommends for acceptance by the Muhimbili University of Health and Allied Science a dissertation titled: ***HIV Sero Status Disclosure and Associated Factors among People Living with HIV/AIDS attending a Care and Treatment Centre in Kisarawe District Hospital, Coastal Region, Tanzania*** in partial fulfillment of the requirements for the degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

.....

Dr. E. J. Mmbaga
(Supervisor)

Date:

DECLARATION

AND

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I **Jamilla A. Mwangi**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature.....

Date.....

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DEDICATION

To my husband, Dr. Sulende Kubhoja, for his loving heart, kindness, tolerance and everlasting support throughout my studies and to my loving children; Susana, Grace and Bwire, who missed me a lot.

ABSTRACT

Background: It is estimated that about 1.4 million people in Tanzania are infected with HIV, with 90,000 being infected annually. Previous studies in Africa on HIV status disclosure have documented low rates of disclosure that vary between countries. Limited data indicates that the disclosure rate in Tanzania ranges from 16.7% to 55%. PLWHA have difficulties in disclosing their HIV status to others for fear of negative consequences. This attitude affects the tempo of HIV prevention. Disclosure of HIV positive status in Tanzania has been focused on various areas but its association with social cultural factors remains unclear.

Objective: To assess the magnitude of HIV status disclosure and explore determinants of disclosure among people living with HIV/AIDS (PLWHA) attending care and treatment centre at Kisarawe District Hospital.

Materials and methods: A cross-sectional study design was employed where both quantitative and qualitative data were collected from consenting PLWHA. Univariate, bivariate and multivariate analyses were performed using SPSS statistical software.

Results: A total of 402 PLWHA were recruited, among them, 132 (32.8%) were males. The mean age of the participants was 42.0 years (Standard deviation 9.9) with majority aged between 25-49. The overall disclosure rate to somebody was 98% while the disclosure to spouses was 56.3%. The greater number of study participants (43%) disclosed their status to five people and above. Males (74.2%) disclose more to their spouses than females (47.7%), ($p < 0.001$). The main determinants of HIV status disclosure were gender (AOR 0.28; 95%CI 0.14-0.56) and receiving counseling (AOR 0.33; 95%CI: 0.10- 0.81). Qualitative findings also show that cultural beliefs and attitudes influence HIV status disclosure among PLWHA.

Conclusion and recommendations

Overall disclosure rate is high though relatively low among spouses. Male gender and counseling were the most important determinants of disclosure. Interventions that target women and expand counseling should be intensified.

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LIST OF ABBREVIATIONS

AIDS	-	Acquired Immunodeficiency Syndrome
AOR	-	Adjusted Odds Ratio
ARVs	-	Anti-Retroviral Drugs
ART	-	Anti-Retroviral Therapy
HCP	-	Health Care Provider
HIV	-	Human Immuno-deficiency Virus
CD4	-	Cluster of differentiation 4
CTC	-	Care and Treatment Centre
NACP	-	National AIDS Control Programme
PLWHA	-	People Living With HIV/AIDS
PMTCT	-	Prevention of Mother to Child Transmission
PMO	-	Prime Minister's Office
MOHSW	-	Ministry of Health and Social Welfare
TACAIDS	-	Tanzania Commission for AIDS
UNAIDS	-	Joint United Nations Programme on HIV/AIDS
UNGASS	-	United Nations General Assembly Special Session
USAID	-	United States Agency for International Development
VCT	-	Voluntary Counselling and Testing
WHO	-	World Health Organization

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DEFINITION OF TERMS

Attitudes

Attitudes refer to general and enduring positive or negative feelings about a person, object or issue [1].

Belief

Belief means information that a person has about an object, an issue or a person. This information can be factual or just an opinion. Furthermore, the information can be positive, negative or may have no evaluative implications for the target of the information [2].

Cultural beliefs

Cultural beliefs are the ideas and thoughts common to several individuals that govern interaction between these people and between them, their gods, and other groups and differ from knowledge in that they are not empirically discovered or analytically proved. In general cultural beliefs become identical and commonly known through the socialization process by which culture is unified, maintained, and communicated [3].

Disclosure

Disclosure in the context of HIV/AIDS, refers to the act of informing any individual or organization of the HIV status of an infected person, or to the fact that such information has been transmitted, by any means, by the person him or herself, or by a third party, with or without consent. Except in exceptional circumstances, when disclosure to another person is required by law or ethical considerations, a person with HIV has the right to privacy and to exercise informed consent in all decisions about disclosure of his/her status [4].

CHAPTER ONE

INTRODUCTION

1.1 Background Information

HIV/AIDS remains a global public health problem worldwide. By the end of 2010, it was estimated that 34 million people in the world would be living with HIV, with 2.7 million being newly infected. The number of AIDS related deaths has been noted to decrease worldwide from 2.2 million to 1.8 million from 2005 to 2010 respectively. However, the rate is increasing in Eastern Europe and Central Asia from about 7,800 to 90,000 and it is twice in East Asia from 24,000 to 56,000 [5]. In Sub-Saharan Africa, it is estimated that 22.5 million people are living with HIV, with 2.3 million being children, while a total of 14 million are orphans from HIV/AIDS [6].

Tanzanian population was estimated to be around 41.05 million people in 2010, with the annual population growth rate of about 2%. It is estimated that about 1.4 million people were living with HIV in 2008 [7]. The current national prevalence is 5.7% with a small decrease of 1.3% of the 2008 prevalence (7%). However, this varies greatly across regions from 1 to 15 percent [8,9]. The estimated number of people who died from AIDS annually declined from 110,000 in 2001 to 96,000 in 2007 [9]. The main mode of transmission of new HIV infection is through sexual intercourse, the reproductive age group aged 15 to 49 being the most affected. Prevalence is higher among women (6.6%) compared to 4.6% of men [7,10].

HIV/AIDS in Tanzania has a long history and serious efforts and several interventions have been made to reduce its impact, including the establishment of Voluntary Counseling and Testing services (VCT) whereby in 2009, it was estimated that 44% of PLWHA were on ART [9]. The HIV/AIDS prevention strategies that include abstinence, being faithful to one uninfected partner, condom use, nutritional education, psychological support and Prevention of Mother to Child Transmission (PMTCT) have been promoted.

VCT were first introduced in 1989 along with establishment of centers for Care and Treatment Centres (CTC) as a strategy to prevent new infections and treat already infected individuals. The number of people receiving care and treatment increased from 2,000 to 135,696 from the year 2004 to 2007 respectively [11]. The number of VCT centers has increased from 520 to 2134 from the year 2004 to 2009 respectively [11,12]. The rise of VCT and CTCs in Tanzania has raised the number of HIV positive diagnoses and counseling services, of which among others, the issue of disclosure is discussed [13].

Disclosure can either be beneficial or harmful. It is beneficial when it encourages people to access HIV prevention and care services and harmful when it brings adverse consequences [4]. In this case, HIV status disclosure is an important strategy for HIV prevention as it enables HIV positive individuals to access HIV care and treatment programs, creates the awareness of HIV risk to sexual partners and practice safer sex behaviour. It also enables couples to make informed reproductive health choices which can reduce unwanted pregnancies hence reduce the risk of MTCT. In addition, it may enable individuals to receive care and socio-economic support from sexual partners, family and the community.

Disclosure to sexual partners is one of the key strategies in HIV prevention as it promotes safer sex practices, prevent new infections to partner, reduce the risk of MTCT, increase social support and reduce depression [14,15]. However, in spite the benefits mentioned above, the disclosure rate in some developing countries remains low as it ranges from 16.7% to 86% [16,17].

On the other hand disclosure is harmful when it brings adverse consequences [4]. Negative consequences such as stigma, discrimination, rejection, divorce, blame, shame, and abandonment, among others, are major hindrances of disclosure because they reduce the pace of HIV prevention.

In many countries, disclosure of one's HIV status is done by the patient himself/herself to a person whom he/she preferred to tell. However, in some countries, health care providers are the ones who decide who are first to reveal the status to, whether the patient him/herself or family members (spouse, parents or

children). It is then becomes the family's decision whether or not to tell the patient the truth or to hide it for the sake of patient's best interests [18]. However, in spite the good intention of involving family members in HIV disclosure, in some families, revelation has resulted in discrimination and psychological stress. Women suffer more from such negative consequences than men [15,19,20,21].

HIV positive status disclosure is a very sensitive phenomenon. HIV infected persons need to outweigh the benefits against the harm before disclosing their status. This reality necessitates an understanding of the magnitude of HIV status disclosure and associated factors among people living with HIV/AIDS who are attending care and treatment centres.

1.2 Problem Statement

Regardless of massive efforts made by various stakeholders to reduce the prevalence of HIV/AIDS in Tanzania, the prevalence has only declined slightly from 7% to 5.7% with large variations across regions, varying from 1% to 15%. It is estimated that about 1.4 million people in Tanzania are infected with HIV, with about 90,000 new infections on each year [8,9,22].

People diagnosed with HIV infection often face difficulties in disclosing to others their infection status. This factor affects efforts of reducing HIV prevalence. Women fear to disclose their status more than men, particularly those who are less educated or have low socio-economic status [19,20,21]. The HIV status disclosure by PLWHA has negative consequences including stigma, discrimination, abandonment, rejection, divorce, physical violence, denied socio-economic support and fear of being accused of infidelity [16,20,23].

Previous studies on HIV status disclosure have provided evidence on low rates of disclosure. There is a big variance of disclosure rates across countries. Studies [16,17] reported that disclosure rates in developing countries after diagnosis ranged from 16.7% to 86%. A study [16] revealed that only 43% of PLWHA from Mityana district in Uganda who were attending post test care had disclosed their HIV status to partners and other people.

In Tanzania, a study [20] reported that 55% of married men showed their results to their wives while 34% of married women disclosed the information to their husbands. Another study undertaken in Dar es Salaam [24] reported that rates of disclosure were only 16.7% among sero-positive women who revealed their status to their sexual partners and only 22.2% of women disclosed their positive status to someone.

HIV status disclosure is influenced by socio-demographic characteristics, fear of negative outcomes of disclosure, health status, prior discussion with another person to undertake HIV test, type of HIV care, or type of counselling received [16,19]. Interventions for increasing disclosure of HIV status have been suggested, with some of these interventions being implemented in different parts of the world. Increasing the effectiveness of HIV counselling of HIV positive persons is one of them [19]. However, in spite of the massive efforts undertaken to solve the problem, the disclosure rate remains low [16].

In Tanzania, many people who are voluntarily tested for HIV do not disclose their status to their partners and or relatives. HIV disclosure studies have focused on the role of social relations in facilitating disclosure to others, acceptability of HIV counselling and testing and participation in MTCT intervention study using antiretroviral, partner's reaction, socio-demographic, behavioural and psychological factors and others focused on stigma and discrimination. However, little is known on the social cultural factors influencing disclosure among PLWHA attending CTC. Thus, a better understanding is needed on how contextual factors such as cultural beliefs, attitudes and knowledge influence disclosure among PLWHA. This study therefore aims at identifying the cultural factors and other determinants affecting HIV disclosure among PLWHA at Kisarawe district hospital. The information collected will be useful in suggesting intervention measures that will increase the rate of disclosure which will accelerate HIV prevention.

1.3 Justification of the study

HIV status disclosure of PLWHA to partners and others is of vital significance to HIV prevention. Thus, the issue of HIV status disclosure needs to be addressed to prevent the spread of HIV infection, promote accessibility to care and treatment programs, attain psycho-social support for patients from relatives and friends, reduce stigma, adhere to treatment and promote safer health behaviour [19,20,21].

There are other researches on HIV status disclosure in Tanzania which were undertaken in different areas with different methodology and different period of time. Tremendous efforts have been made to increase HIV status disclosure rate as one of HIV prevention strategies. However, little is known on the social cultural factors affecting disclosure especially in areas such as Kisarawe where the prevalence of HIV infection is relatively high. This study therefore aims at assessing the magnitude of HIV status disclosure and associated factors that influence disclosure among people living with HIV/AIDS attending care and treatment centre at Kisarawe District. The study will contribute in filling the existing knowledge gap hence suggest proper intervention measures for promoting disclosure in the community, which, in turn, will reduce the spread and transmission of HIV.

1.4 Research questions

- 1.4.1 What are the socio-demographic characteristics of PLWHA attending care and treatment centre at Kisarawe District Hospital?
- 1.4.2 What is the proportion of PLWHA attending care and treatment centre at Kisarawe District Hospital who have disclosed their HIV status?
- 1.4.3 What is the preferred audience (partner, parents, friends, other family members and public) for HIV status disclosure among PLWHA attending care and treatment centre at Kisarawe District Hospital?
- 1.4.4 What are the determinants (socio-demographic characteristics, ART status, counselling, knowledge on the importance, cultural beliefs and attitudes) of disclosure to spouses and other sex partners among PLWHA attending care and treatment centre at Kisarawe District Hospital?

1.5 Objectives

1.5.1 Main objective:

To assess the magnitude of HIV status disclosure and explore determinants of disclosure among people living with HIV/AIDS (PLWHA) attending care and treatment centre at Kisarawe District Hospital.

1.5.2 Specific objectives:

1.5.2.1 To describe socio-demographic characteristics of PLWHA attending care and treatment centre at Kisarawe District Hospital.

1.5.2.2 To determine the proportion of PLWHA attending care and treatment centre at Kisarawe District Hospital who have disclosed their HIV status.

1.5.2.3 To determine the preferred HIV status disclosure audience (partner, parents, friends, other family members, public) among PLWHA attending care and treatment centre at Kisarawe District Hospital.

1.5.2.4 To determine the determinants (socio-demographic characteristics, ART status, counselling, knowledge on the importance, cultural beliefs and attitudes) of disclosure to spouses and other sex partners among PLWHA attending care and treatment centre at Kisarawe District Hospital.

1.6 Conceptual framework

Figure 1 below depicts conceptual framework that illustrates multiple factors of HIV positive status disclosure such as cultural beliefs, knowledge, attitude, stigma, and discrimination, fear of rejection, abandonment, physical violence and gender power related inequalities and how they facilitate or hinder the disclosure. Based on the Theory of Planned Behaviour [25], it shows an important contribution to disclosure research by explaining the underlying causes of non-disclosure. The theory states that attitude toward behaviour, subjective norms, and perceived behavioural control, together shape an individual's behavioural intentions and behaviours. This theory proposes that people's behaviour is determined by a set of control beliefs about the presence of contextual factors such as culture, stigma and knowledge to influence positive or negative attitudes towards HIV disclosure. These factors interact with individuals socio-demographic characteristics and form a basis for disclosure

intentions. It thus implies that for disclosure to be expected, the contextual factors and individual factors need to be taken into account in promoting it.

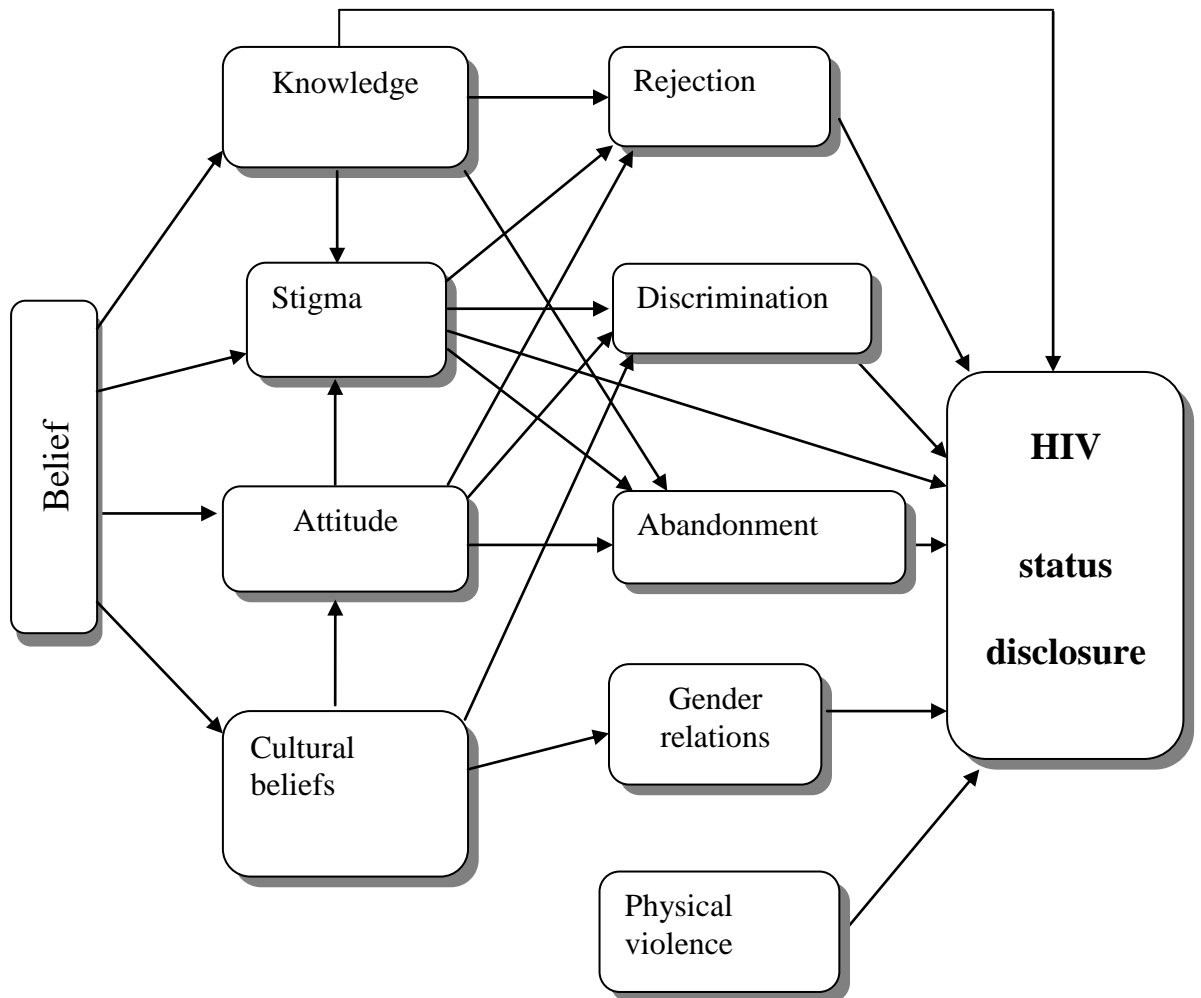


Figure 1. Multiple factors influencing HIV positive status disclosure

CHAPTER TWO

LITERATURE REVIEW

2.1 Socio-demographic characteristics of PLWHA and disclosure status

HIV infected individuals often have difficulties telling others about their status. For disclosure to happen, it depends on several factors which include age, socio-economic status, level of education, marital status, social relations, knowledge, cultural factors and acquaintance on the importance of HIV disclosure. Global studies have revealed that younger people; or people with low socio-economic status and low education level are less likely to disclose their HIV status [14,19,23,26].

It has been reported that women with long standing relations are more likely to disclose their status than those of shorter duration or who had multiple sexual partners [19,21]. Similarly, other studies [16] asserted that clients who are not married and those who have fewer sexual partners, less than two in a year, are more likely to disclose their HIV positive status than those who have many sexual partners.

Additionally, women with more than one sexual partner are more likely to have disclosed their HIV status than those with only one sexual partner (71.2% compared to 89.0%) [14]. However, this is not always the case, another study [21] argues that unmarried women are less likely to disclose their status to their sexual partners. In addition, another study [27] reported that women who are married are more likely to disclose their HIV status to their husband/sexual partner (78% compared to 17%).

It has been documented that there is significantly higher disclosure rate among couples where the male partner is HIV infected [28]. Women are much less likely to disclose their HIV positive status to their spouses or sexual partners. It has been reported that 55% of married men disclose their HIV test results to their spouses while only 34% married women disclose their HIV test results to their spouses [20]. Similarly, a study in rural Malawi [29] revealed that there are differences by gender

in disclosing HIV status where HIV positive women are less likely to disclose their HIV status to their husbands.

Gender associated factors coupled with power imbalances within couple relationships may also highly contribute to disclosure where male partners are the HIV positive compared to where female partners are the HIV infected. Similar observations indicate that normally men have more socio-economic power than women, thus they do not fear more of being rejected or discriminated as women do [20,28]. However, another study has found the contrary, Bouillon et al [26] asserts that most of the time, males are unwilling to disclose their HIV status.

Other study indicated that HIV infected men are more concerned about their partner's reactions, that is, they fear the exposure of their past sexual behaviour. While HIV infected women are more concerned about material support, fear of physical violence, plus social and economic pressure in raising their children once they are abandoned [21].

Research from many different countries in Africa and elsewhere have reported the influence of various factors affecting the magnitude of HIV status disclosure among PLWHA attending CTC. A study in Uganda [16] revealed that people who had good interpersonal communication skills and those who are on ART are more likely to disclose their HIV positive status. Furthermore, a study done in Ethiopia shows that disclosure of HIV status to sexual partners is associated with knowing the partner's HIV status, advanced disease stage, low negative self-image, residing in the same house with partner, and discussion about HIV testing prior to seeking services [30].

Studies also indicate that PLWHA who live in rural settings are two times more likely not to disclose their HIV status to any significant others compared to those who live in urban settings [31].

2.2 Proportion of PLWHA and HIV disclosure rates

In developed countries, HIV status disclosure rate among antenatal care women ranges from 42%-100% compared to 16.7% - 32% for developing countries [31].

However, previous studies [17,28] report the rates of disclosure in developing countries as ranging from 16.7% to 86%. The disclosure of HIV positive status among HIV discordant couples in Sub-Saharan Africa is generally low. HIV transmission among discordant couples is quite substantial, ranging from 5.0 to 16.7 per 100 person years, which is 5 to 17 times higher than incidence among HIV concordant negative couples. Thus, they considerably contribute to the HIV epidemic [28].

However, less than 10% of HIV positive individuals are aware of their partners' status and only about 20% of HIV discordant couples know that they are living in discordant relationship in East Africa [28]. Another study [23] reveals that among those who tested positive, 13% of the sampled respondents had never disclosed their HIV test results to anyone. Furthermore, more than one third of all HIV infected adults have never disclosed the information to their sexual partners. A study in Zimbabwe [27] reported that 97% of the women disclose to at least to one person while 78% disclose to their spouse/sexual partners.

In Tanzania, studies reveal that 55% of infected married men disclose their HIV status to their wives and 34% of married women disclose their status to their husbands [20]. A study undertaken in Dar es Salaam reveals that 16.7% of HIV infected women disclose their HIV status to their sexual partners and only 22.2% of women disclose their HIV status to significant others [24]. Furthermore, another study conducted in Dar es Salaam reported the prevalence of disclosure being 22% within two months to 40% after nearly four years [32]. In the Ndayanga study [14] in Tanzania, 64.5% of HIV seropositive pregnant women receiving PMTCT services are reported to have disclosed their HIV status.

2.3 The preferred audience for HIV disclosure

The process of disclosing HIV status differs from one person to another. It involves decisions about timing, to whom, how and under what conditions [19]. Some disclose their status soon after receiving HIV test results, others give the information after a short period of time (months), some take longer to disclose (years) as some do not

disclose anything to anyone, fearing the consequences if their status became widely known. Most PLWHA tend to disclose their status to people whom they are closely related, and who they truly trust, mostly family members such as spouses, parents, siblings, children, aunts and uncles.

However, some PLWHA disclose their status to friends, neighbours, and even members of the public [20] PLWHA tend to share their status with family members due to the social ties they have and the psychosocial support they expect from them. However, this might always not be the case, as some people do not trust their family members as they do trust their friends. Previous study [26] reports that friends appear to be closer confidants than immediate family members among gay men. He further explains that relatives may be chosen over spouses.

As earlier explained in the definition of disclosure in the context of HIV/AIDS, it may also refer to the fact that such information has been personally transmitted, or by a third party, with or without their consent. In China, a health care provider has the choice to disclose HIV status of the HIV infected person to the person himself/herself or to family members taking into consideration the circumstances surrounding the infected person. A study [18] reveals that health care providers should honestly inform the patient or his/her family member(s) about the condition of the disease. In this study, 49% of health care providers who responded were of opinion that family members (mainly spouses and children) should be the first to be informed on a patient's HIV status by the provider.

2.4 Determinants and perceived consequences of HIV disclosure

There are number of factors which promote HIV status disclosure. Taking ART is one of the determinants of disclosure, PLWHA who are on ART are more likely to disclose their status compared to those who are not on ART [16]. This is due to the fact that before starting ART, they receive ART adherence counseling in which among other things, they emphasize on disclosure so that they can be assisted especially by being reminded to take their medication (ARVs) or to be helped to pick

the medications from the centre once the patients cannot do by themselves for a strong reason.

HIV counseling promotes disclosure of one's HIV status. Counseling encourages the HIV infected persons to disclose their HIV positive status to others. Counseling can be done during pre-test and post-test counseling sessions or during the routinely clinic visit for care and treatment programmes [16]. The study reports that clients who received ongoing counseling at every clinic visit are more likely to disclose, this is due to the fact that clients are coupled with benefits of disclosure. A Tanzanian study [32] reports that counseling has influence on disclosure.

.However, majority of HIV infected persons afraid of disclosing their HIV status to others for many reasons. Fear of stigma and discrimination remains the main reason for non disclosure among PLWHA. Most HIV infected individuals are scared widespread information of their HIV status, which might lead to stigma and discrimination [20], this study reveals that 5 out of 11 respondents did not disclose their HIV status to anyone, fearing of discrimination. Another study reveals [15] that HIV positive status disclosure may expose a woman to stigmatization, discrimination and rejection from relatives, friends and health care providers which may cause social withdrawal, psychological stress and depression. However, HIV status disclosure may reduce depression due to the fact that a woman may no longer has to keep her status secret and hence minimize psychological stress.

Many global studies have documented the negative consequences of disclosure which include fear of stigma, discrimination, abandonment, divorce, physical violence, accusation of infidelity, rumor mongering, feeling of shame, fear of loss of economic support, loss of custody of children and property especially for women [16,19,23,26]. A study undertaken in Uganda and Tanzania [16,20] show that HIV status disclosure has risk of being accused of infidelity especially for women.

A study done in China [18] reports that discrimination occurs within the family after HIV status disclosure of the patient to family members. In addition, a study done in Malawi [29] reports that women who perceive HIV stigma in the community are less likely to disclose HIV status to a spouse.

2.5 Knowledge on the importance of HIV disclosure

In Tanzania, HIV knowledge is rather high, with 87% to 90% possessing some knowledge on HIV [33]. Many people know about HIV transmission and prevention, but the problem is that they don't act upon it, that is why HIV prevalence still remains high in some regions. A USAIDS report shows that 98% of all Tanzanian aged between 15 and 49 years have heard about AIDS but don't have thoroughly understanding of the disease [9].

The knowledge is significantly higher in urban rather than rural settings. However, the knowledge on the importance of HIV disclosure is unknown. Counsellors at VCT centres do put more emphasis on the confidentiality of the test results but they rarely mention the advantage of disclosure to significant others [20].

2.6 Cultural beliefs on HIV disclosure

Cultural beliefs of different societies shed different lights on the right way of truthful disclosure. Findings of the study done among people with traditional Navajo beliefs [34] reveals that some people in some culture holds the belief that mere hearing about possible risks of treatment amounted to inviting the mishaps. Such beliefs make people withhold truthful information about their HIV status for fear of inviting harmful effect. Some societies associate specific signs with HIV/AIDS disease, thus if HIV infected persons do not manifest any signs generally associated with HIV/AIDS such as weight loss, the community does not believe that they have infected even when they disclose their status [35]. Moreover, some societies associate HIV/AIDS with witchcraft, a tendency which affects the disclosure. A study undertaken in Zimbabwe reveals that traditional healers told people that HIV was not a virus, but a misfortune caused by unhappy spirits [36]. Therefore, the diagnosis of unhappy ancestors or bewitching leads to non disclosure of the true health status of a person.

Religious belief, being one of the cultural aspects, has important role to play in HIV status disclosure. Religion shapes individual outlooks on living with HIV. It is also used as a coping strategy among PLWHA by providing a sense of peace and hope through prayers and faith in God [35,37]. A study done among HIV positive pregnant women in Kinshasa [38] reveals that faith in God and/or religious leaders does influence women's disclosure and coping strategy. A previous study [20] reveals that there are some cultural rules that discourage the disclosure of mischief conduct. However, a study done in Tanzania [37] reports that respondent's intentions of disclosing their status to the religious community if they become HIV infected is primarily associated with non-religious factors. This concurs with the findings of another study [39] which reports that there was no relationship between HIV status disclosure and religion.

2.7 Attitudes on HIV disclosure

Many HIV infected persons have negative attitudes towards disclosure of their status because they fear that the community shall discover their tragic status. A study on Attitudes of Patients on disclosure of their HIV sero-positive status in Nigeria [40] reveals that HIV positive patients fear negative outcomes of disclosure, and rejection due to stigma, discrimination, social withdrawal, and being disgraced by their families. Furthermore, another study [37] reports that religious beliefs on HIV help to shape attitudes towards HIV status disclosure. Religious teachings which state that HIV/AIDS is a punishment from God make a person feel guilty, hence less likely to disclose their status for fear of being blamed of unfaithfulness and adultery.

CHAPTER THREE

METHODOLOGY

3.1 Study design

A cross sectional study of PLWHA attending care and treatment centre at Kisarawe District Hospital was conducted using both quantitative and qualitative methods in data collection. A cross-sectional study examines the relationship between disease (or health condition) and other variables of interest as they exist in a defined population at a single point in time or over a short period of time. This design was adequate in collecting data that addressed the intended research questions for this study as it was able to measure all factors under investigation at once, plus the prevalence rate of disclosure. However, this study design has weakness in establishing temporal relationship between exposure and outcome, the determinants identified may therefore not be causal [41]. However, most factors examined are known determinants of disclosure and supported by other studies.

3.2 Study area

This study was conducted in Kisarawe district, one of the six districts of the coastal region. Other districts are Kibaha, Bagamoyo, Mkuranga, Rufiji and Mafia. The district is located approximately 30 km Southwest of Dar es Salaam. It is surrounded by Ilala and Kinondoni districts to the South East, Rufiji District to the South, Morogoro District to the West and Kibaha District to the North. The district has four divisions, 14 wards and 77 villages. It covers a 4,464 km² area, being 13.3% of the total area of Coast Region [42].

The 2002 national census estimated the population of the district to number 95, 323, a figure that was expected to rise to 101, 638 by 2005 [42]. The area has good climatic conditions both for agriculture and fishing. The chief food crops are maize, rice, sorghum, cassava, sweet potatoes, legumes, pulses and bananas. The major cash crop is cashew nuts. The district has 19 health facilities, one hospital, three health centres and 15 dispensaries. The top most ten diseases causing morbidity and

mortality in Kisarawe District are malaria, acute respiratory infections, pneumonia, diarrhoea, anaemia, STIs/HIV/AIDS, pregnancy complications, tuberculosis, hypertension and accidents. Kisarawe District was specifically selected for this study due to its rural location where cultural practices and pressures are high. Moreover, the district is located close to Dar es Salaam where the prevalence of HIV infection is high. Kisarawe is the second area with high prevalence rate of HIV/AIDS in Coast Region (7.2%) and a well established CTC that allowed a sufficient number of study sample [42,43].

3.3 Study population

3.3.1 Quantitative study population

The study population consisted of HIV patients attending CTC at Kisarawe District Hospital who were aged 18 years and above. Recent data indicated that, the district has 3,005 PLWHA attending CTC at Kisarawe District Hospital [44].

3.3.2 Qualitative study population

Participants of in-depth interviews were those who fulfilled the above criteria, and who were on ART for long period of time (more than one year) and those who were on ART for a short period of time (three to six months). One health care provider was also involved in in-depth interviews so as to allow the researcher get additional information from the health care provider perspectives on the factors affecting PLWHA in disclosing their status to others.

3.4 Inclusion criteria

3.4.1 Quantitative inclusion criteria

Those PLWHA registered as patients at the centre, aged 18 years and above, and were willing to give informed consent.

3.4.2 Qualitative inclusion criteria

The single health care provider who participated in in-depth interview was a counsellor whose selection was based on the longer period that health care provider worked in the CTC and was willing to give informed consent.

3.5 Exclusion criteria

3.5.1 Quantitative and qualitative exclusion criteria

Patients who were too sick to be interviewed.

3.6 Sample size and sampling procedures

3.6.1 Quantitative sampling

A total of 402 PLWHA from Kisarawe District Hospital were enrolled. The study was conducted from May 2012 to August 2012. A systematic random sampling was used in the recruitment of patients. All patients who attended the hospital CTC starting from the date of commencement of data collection, and who fulfilled the selection criteria, were consecutively recruited for the study. A lottery method using names from attendance register was used to select consecutively 30 study participants at random on daily basis. The recruitment continued until the intended sample size was achieved.

Sample size was calculated using the following formula.

$$n = Z^2P(100-P)/\epsilon^2$$

Where:

n = minimum required sample size

Z = standard normal deviate corresponding to the level of significance (1.96 at 95% confidence interval)

P = the estimated proportion of PLWHA who disclosed their HIV status was taken to be 49%.

ϵ = Maximum likely error (5%)

Therefore, the minimum sample size:

$$N = 1.96^2 \times 49(100-49)/5^2$$

Therefore, the minimum sample size was 384.

With the addition of a 10% non-response rate, the final sample size was 426.

3.6.2 Qualitative sampling

Purposeful sampling based on the potential of the participant to give needed information was used to select qualitative study sample. Qualitative interview involved 6 in-depth interviews with PLWHA until it reached saturation point, coupled with one in-depth interview with a health care provider.

3.7 Data collection tools and procedures

3.7.1 Quantitative data collection

3.7.1.1 Structured questionnaire

A structured questionnaire designed for the purpose of the study was used (appendix B) to collect quantitative data through a face to face interview. The questionnaire was used to collect information on socio-demographic characteristics, risk behaviours, stigma, cultural beliefs, attitudes towards disclosure, knowledge on the importance of HIV status disclosure, violence history, disclosure status, audience of disclosure and gender relations. Medical history data such as ARV status, TB infection were collected. The outcome variable for this study was HIV status disclosure status as a dichotomy variable.

3.7.2 Qualitative data collection

3.7.2.1 In-depth interview

For qualitative data collection, the principal investigator conducted the interviews. In-depth interview was used to collect primary data on knowledge, cultural issues and attitudes from selected respondents by using a semi-structured interview guide. Data was collected through note taking and recorder. A total of seven interviews were conducted; where each interview lasted for the period of 30 to 50 minutes depending on the amount of information the participant possessed.

3.8 Variables

3.8.1 Dependent variable

3.8.1.1 HIV status disclosure

3.8.2 Independent variables

3.8.2.1 Socio-demographic characteristics such as age, sex, level of education, marital status, occupation, monthly income and religion.

3.8.2.2 Knowledge on the importance of HIV status disclosure

3.8.2.3 Cultural beliefs

3.8.2.4 Attitudes

3.8.2.5 Violence

3.8.2.6 Risk behaviour

3.8.2.7 Gender relations

3.9 Data collection process

Two research assistants were trained for one day by the principal investigator to familiarize with the tool (particularly on how to ask questions and record the information accurately). After acquiring all necessary permission, the researcher introduced the study to the CTC in charge and other staff. Following the patients' completion of their scheduled services at the clinic, the researchers approached them and asked for consent to be interviewed with assurance that refusal or withdraw would not affect the services they received at the clinic. Those unwilling to participate were allowed to be excluded in interview. Those who accepted were interviewed in a secure place located within the premises.

Data were collected on daily basis from morning to evening, except for weekends, for a three-week period. A total of 402 PLWHA were interviewed; where each interview took about 15 to 20 minutes. On daily bases the researchers were counter-checking for accuracy and completeness of the filled questionnaires and all completed questionnaires were given a code number.

3.10 Data processing and analysis

3.10.1 Quantitative data processing and analysis

Data was edited for accuracy, readability, consistence and completeness; thereafter it was coded and then entered into a computer using software SPSS (Statistical Package for the Social Sciences) version 17.0. Frequencies were run for all categorical variables and comparison between proportions examined using the Chi-square test for difference in proportion of Fischer's exact test when appropriate. All continuous variables were summarized by calculating means and standard deviations and comparison between means was done using t-test. HIV status disclosure was set as an outcome variable in the analysis of determinants of disclosure. A bivariate analysis was done to determine the presence of a statistically significant association ($p < 0.05$) between independent variables and the outcome variable. Multiple logistic regression models were built to identify independent determinants of HIV status disclosure. Both adjusted and un-adjusted odds ratio were reported with their corresponding 95% confidence intervals. All the analyses were two tailed and significance level set at 5%.

3.10.2 Qualitative data processing and analysis

Qualitative data, all ipad-recorded interviews were transcribed and edited. The transcribed text was translated from Swahili language to English and read several times to gain familiarity with the data. After reading all transcripts we created demarcated segments of texts that represented the main issues that emerged during data collection. Each segment was labelled with a "code" – such as 'feelings about rejection', 'stigma' in line with research questions and objectives. After coding was complete, we created a summary of the common/recurring codes, taking into account the similarities and differences in related codes across the entire transcripts, distinct original sources/contexts, or comparing the relationship between one or more codes. Coded transcripts were arranged according to themes such as cultural beliefs, attitudes and knowledge to answer the study objectives. All analyses was done manually

3.11 Ethical consideration:

Ethical approval for the study was sought from the MUHAS/Clearance Committee. Copies of letters of introduction from SPHSS were obtained and submitted to the District Medical Officer of Kisarawe and the officer in charge of the hospital to enable the researcher to get permission to collect data in Kisarawe Hospital. Signed informed consents were obtained from participants by explaining the purpose of the study and reading out the consent form (Appendix D) before interview. We explained to participants that all information provided will be kept confidential and there will be no link to their identity as no names appeared in any form, instead numbers were used. We also explained to them that participation in the study was voluntary and they were allowed not to answer any question they did not feel to answer and they can withdraw from the study whenever they wanted.

CHAPTER FOUR

RESULTS

This chapter presents the results of the study. It starts by describing the socio-demographic characteristics, and is then followed by the substantive findings of the study, which are presented according to pertinent research objectives.

4.1 Socio-demographic characteristics of study participants

The study enrolled 402 HIV infected persons where a total of 270 (67.2%) females and 132 (32.8%) male participants were interviewed. Majority of study participants were married (52%) followed by widowed/divorced/separated (39.1%). A large proportion of participants, 105(26.1%) reported a monthly income which lies between Tshs. 100,000 and 299,000 (26.1%) followed by Tshs. 50,000 and 99,000 (24.6%). Most participants reported to have completed primary education 280 (69.7%) while 83 (20.6%) had no formal education. Almost three quarters 296 (73.6%) of the participants were Muslims. Most of the study participants belonged to the age group of 25-49 years (77.1%) and the overall mean age was 42 years (Standard deviation 9.9). Men were significantly older [44.8 years (SD10.3)] than that of female (40.6 (SD 9.6)), $p < 0.001$. The socio-demographic characteristics of the study participants are summarised in Table 1a and Table 1b.

Table 1a: Socio-demographic characteristics of respondents

Variables	n	Percentage of respondents
Gender		
Males	132	32.8
Females	270	67.2
Total	402	100.0
Age group (in years)		
18-24	8	2.0
25-49	310	77.1
50-64	74	18.4
≥ 65	10	2.5
Total	402	100.0
Education level		
No formal education	83	20.6
Primary	280	69.7
Secondary or higher	39	9.7
Total	402	100.0
Occupation		
Employed	27	6.7
Self employed	262	65.2
Unemployed	113	28.1
Total	402	100.0

Table 1b: Socio-demographic characteristics of respondents

Variables	Frequency of respondents	Percentage of respondents
Monthly income (in Tshs)		
<50,000	29	7.2
50,000 – 99,000	99	24.6
100,000 – 299,000	105	26.1
> 299,000	33	8.2
Unstated	136	33.8
Total	402	100.0
Marital status		
Married	209	52.0
Never married	36	9.0
Widowed/divorced/separated	157	39.1
Total	402	100.0
Religion		
Roman Catholic	42	10.4
Lutheran and other Christian	64	15.9
Muslim	296	73.6
Total	402	100.0

4.2 Proportion of HIV sero-status disclosure

Overall, the prevalence of HIV status disclosure to at least one person was 98% (394). The disclosure status did not differ by gender (male 97.0% versus female 98.5%, $p=0.296$). Majority of study participants 173 (43%) told five people and above, followed by two to four people 172 (42.8%). Participants who disclosed their

status at least to one person were 49 (12.2%) while only 8 (2%) participants did not disclose to anyone (Figure 2).

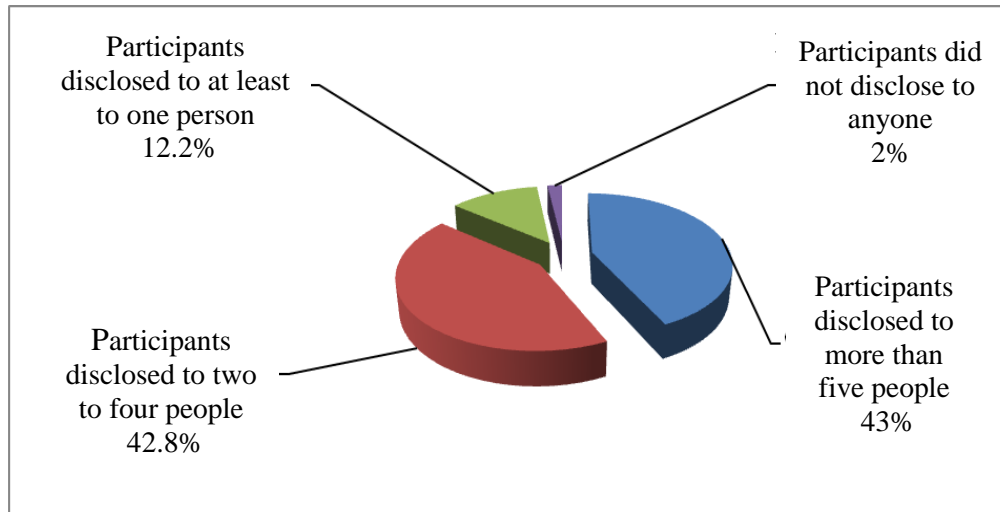


Figure 2: Distribution of participants by number of persons HIV status was disclosed to.

4.3 Preferred audience of disclosure

Participants were asked to mention who was the most preferred person to disclose their HIV status, and 394 responded to this question. Among 394 study participants, 131 (32.6%) reported to most prefer disclosing their HIV status to their relatives [11.9% to brothers, 16.4% to sisters, 1.5% to aunts, 0.5% to sister-in-laws, 1.0% to brother-in-laws, 0.5% to nieces/nephews, 0.2% to grandfather and 0.5% to cousins].

A total of 117 (29.1%) participants disclosed their HIV status to their spouses and 66 (16.4%) to mothers. They were followed by 50 (12.4%) who disclosed to their children, 4% to fathers and 3.5% to friends. There was statistical significant difference in audience preferred most to tell by gender ($p < 0.001$), age ($p < 0.001$), occupation ($p = 0.011$), marital status ($p < 0.001$) and income ($p < 0.001$). However, findings show no significant difference by education ($p = 0.119$). Participants preferred mostly to disclose to the person of the same sex. Results show that females disclose more to their mother than males did (female 90.9% vs. males 9.1%), while

males disclose more to their brothers (males 70.8% vs. females 29.2%). Table 2 summarizes the responses on the preferred audience of disclosure by gender.

Table 2: Preferred audience of disclosure

Preferred audience	Frequency (%)	Male	Female
Spouse	117 (29.1)	50 (42.7)	67 (57.3)
Mother	66 (16.4)	6 (9.1)	60 (90.0)
Other relatives	131 (32.6)	51 (38.9)	80 (61.1)
Father	16 (4.0)	8 (50)	8 (50.0)
Children	50 (12.4)	8 (16.0)	42 (84.0)
Friend	14 (3.5)	5 (35.7)	9 (64.3)
Missing	8 (2.0)		
Total	402 (100.0)	128 (32.5)	266 (67.5)

4.4 Determinants of disclosure to spouse

This study was interested to know the determinants of disclosure to spouse and other sex partners. This is important because sexual intercourse is the major means of HIV transmission in our country. Among 394 study participants, 117 (29.1%) reported to prefer most disclosing their HIV status to their spouses. Findings indicate that gender, education and occupation are determinants of disclosure to spouse. (Table 3).

Table 3: Bivariate analysis of determinants of disclosure to spouse among PLWHA attending care and treatment at Kisarawe District Hospital

Variable	Total (N)%	Disclosed n(%)	p-value
Gender			
Males	128 (100.0)	95 (74.2)	<0.001
Females	266 (100.0)	127 (47.7)	
Missing	8 (2.0)		
Total	402 (100.0)	222 (56.3)	
Age			
18 – 24	8 (100.0)	4 (50.0)	0.166
25 – 49	305 (100.0)	181 (59.3)	
50 – 64	71 (100.0)	32 (45.1)	
≥ 65	10 (100.0)	5 (50.0)	
Missing	8 (2.0)		
Total	402 (100.0)	222 (56.3)	
Education level			
No formal	81 (100.0)	35 (43.2)	0.024
Primary	277(100.0)	167 (60.3)	
Secondary or higher	36 (100.0)	20 (55.6)	
Missing	8 (2.0)		
Total	402 (100.0)	222 (56.3)	
Occupation			
Employed	27 (100.0)	22 (81.5)	0.004
Self employed	254 (100.0)	147(57.9)	
Unemployed	113 (100.0)	53 (46.9)	
Missing	8 (2.0)		
Total	402 (100.0)	222 (56.3)	
Monthly Income			
<50,000	27 (100.0)	17 (63.0)	0.067
50,000 – 99,000	97 (100.0)	52 (53.6)	
100,000 – 299,000	102 (100.0)	63 (68.5)	
> 299,000	32 (100.0)	26 (81.3)	
Missing	144 (35.8)		
Total	402 (100.0)	164(63.6)	
Religion			
Roman Catholic	39 (100.0)	15 (38.5)	0.058
Others Christian	62 (100.0)	37 (59.7)	
Muslim	293 (100.0)	170 (58.0)	
Missing	8 (2.0)		
Total	402	222 (56.3)	

Table 3 cont.

Bivariate analysis of determinants of disclosure to spouse among PLWHA

Characteristics	Total (N)	Disclosed n(%)	p-value
ART status			
Yes	325	181 (55.7)	0.448
No	59	36 (61.0)	
Missing	18		
Total	402	217 (56.5)	
Disclosure counselling			
Yes	367	209 (56.9)	0.056
No	27	13 (48.1)	
Missing	8		
Total	402	222 (56.3)	
Worried			
Yes	137	83 (60.6)	0.205
No	257	139 (54.1)	
Missing	8		
Total	402	222 (56.3)	
Importance of disclosure			
Yes	243	130 (53.5)	0.148
No	151	92 (60.9)	
Missing	8		
Total	402	222 (56.3)	
Physical violence			
Yes	2	2 (100.0)	0.684
No	209	193 (92.3)	
Missing	191		
Total	402	195 (92.4)	
Condom use			
Yes	185	155 (83.8)	0.006
No	16	9 (56.3)	
Missing	201		
Total	402	164 (81.6)	

4.4.1 Socio-demographic characteristics

Results show that males (74.2%) were more likely to disclose their HIV status to their spouses more than female (47.7%) ($p < 0.001$). Increasing education level ($p = 0.024$), occupation ($p = 0.004$) and income ($p = 0.067$) were statistically associated with the higher likelihood of HIV status disclosure. There was a borderline ($p = 0.058$) statistical significant relationship between HIV disclosure status and religion affiliation in this population, however, Roman Catholic were less likely to disclose their HIV sero status as compared to other religion affiliations (Table 3).

4.4.2 ARV status

Table 3 shows that among 325 participants, 181 (55.7%) who were on ARVs disclosed their HIV status to their spouses as opposed to 144 (44.3%) participants who did not disclose. However, this difference did not attain a statistical significance ($P = 0.448$). Worries and knowing the importance of HIV status disclosure did not determine disclosure status of people living with HIV attending care and treatment at Kisarawe, (OR= 0.738; 95% CI 0.488-1.115, $p = 0.148$). Results showed that out of 394 participants who responded to this question on counselling, 209 (56.9%) who had been counselled on HIV test result disclosure told their spouses about their HIV status as opposed to 158 (43.1%) participants who did not disclose ($p = 0.056$), suggesting that counselling plays an important role in facilitating disclosure to spouses.

4.4.3 Worries

Findings also show that those who are worried (60.6%) were more likely to disclose their HIV status to their spouses than those who were not worried (54.1%) although this difference did not attain statistical significance at 5% level ($p = 0.205$). Furthermore, condom use was found to be statistically significant, (OR= 0.249, 95% CI: 0.086, 0.720, $p < 0.001$). It means use of condoms is associated with low likelihood of HIV status disclosure to their spouses, [155 (83.8%) vs. 8 (61.5%) respectively]. The findings also indicate that physical violence was not statistically significant, $p = 0.684$. Therefore, there is no association between physical violence

and HIV status disclosure (Disclosed while hit/slapped 2 (100%) vs. disclosed while not hit/slapped 193 (92.3%).

Table 4 shows the results of a logistic regression analysis. After adjusting for other variables (confounders) results show that there was a significant association between being a male and HIV status disclosure. This means that females are 72% less likely to disclose their status (OR= 0.285, 95% CI: 0.145, 0.559, $p < 0.001$) compared to males. The Bivariate results showed that education and occupation were statistically significant in influencing HIV status disclosure but after running multiple logistic regression these determinants did not remain significant. Receiving counselling was associated with increased likelihood of HIV status disclosure, AOR, 0.33 (95% CI: 0.10- 0.81) (Table 4).

Table 4: Logistic regression of the determinants of HIV status disclosure to spouse among PLWHA

Variable	Category	Disclosed (%)	AOR (95% CI)	P-value
Gender	Male	95 (74.2)	1	<0.001
	Female	127(47.7)	0.3 (0.1, 0.6)	
Age	18-24	4 (50.0)	1	0.299
	25-49	181(59.3)	0.2 (0.0, 4.4)	
	50-64	32 (45.1)	0.4 (0.1, 2.8)	
	≥ 65	5 (50.0)	0.7 (0.1, 5.2)	
Education	No formal education	35 (43.2)	1	0.133
	Primary	167 (60.3)	2.5 (0.8, 7.9)	
	Secondary or higher	20 (55.6)	1.6 (0.6, 4.6)	
Occupation	Employed	22 (81.5)	1	0.999
	Self employed	147(57.9)	0.0 (0.0)	
	Unemployed	53 (46.9)	0.0 (0.0)	
Religion	Roman Catholic	15 (38.5)	1	0.368
	Lutheran and others	37 (59.7)	1.6 (0.6, 4.3)	
	Muslim	170 (58.0)	0.6 (0.2, 1.3)	
ARV status	Taking ART	181 (55.7)	1	0.999
	Not on ART	36 (61.0)	0.0 (0.0)	
Counseling	Received counseling	209 (56.9)	1	0.038
	Did not receive	13 (48.1)	0.3 (0.1, 0.8)	
Worried	Worried	83 (60.6)	1	0.996
	Not worried	139 (54.1)	0.0 (0.0)	
Importance	Important	130 (53.5)	1	0.995
	Not important	92 (60.9)	0.0 (0.0)	
Condom use	Use condoms	155 (83.8)	1	0.999
	Not using condoms	8 (61.5)	0.0 (0.0)	
Violence	Hit/slapped	2 (100.0)	1	0.998
	Not hit/slapped	193 (92.3)	0.0 (0.0)	

4.4.4 Knowledge on the importance of disclosure

Participants were asked to explain whether there was any importance of disclosing their HIV status to others. Out of 402 participants, 245 (60.9%) reported that it is important to tell others about their HIV status while 157 participants (39.1%) were of the opinion that there was no importance of disclosure.

Among 245 participants who said it was important to disclose the information to others, 137 (34.1%) suggested gaining support from partners or relatives as the main reason for disclosure. However, getting advice regarding care and treatment, preventing someone from being accused of witchcraft and educating others on HIV/AIDS were minor reasons for disclosure of one's status.

Table 5: Reasons why disclosure is important.

Reasons	Frequency (%)	Male (%)	Female (%)
Encourage others to go for HIV test	50 (12.4)	27 (54.0)	23 (46.0)
Gain support from partner/relatives	137 (34.1)	37 (27.0)	100 (73.0)
Prevent others from infection	40 (10.0)	14 (35.0)	26 (65.0)
To get advice regarding care and treatment	8 (2.0)	3 (37.5)	5 (62.5)
Prevent someone from being accused of witchcraft	4 (1.0)	0 (0.0)	4 (100)
Educate others on HIV/AIDS	6 (1.5)	3 (50.0)	3 (50.0)
Non response	157 (39.1)		
Total	245 (60.9)	84 (34.3)	161 (65.7)

4.5 Qualitative findings

The following section presents results from the qualitative component of this research. Seven in-depth interviews were conducted, six to PLWHA and one to health care provider – a nurse counsellor. In the interviews with PLWHA, men and women described various factors that influenced their HIV sero status disclosure or non disclosure to their partners and others. They also described reasons why disclosure was important, cultural beliefs that hinder or allow disclosure to take place and attitudes towards disclosure in their community. The following is a presentation of these factors.

4.5.1 Knowledge on the importance of disclosure

In order to know the knowledge on the importance of disclosure, the researcher explored the knowledge of respondents themselves and also the community. Through interviews, it was revealed that most of respondents were knowledgeable on the importance of disclosure. When asked on the importance of disclosure, one respondent had the following to say:

“I find it nice to be open about my HIV positive status because once many people know that you have this problem, you may get some assistance. Sometimes, support is given to HIV infected people so it is easier to communicate with you when you are needed. Those who do not disclose, they deny themselves their basic rights.” (HIV-positive woman, 44 years, single).

From the above response, it implies that disclosure is a good thing and has several benefits. She said that when one disclosed her status, she was more likely to get several benefits, including gaining support from relatives or even from government departments or NGOs dealing with PLWA. Those who do not disclose their status are therefore likely to miss these advantages.

Another respondent was on opinion that disclosure of HIV ensures assistance from the family on ARVs adherence, following clinic appointment and being taking care of when becomes critically sick. She said:

“I think it is very important to disclose my HIV status to my family members because once I fall sick they will know that they should take me to the hospital. Also, they will remind me to take my medications whenever I forget to do so because they know I should not miss my dose. They also remind me when my clinic appointment is due. When I become sick, they can wash my clothes. It is important to disclose my status so that they can wear protective gear such as gloves to prevent them from infection when they attend me.” (HIV-positive man, 50 years, married).

From the above example, it is clear that this respondent is knowledgeable on the importance of disclosure.

4.5.2 Cultural beliefs about HIV infected individuals

Each community has its own interpretation/perception about how the HIV infected person should look like. People have their own perception on the signs that HIV infected person must have, therefore if they are absent, they will deny somebody's HIV positive status.

“When I disclosed my HIV positive status, they told me that I had not developed any disease related to HIV infections. However, I chose to spend the government's money because they told me that I was of different condition from those who were already infected. The first time I reported for a HIV test I was not sick at all. I used to have a tendency of doing HIV tests after every three months. Thereafter, I stayed for one year. When I went to have a test again, I was told I was positive.” (HIV-positive woman, 32 years, married)

According to this community of Ms X, her community did not trust that she was HIV infected because she did not have HIV/AIDS signs and symptoms. Some family members believed her while others thought she was lying. They said that may be she was gaining something from such a status. This community has its own interpretation on how the HIV infected person should look like. Therefore, if the symptoms were

absent, they denied somebody's HIV positive status. In an interview with another woman, she had the following to say:

“Neighbours knew about this but they didn't believe it because what they believed was that a HIV infected person should be skinny, hairless with her shoulders pulled up. They went further by telling me that I should not pronounce that I was HIV positive. It was not good to do so because they knew how HIV infected people look like.” (HIV-positive woman, 43 years, single).

According to Ms. Y, her neighbours did not believe that she was HIV positive, because she showed no signs of HIV infection. To make them to believe, she showed them her CTC2 card and her ARVs medications. Some people believed her while others did not. Some respondents believed that a person who was a prostitute or a woman with many children with different fathers were the ones to suffer from HIV infection. This reveals the perceptions that people have about a person infected with HIV/AIDS which affect disclosure of HIV status. As the above case indicates, a person might be tempted to feel she has no need to disclose her status because people only identify ones status based on visible signs that are normally attributed to a person infected with HIV/AIDS.

Through the interviews, it was evident that in Kisarawe town, witchcraft is associated with HIV/AIDS. A bewitched person becomes sick and shows all the signs of HIV/AIDS. The following comment by participant X, illustrates the situation.

“Others say that HIV/AIDS is witch-craft, that someone can bewitch you and you can show all the signs of HIV/AIDS, that you can go for tests in the hospitals where you find you are not infected. Someone might be truly infected with HIV but because of that belief, he might think he was bewitched and therefore goes for traditional medicine.” (HIV-positive woman, 44 years, single).

According to the evidence of Ms. Z above, HIV/AIDS is not only a medical issue but it can be also created by people (witches) in the sense that a person can have all the signs of HIV/AIDS but if tested he/she is not infected. On the other hand, a person might be infected with HIV but because of this belief he/she may not go to the hospital but could instead opt to go to *'fundi'* (traditional healer).

With regard to disclosure of HIV status, this belief may affect disclosure because a person may be sick and have all the signs of HIV/AIDS but opt to go to the *'fundi'* and not to the hospital. Or a person may go to the hospital and test and find that he/she was infected with HIV but decide not to tell the truth instead say *'nimechezewa'* (bewitched) and people may believe him/her.

4.5.3 Attitudes towards PLWHA who have disclosed

People have different attitudes towards HIV infected persons. Some people have negative attitudes towards PLWHA who disclosed their HIV status, and some have positive attitudes. There are two types of attitudes, first, attitude of respondents themselves and second, attitude of the community towards disclosure. The following illustrate the positive attitude at community level.

“To me there is no difference, my family has not abandon me, and where I am staying no one has discriminated me, neither my neighbours nor my relatives.” (HIV-positive woman, 32 years, married).

Some think that HIV infected person is a normal person who can work like anybody else or can be engaged in intimate relationships like any other person. As shown in the case of Ms X above, her family, relatives and neighbours did not abandon or discriminated her in any way. However, through interviews, it was evidenced that some people have negative attitudes towards HIV infected people who have disclosed their HIV/AIDS status. The following illustrate the negative attitude.

“But there are others whose relatives stigmatize or discriminate them, they do not want to be near them or involve them in anything because they think

the person does not have his past ability. People do not want to disclose their HIV status because they will be stigmatized especially in social activities like ceremonies. Some dare to say that if you disclose your HIV status, people think that you are a dying person. For sure you are not going to live any longer.” (HIV-positive woman, 43 years, single).

From this example, it seems that people may be willing to disclose their status but some people in the community may show negative attitudes towards them. People who disclosed their HIV status have been stigmatized and discriminated in the family and even in social events such as ceremonies and rituals (*ngoma ya kumtoa mwali*). In some cases, some community members perceived them as dying people, they are no longer useful in the society or they can not pursue a normal life like before.

In order to explore the attitudes towards HIV disclosure among PLWHA attending CTC, a researcher asked their attitudes towards HIV/AIDS disclosure. Many respondents showed positive attitudes toward disclosure. The following is an example of positive attitude.

“In my opinion, I think it is good to disclose your status rather remain discrete. Once you disclose your status, it means you no longer suffer from self stigmatisation. This attitude boosts the functioning of medication and ARV adherence. But if you don’t disclose your status, the medications will also stigmatize you and in that way you will end up being stigmatized.” (HIV-positive man, 41 years, widowed).

From this example, respondent has positive attitude toward disclosure and knows the advantages of disclosure.

On the other hand, the health care provider had other opinion, that community had negative attitudes towards PLWHA. She explained that disclosure is the problem in marriage.

“To couples, if a wife discloses her HIV status to her husband and the husband goes for test and finds she is HIV negative, divorce will follow because he will think that his wife was not faithful. The revelation will therefore be the source of marriage breakdown. Furthermore, those with poor discernment will discriminate this patient either wife or anyone else who disclosed his/her HIV status is in the family like they did to leprosy patients in old days. They think a HIV infected person does not deserve to live in the community. Children coming from a HIV infected family who are in school are discriminated by fellow children thinking that the family of that child was not a decent one.” (Health Care Provider -female, 50 years, married).

From the above evidence, health care provider thinks that disclosure is a source of marriage disintegration, discrimination and stigmatization in the family and even to children who are in school.

CHAPTER FIVE

DISCUSSION

5.1 Socio-demographic characteristics of PLWHA and disclosure status

Although the overall disclosure rate in this study was found to be high (98%), it varied with different characteristics among the participants. In this study, HIV status disclosure to spouse was 56.3%. This is also higher than 42%, 22% - 40% and 16.7% reported by the studies done in Dar es Salaam [20,24,32]. Although majority of the study participants were females, there was higher disclosure rate to spouses among males. Higher female's enrolment in this study may be due to the fact that females are more infected than males due to their vulnerability, they easily seek health care services once they become ill compared to males. The enrolment level could also have been accelerated by PMTCT programs hence higher attendance in CTCs. The higher disclosure rate among male in this study was similar to findings reported by another study in Tanzania which reported a 55% disclosure rate among men as compared to 34% among females [20]. In concurrence with this finding, a study done [30] among PLWHA in Ethiopia indicated that gender is an associated factor of HIV status disclosure. Opposite findings have been reported by previous study [26], which did the study among HIV positive patients in French Antilles and French Guiana, he found that males were more reluctant to disclose their HIV status.

Our findings support the link between education and disclosure. Participants with no formal education had the lowest prevalence of disclosure as compared to those with better education. This finding is comparable to the study done among PLWHA in Burkina Faso, whereby illiterate women reported to disclose less their HIV status to their steady partner compared to the more educated [26]. In this study, the findings of a low prevalence among participants with no formal education may have resulted from the findings that these participants with no formal education do not understand the importance of disclosure (15.9%). The main reason for observed difference in HIV status disclosure among participants with no formal education could be explained by the fact that education increases the ability to analyze, internalize and

act on health information messages such as those related to importance of disclosure to sexual partner.

Previous studies identified association between partners' education level and HIV status disclosure. In contrast with the findings of Makin et al. [19], who reported that women who were having partners with tertiary education were more likely to disclose their HIV status to their partners than those with partners with low level of education. In this study, participants having partners with primary education were more likely to disclose their HIV status compared to those with secondary or higher education.

The findings of this study revealed that participant's occupation was also significant determinants of disclosure to spouses. Similar results have been reported in other studies [19,32]. In the present study, bivariate analysis shows that income did not determine disclosure status to spouses. Similar to this study, Deribe et al. [30] found that income was negatively associated with disclosure.

5.2 Proportion of PLWHA and HIV disclosure rates

The present study shows that HIV status disclosure to somebody was higher among HIV positive participants (98%) compared to those who did not disclose (2%) among PLWHA attending care and treatment centre at Kisarawe District Hospital. Generally, there was no difference by gender (male 97% vs. female 98.5%). Previous studies reported lower rate of HIV status disclosure of 16.7% to 86% in developing countries [17,28]. This is also higher than in a study done in South Africa which reported 87% disclosure rate [23]. This finding is also very high compared to other studies done in Tanzania which reported 55% [20] and 22% HIV status disclosure rate [24]. Though many studies reported lower rates of disclosure in Africa [17] but this finding is comparable to other studies elsewhere. In a study conducted in Ethiopia [30] it was found that 94.5% of study participants had disclosed their HIV status at least to one person. Similarly, the study in Zimbabwe [27] reported that 97% of the respondents disclosed their HIV status at least to one person. The higher rate of disclosure in this study may be attributed to the presence of intervention programmes which encourage disclosure to partners and others in the hospital and

the fact that before starting ART, PLWHA receives adherence counseling at least in two sessions, whereby amongst other topics discussed disclosure is one of them.

Disclosure rates of HIV status among PLWHA are different across studies. These differences resulted from different methods used to measure rates of disclosure and the time frames used. Studies also used different disclosure intervals since diagnosed. Some looked at disclosure in two weeks, some in six months, in two years and others almost four years after receiving HIV test result. Therefore, these rates are sometimes impossible to compare directly because studies differ. This study did not set the time frame to ask study participants about HIV status disclosure, therefore the disclosure rate obtained is cumulative.

5.3 The preferred audience for HIV status disclosure

Regarding preferred audience to tell about HIV status, findings of this study revealed that most people prefer to disclose their HIV status to their spouses, mothers and sisters were the second most followed by children. Disclosure appears to be a very selective phenomenon, it involves decision about when to tell, to whom and circumstances surrounding the PLWHA. This is so because if they do not consider all those things disclosure may be harmful to them instead of being beneficial. Very few people are selected to be told about HIV status, spouses appear to be the first most confidants. This finding is similar to other studies done in Dar es Salaam [20,26,45]. This finding implies that married couples prefer to tell their spouses because they expect emotional and economic support as an outcome of their disclosure. On the other hand this may cause the one spouse not disclosing for fear of being stigmatized, discriminated or abandoned. However, the rate of disclosure to spouses is still low threatening efforts for HIV prevention.

Additionally, mothers and sisters were the second most preferred audience to be told about HIV status disclosure. These findings concur with many studies [20,26,32]. Mothers and sisters were frequently preferred as confidants. This might be so because they are friendlier, understanding, and secretive and they could offer help easily whenever needed. Findings of this study show that there is gender aspect on

the issue of disclosure, as results of this study indicated females participants preferred to disclose more to their fellow females such as mothers while male participants preferred to disclose more to their fellow males such as brothers. Similar findings were observed by other studies [20,32].

In comparison with qualitative findings, the most preferred audience to disclose their status was the same as in quantitative. Five participants of in-depth interviews disclosed first to their spouses then to their mothers, followed by sisters.

5.4 Determinants of disclosure to spouses

5.4.1 ART status

The present study shows that there was no significant difference between those who were taking ART and those who do not and disclosure to spouses (55.7% vs.44.3% respectively). The opposite was found in a study done in Uganda [16], which found that people who were on ART were more likely to disclose their HIV status than those who were not on ART. The findings of this study could be explained by the fact that despite of adherence counseling they receive before starting ART but there are also other factors to be considered by a person before disclosing. Disclosure among couples threatens the relationship and brings fear of discontinuation of material and financial support from partner.

5.4.2 Disclosure counselling

Counselling was found to influence disclosure rate among participants in study. Counselling can be individual or couple and the contents may include knowledge and skills to live positively and disclosure. This finding agrees with other study done in Mityana district in Uganda and Dar es Salaam [16,32] suggesting that those who receive counselling were more likely to disclose their status to their spouses.

5.4.3 Condom use

Furthermore, bivariate analysis found condom use to be statistically significant, which was associated with HIV status disclosure to their spouses. This finding is similar to the study done by Kairania et al [28]. This finding could be explained by the fact that PLWHA who are using condoms are self confident that they can not transmit HIV infections or new HIV infections (if partner is already HIV positive) to their partners. Therefore, they become confident in disclosing their HIV status. However, condom use was not significant when multivariate logistic regression conducted.

5.4.4 Knowledge on the importance of HIV disclosure

Regardless of the present study findings that there was no statistical difference in the level of knowledge on the importance of disclosure of HIV status in PLWHA between participants who disclosed and those who did not disclose, disclosure is still important. It enables HIV infected person to receive care and socio-economic support from partners and relatives, promote safer sex behavior, promote adherence to ART and prevent spreading of HIV infection to others. This finding is comparable to the study done in Zimbabwe among women who attended PMTCT clinic [31].

However, bivariate analysis showed statistical difference on the level of knowledge on the importance of disclosure by level of education, that education influences disclosure. This may have resulted by the fact that people with formal education can get information on importance of disclosure more easily by reading materials from different sources. The negative association between HIV disclosure and importance of disclosure could be explained by the fact that although people understand the importance of disclosure but due to fear of discrimination, stigma and divorce, they decided not to disclose their HIV status to partners or relatives.

This argument is supported by the qualitative finding of this study, which reported that all seven participants were knowledgeable on the importance of disclosure and its benefits. These findings concur with quantitative findings which indicated that

60.9% thought disclosure is important. However, this finding was not statistically significant when multivariate logistic regression conducted.

5.4.5 Cultural beliefs affecting disclosure

The current study focuses on exploring beliefs that facilitate or hinder HIV disclosure. In this study, findings show that people in that community have common cultural beliefs attached to signs that attributed to HIV infected person and that people should not announce themselves that they are HIV positive. A study [35] observed similar findings that communities associate specific signs with HIV/AIDS. According to the Theory of Planned Behaviour, [25] this normative belief which disapprove the disclosure behaviour together with motivation to comply to what other group (referent) think it is right damage the behavioural intention of PLWHA to disclose their HIV status. Therefore, individuals are more likely to perform a behaviour which will lead to outcomes they value [31]. In this study HIV/AIDS was associated with witchcraft. This finding is similar to prior study [20] which revealed that one respondent thought she was bewitched by her relatives after being told she is HIV positive. Another study [36] also reported witchcraft in association with HIV disclosure. Our findings concerning witchcraft could be explained by the fact that some PLWHA want to hide their status under the umbrella of witchcraft for fear of perceived negative outcome of disclosure from their partners or relatives.

5.4.6 Attitude towards HIV status disclosure

In this study participants were afraid of disclosing their HIV status for fear of negative consequences, such as divorce, discrimination and stigma. This finding is comparable to studies conducted elsewhere [16,19,20,23,26,31]. The belief that disclosure causes negative outcome may lead to non-disclosure [40]. Therefore, interventions should focus on changing these behavioural beliefs hence change negative attitudes toward disclosure. However, the findings of negative outcome of disclosure in qualitative method was not similar to quantitative findings whereby in spite of the fact that they mentioned negative outcome of disclosure when asked why

worried if other people will find out your HIV status, it was not statistically significant.

5.5 Limitation of the study

The findings of this study could be affected by a number of limitations. Reported nature of the data collection approach could be affected by desirability bias hence distorting the results presented. This is an important issue with regards to sensitive topic such as HIV/AIDS. Again, the cross sectional study design employed has inherent weakness in the establishing temporal relationship between exposure and outcome. Therefore, the determinants identified may not be causal. Moreover, the facility nature of the study indicates that most patients who are more likely to disclose would be seen. Patients attending health facilities are more likely to encounter counseling and able to develop skills and self efficacy to disclose. This could explain the high rate of HIV status disclosure to anyone found in this study. The sample size of 426 could not be reached due to short duration of data collection and relatively low patients flow.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 CONCLUSION

This study reveals that the overall disclosure rate to someone was 98% while the disclosure to spouses was 56.3%. Disclosure to spouses was higher among males than females. The findings show that male gender and receiving counseling were the important determinants of disclosure. Qualitative findings also show that cultural beliefs and attitudes influence HIV status disclosure among PLWHA and all seven participants were knowledgeable on the importance of disclosure.

6.2 RECOMMENDATION

1. Women should be empowered psychologically so as to enable them to cope with the situation and overcome the consequences of disclosure.
2. Special emphasis should be made to increase the coverage of provision of education and counseling on disclosure after receiving HIV positive results. This should be an effective, on-going practice which will result to changes on attitudes towards disclosure.
3. Focus should also be directed to the general population, in that the community should be educated about the importance of disclosure so as to reduce the perceived consequences of disclosure such as stigma and discrimination, so as to prevent the spread of new infections. Interventions should focus on covering large areas in order to bring about widespread change in behavioural beliefs that govern people's attitudes, hence reduce negative attitudes towards disclosure.
4. Further studies are needed to compare these results with other sites which had no HIV prevention interventions.

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APPENDICES

8.1 Appendix A: Questionnaire (English)

Patient Questionnaire

**HIV SERO STATUS DISCLOSURE AND ASSOCIATED FACTORS AMONG
PEOPLE LIVING WITH HIV/AIDS ATTENDING A CARE AND
TREATMENT CENTRE IN KISARAWA HOSPITAL, TANZANIA**

Interviewer reads: Thank you for agreeing to meet with me today and participate in this research.

Participant ID NO _____

Interviewer ID NO _____

Interview Start Time: _____

Interview End Time: _____

Date of interview ____/____/____

PART A: SOCIO-DEMOGRAPHIC DETAILS

1. Date of birth ____/____/____

2. What is participant's gender: 1. Male _____ 2. Female _____

3. Participant's age (in complete years) _____

4. Residence _____

5. What is your education level?

- 1=None ➔ Skip to Q.7 2=Primary 3=Secondary (Form 1-4)
 4=Secondary (Form 5-6) 5=Higher education 6= Madrassa ➔ Skip to Q.7
 7=I don't know 8=Refused

6. What is the highest (standard/form/year) you completed at that level?

- _____ standard/form/year 1=I don't know 2=Refused

7. What is your occupation?

- 1=Employed 2=Self employed 3=Housewife ➔ Skip to Q.10
 4=Unemployed ➔ Skip to Q.10 5=Peasant
 6=Student ➔ Skip to Q.10 7=Others (specify) _____

8. If you are employed or self employed, are you?

- 1=Unskilled labour 2=Skilled labour 3=Professional

9. What is your monthly income?

- _____ 1=Tanzanian Shillings 2=I don't know
 3=Refused

10. What is your marital status now?

- 1=Married 2=Never married ➔ Skip to Q.12-14
 3=Widowed ➔ Skip to Q.12-14 4=Divorced ➔ Skip to Q.12-14
 5=Separated ➔ Skip to Q.12-14 6=Living together as married
 7= I don't know 8=Refused

11. What is your religion?

- 1=Roman Catholic 2= Lutheran 3=Pentecostal

- 4=Muslim 5=Anglican 6=Seventh Day Adventist
 7=No religion 8=Other religion (specify) _____
 9=I don't know 10=Refused

12. **(For males only):** Altogether, how many wives do you have or other partners do you live with as if married? Then skip to Q.14

- _____ Number of wives and live-in partners 1= I don't know
 2=Refused

13. **(For females only):** Including yourself, in total, how many wives or other partners does your husband/partner live with now as if married?

- _____ Number of wives/partners 1=I don't know 2=Refused

14. How long have you been living with your husband/wife/partner?

- _____ 1=Number of days _____ 2=Number of weeks
 _____ 3=Number of months _____ 4=Number of years
 5= I don't know 6=Refused

15. Do you have any children?

- 1=Yes 2=No ➔ Skip to Q.18 3=I don't know 4=Refused

16. How many children do you have?

- _____ Number of children 1= I don't know 2=Refused

17. How many of your children are living with you now?

- _____ Number of children 1= I don't know 2=Refused

PART B: HIV TESTING AND CARE

18. When did you find out that you have HIV? _____/_____ (month/ year)

1= I don't know 2=Refused

19. Why did you get tested for HIV?

1=I felt sick

2= Partner's illness/death

3= Child illness/death

4=I heard on the radio/TV that I should get tested

5= Health provider recommended

6=Family or friend encouraged me to get tested

7=I was pregnant and the clinic tested me

8=Self initiative

9=Others (specify) _____

10= I don't know

11=Refused

20. When was the last time your CD4 count was tested? ____/____ (month/year)

1= I don't know 2=Refused

21. What was your CD4 count last time you were tested?

_____ CD4 count 1= I don't know 2=Refused

22. Do you take any medication for your HIV?

1=Yes 2=No →Skip to Q.25 3= I don't know 4=Refused

23. Are you taking ARVs?

1=Yes 2=No →Skip to Q.25 3= I don't know 4=Refused

24. When did you start taking ARVs?

_____/_____(month/ year) 1= I don't know 2=Refused

25. Are you currently suffering from TB infection?

1=Yes 2=No → Skip to Q.27 3= I don't know 4=Refused

26. Do you take medication for your TB infection?

1=Yes 2=No 3= I don't know 4=Refused

27. Are you currently suffering from any other opportunistic infection?

1=Yes 2=No

If Yes, (specify) _____

PART C: SEROSTATUS AND DISCLOSURE INFORMATION

28. Did you receive any counseling in connection with HIV test result disclosure?

1=Yes 2=No

29. Have you shared your HIV positive test results with anybody?

1=Yes 2=No → Skip to Q.36

30. How long after learning your HIV status, did you first disclose your HIV status?

31. How many people have you told?

____Numbers 1=I don't know 2=Refused

32. How many household members have you told?

____Numbers 1=I don't know 2=Refused

33. Have you ever disclosed your HIV status to any of the following people?
(Tick where appropriate)

	Yes	No	I don't know	Refused
a. Any parent?	1	2	3	4
b. Any biological child?	1	2	3	4
c. Any relative?	1	2	3	4
d. Any friend?	1	2	3	4
e. Any spouse?	1	2	3	4
f. Any sex partner?	1	2	3	4

34. To whom a person would you like most to tell your HIV status? _____

35. Who was the second person with whom you shared you HIV status? _____

36. Are you worried about other people finding out your HIV status?

1=Yes

2=No

3=I don't know

4=Refused

37. What do you think might happen if people you have not told found out your HIV status? (Do not read responses. Tick all that apply)

1=Might be fired or lose a job/denied a job

2=Family member might treat you differently

3=Might lose friends

4=Partner might get violent

5=People might start gossiping about you

6=Might be kicked out of your home

7=In-laws might encourage spouse to leave you

8=Your children might be abused or discriminated against

9=Your Children might become upset/fearful

10=Might not get care/hospital home and/school

11=Might cause other persons health deteriorate or other person to become
anxious.

12=Stigma

13=Nothing

14=Other (specify) _____

15=I don't know

16=Refused

**PART D: KNOWLEDGE ON THE IMPORTANCE OF HIV STATUS
DISCLOSURE**

38. Have you ever heard of the importance of HIV status disclosure?

1=Yes 2=No ➔ Skip to Q.40

39. How did you get that information?

1=Training

2=Family members

3= Health care providers

4= Friends

5= Peers

6= Teachers

7= Religious members

8= Internet

9= Media

9=Other (specify) _____

10= I don't know

11=Refused

40. Do you think it is important to tell others about your HIV status?

1=Yes 2=No ➔ Skip to Q.42

41. Why do you think it is important to tell other people about HIV/AIDS status?

PART E: SEXUAL BEHAVIOURS

42. How many sexual partners have you ever had?

_____ Total number of lifetime partners 1=I don't know 2=Refused

43. Currently, how many sexual partners do you have? _____

If the answer is 0 (I don't have any) → **Skip to END**

(Read down each column of the table for each partner, circle the number which indicate the answer)

Questions	Partner 1	Partner 2	Partner 3
44. Is this person your spouse, fiancé, main partner or casual partner?	1=Spouse 2=Fiancé 3=Main partner 4=Casual partner 5=I don't know 6=Refused	1=Spouse 2=Fiancé 3=Main partner 4=Casual partner 5=I don't know 6=Refused	1=Spouse 2=Fiancé 3=Main partner 4=Casual partner 5=I don't know 6=Refused
45. How old is your partner?	_____ Complete years	_____ Complete years	_____ Complete years
46. What is your partners' education level?	1=None 2=Primary school 3= Sec (Form 1-4) 4= Sec (Form 5-6)	1=None 2=Primary school 3= Sec (Form 1-4) 4= Sec (Form 5-6)	1=None 2=Primary school 3= Sec (Form 1-4) 4= Sec (Form 5-6)

	5=Higher education 6= Madrassa 7=I don't know 8=Refused	5=Higher education 6= Madrassa 7=I don't know 8=Refused	5=Higher education 6= Madrassa 7=I don't know 8=Refused
47. What is your partners' Occupation?	1=Employed 2=Self employed 3=Housewife → Skip to Q.50 4=Unemployed 5=Peasant 6=Student 7=Others (specify) _____	1=Employed 2=Self employed 3=Housewife → Skip to Q.50 4=Unemployed 5=Peasant 6=Student 7=Others (specify) _____	1=Employed 2=Self employed 3=Housewife → Skip to Q.50 4=Unemployed 5=Peasant 6=Student 7=Others (specify) _____
48. If you are employed or self employed, are you?	1=Unskilled labour 2=Skilled labour 3=Professional	1=Unskilled labour 2=Skilled labour 3=Professional	1=Unskilled labour 2=Skilled labour 3=Professional
49. What is your partner's monthly income?	1=Less than 50,000/- 2=Between 50,000/- and 99,000/- 3=Between100,000/- and 299,000/- 4= More than 299,000/- 5=None 6=I don't know 7=Refused	1=Less than 50,000/- 2=Between 50,000/- and 99,000/- 3=Between100,000/- and 299,000/- 4= More than 299,000/- 5=None 6=I don't know 7=Refused	1=Less than 50,000/- 2=Between 50,000/- and 99,000/- 3=Between100,000/- and 299,000/- 4= More than 299,000/- 5=None 6=I don't know 7=Refused

50. Do you know your partner's HIV status?	1=Yes 2=No → skip to Q. 51 3=Refused	1=Yes 2=No → skip to Q. 51 3=Refused	1=Yes 2=No → skip to Q. 51 3=Refused
51. What is your partner's HIV status?	1=HIV positive 2=HIV negative 3=I don't know 4=Refused	1=HIV positive 2=HIV negative 3=I don't know 4=Refused	1=HIV positive 2=HIV negative 3=I don't know 4=Refused
52. Have you told your partner that you are HIV positive?	1=Yes 2=No → skip to Q. 56 3=I don't know 4=Refused	1=Yes 2=No → skip to Q. 56 3=I don't know 4=Refused	1=Yes 2=No → skip to Q. 56 3=I don't know 4=Refused
53. How long ago did you tell this partner that your HIV positive?	____ 1=Days ago ____ 2=Months ago ____ 3=Year ago 4=I don't know 5=Refused	____ 1=Days ago ____ 2=Months ago ____ 3=Year ago 4=I don't know 5=Refused	____ 1=Days ago ____ 2=Months ago ____ 3=Year ago 4=I don't know 5=Refused
54. When you told this partner you are HIV positive, did your partner hit, slap or do anything else to hurt you physically?	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused

<p>55. Has anyone else ever hit, slapped or done anything else to hurt you physically?</p>	<p>1=Yes 2=No 3=I don't know 4=Refused ➔ Skip to Q. 57</p>	<p>1=Yes 2=No 3=I don't know 4=Refused ➔ Skip to Q. 57</p>	<p>1=Yes 2=No 3=I don't know 4=Refused ➔ Skip to Q. 57</p>
<p>56. How confident are you that you could tell your partner about your HIV status in the next month? (Skip this Qn if Q.50 & Q.52 are Yes and If Q.51 is HIV positive)</p>	<p>1=Very confident 2=Confident 3=Somewhat confident 4=Not at all confident 5=I don't know 6=Refused</p>	<p>1=Very confident 2=Confident 3=Somewhat confident 4=Not at all confident 5=I don't know 6=Refused</p>	<p>1=Very confident 2=Confident 3=Somewhat confident 4=Not at all confident 5=I don't know 6=Refused</p>
<p>57. How worried are you about transmitting HIV to this partner? (Skip this Qn if Q.50 & Q.52 are Yes and If Q.51 is HIV positive)</p>	<p>1=Very worried 2=Somewhat worried 3=Not at all worried 4=I don't know 5=Refused</p>	<p>1=Very worried 2=Somewhat worried 3=Not at all worried 4=I don't know 5=Refused</p>	<p>1=Very worried 2=Somewhat worried 3=Not at all worried 4=I don't know 5=Refused</p>
<p>58. Does your partner provide any financial support to you or any of your children?</p>	<p>1=Yes 2=No 3=I don't know 4=Refused</p>	<p>1=Yes 2=No 3=I don't know 4=Refused</p>	<p>1=Yes 2=No 3=I don't know 4=Refused</p>
<p>59. Do you provide any financial support</p>	<p>1=Yes 2=No</p>	<p>1=Yes 2=No</p>	<p>1=Yes 2=No</p>

to your partner?	3=I don't know 4=Refused	3=I don't know 4=Refused	3=I don't know 4=Refused
60. In the past 3 months, how many times did you have sexual intercourse with your partner?	_____ Number of times 1=I don't know 2=Refused	_____ Number of times 1=I don't know 2=Refused	_____ Number of times 1=I don't know 2=Refused
61. How often did you use condom when you have sexual intercourse with your partner?	1=Never → Skip to END 2=Some of the time 3=Most of the time 4=All of the time 5=I don't know 6=Refused	1=Never → Skip to END 2=Some of the time 3=Most of the time 4=All of the time 5=I don't know 6=Refused	1=Never → Skip to END 2=Some of the time 3=Most of the time 4=All of the time 5=I don't know 6=Refused
62. Did you or your partner use a condom the last time you had sexual intercourse together?	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused
63. Can you refuse to have sex with your partner if he/she does not want to use condoms?	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused	1=Yes 2=No 3=I don't know 4=Refused

Interviewer reads: Thank you for taking the time to participate in this interview.

8.2 Appendix B: Questionnaire (Kiswahili)

DODOSO KWA MGONJWA

UTAFITI KUHUSU UBAINISHAJI WA MATOKEO YA KUWA MTU ANAISHI NA VVU MIONGONI MWA WATU WANA OISHI NA VIRUSI VYA UKIMWI NA SABABU ZINAZOPELEKEA AU KUZUIA UBAINISHAJI HUO

Mhojaji anasoma: Ahsante kwa kukubali kushiriki katika utafiti huu.

Namba ya kitambulisho cha mgonjwa: _____

Namba ya kitambulisho cha mhojaji: _____

Muda wa kuanza mahojiano: _____

Muda wa kumaliza mahojiano: _____

Tarehe ya mahojiano _____ / _____ / _____

SEHEMU A: Taarifa za kijamii na kidemografia

1. Tarehe ya kuzaliwa _____ / _____ / _____

2. Nini jinsia ya mshiriki: 1. Kiume _____ 2. Kike _____

3. Je, una umri gani (umri kamili) _____

4. Je, ni mahali gani unapoishi kwa sasa _____

5. Je, nini kiwango cha elimu yako?

1=Sijasoma ➔ Nenda swali na. 7

2=Shule ya msingi

3= Kidato cha 1-4

4=Kidato cha 5-6

5=Elimu ya juu

6=Madrasa → Nenda swali na.7

7=Sifahamu

8=Sitaki kujibu

6. Katika kiwango hicho, nini daraja/kidato/miaka ya elimu?

_____ 1. Daraja/kidato/mwaka 2=Sifahamu 3=Sitaki kujibu

7. Je, unajishughulisha na kazi gani?

1=Nimeajiriwa

2=Nimejiajiri

3=Mama wa nyumbani → Nenda swali na. 10

4=Sijaajiriwa → Nenda swali na. 10

5=Mkulima

6=Mwanafunzi → Nenda swali na. 10

7=Nyinginezo (eleza) _____

8. Kama umeajiriwa au kujiajiri, je, wewe ni?

1=Mfanyakazi asiye na taaluma

2=Mfanyakazi mwenye taaluma

3=Mtaalam

9. Ni nini kipato chako cha mwezi?

_____ 1=Shilingi za kitanzania 2=Sifahamu 3=Sitaki kujibu

10. Je, nini hali yako ya ndoa?

1= Nimeoa/nimeolewa

2= Sijawahi kuoa/kuolewa ➔ Ruka swali na.12-14

3=Mjane/mgane ➔ Ruka swali na.12-14

4=Mtalaka/mtaliki ➔ Ruka swali na.12-14

5=Nimetengana na mwenzi wangu ➔ Ruka swali na.12-14

6=Naishi pamoja na mwenzi wangu kama wanandoa

7=Sifahamu

11. Je, wewe ni dini gani?

1=Mkatoliki

2= Mlutheri

3=Mpentekoste

4= Mwislamu

5=Mwangilikana

6= Msabato

7 =Pagani

8=Madhehebu mengine (taja) _____

9= Sifahamu

10=Sitaki kujibu

12. **(Kwa wanaume tu):** Kwa ujumla, una wake wangapi au una wenzi wengine wangapi unaoishi nao kama wanandoa? Kisha ➔ Nenda swali na. 14

_____ Idadi ya wake na wenzi unaoishi nao

1= Sifahamu

2=Sitaki kujibu

13. **(Kwa wanawake tu):** Ukijihesabu wewe mwenyewe, mume/mwenzi wako ana wake/ wenzi wengine wangapi anaoishi nao kama wanandoa?

_____ Idadi ya wake na wenzi anaoishi nao

1=Sifahamu

2=Sitaki kujibu

14. Je, umeishi na mume/mke/mwenzi wako kwa muda gani sasa?

_____1=Idadi ya siku

_____2=Idadi ya wiki

_____3=Idadi ya miezi

_____4=Idadi ya miaka

5= Sifahamu

6=Sitaki kujibu

15. Je, una watoto wowote?

1=Ndiyo

2=Hapana ➔Nenda swali na. 18

3=Sifahamu

4=Sitaki kujibu

16. Je, una watoto wangapi?

_____ Idadi ya watoto

1= Sifahamu

2=Sitaki kujibu

17. Ni watoto wako wangapi wanaishi na wewe kwa sasa?

_____ Idadi ya watoto

1= Sifahamu

2=Sitaki kujibu

SEHEMU B: Upimaji wa VVU na Matunzo

18. Je, ni lini ulibaini kuwa una VVU? _____/ _____ (mwezi/mwaka)

1= Sifahamu

2=Sitaki kujibu

19. Ni sababu gani iliyokufanya ukapimwe VVU? (Tiki sababu moja kuu)

1=Niliugua

2= Baada ya mwenzi kuugua/kufariki

3= Baada ya mtoto kuugua/kufariki

4=Nilisikia kupitia radio/luninga

5= Nilishauriwa na mhadumu wa afya

6=Familia au rafiki alinitia moyo nikapime

7=Nilikuwa mjamzito nikapimwa kliniki

8=Niliamua mwenyewe

8=Sababu nyingine (eleza) _____

10= Sifahamu

11=Sitaki kujibu

20. Je, mara ya mwisho ulipopimwa CD4 ilikuwa ni lini? ___/___ (mwezi/mwaka)

1= Sifahamu

2=Sitaki kujibu

21. Mara ya mwisho ulipopima, ulikuwa na CD4 ngapi?

_____majibu ya CD4

1= Sifahamu

2=Sitaki kujibu

22. Je, unatumia dawa yoyote kwa ajili ya matibabu yako ya VVU?

1=Ndiyo

2=Hapana ➔ Nenda swali na. 25

3= Sifahamu

4=Sitaki kujibu

23. Je, unatumia dawa ya kupunguza makali ya VVU?

1=Ndiyo

2=Hapana ➔ Nenda swali na. 25

3= Sifahamu

4=Sitaki kujibu

24. Je, ni lini ulianza kutumia dawa za kupunguza makali ya VVU kwa mara ya kwanza?

_____/_____ (mwezi/mwaka) 1= Sifahamu 2=Sitaki kujibu

25. Je, kwa sasa unasumbuliwa na kifua kikuu?

1=Ndiyo

2=Hapana ➔ Nenda swali na. 28

3= Sifahamu

4=Sitaki kujibu

26. Je, unatumia dawa za kutibu TB?

1=Ndiyo

2=Hapana

3= Sifahamu

4=Sitaki kujibu

27. Je, kwa sasa unasumbuliwa na ugonjwa nyemelezi wowote?

1=Ndiyo

2=Hapana

Kama ndiyo, (eleza) _____

SEHEMU C: Kubainisha hali ya maambukizi ya VVU

28. Je, ulipata ushauri nasaha kuhusu kubainisha matokeo yako ya vipimo vya VVU?

1=Ndiyo

2=Hapana

29. Je, umewahi kumweleza mtu yeyote kuwa una VVU?

1=Ndiyo

2=Hapana ➔ Nenda swali na. 36

3=Sifahamu

30. Je, ulitumia muda gani tangu ulipopokea matokeo yako ya VVU mpaka ubainishaji wa matokeo hayo kwa mara ya kwanza? _____

31. Je, umekwishaueleza watu wangapi?

_____ Idadi

1=Sifahamu

2=Sitaki kujibu

32. Umekwishaueleza watu wangapi unaoishi nao nyumbani/kwenye kaya yako?

_____ Idadi

1=Sifahamu

2=Sitaki kujibu

33. Je, umewahi kueleza hali yako ya maambukizi kwa watu wafuatao?

	Ndiyo	Hapana	Sifahamu	Sitaki kujibu
a. Kwa mzazi wako yeyote?	1	2	3	4
b. Kwa mwanao wa kuzaa yeyote?	1	2	3	4
c. Kwa ndugu yeyote?	1	2	3	4
d. Kwa rafiki yeyote?	1	2	3	4
e. Kwa mwenzi yeyote?	1	2	3	4
f. Kwa mpenzi yeyote?	1	2	3	4

34. Ni nani uliyemweleza wa kwanza kuwa una VVU? _____

35. Ni nani wa pili uliyemweleza kuwa una VVU? _____

36. Je, una wasiwasi wowote kwamba watu wengine watafahamu hali yako ya maambukizi ya VVU?

1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu

37. Je, unafikiri ni kitu gani kitatokea kama watu ambao hujawaeleza watafahamu kuhusu hali yako ya maambukizi ya VVU? (*Usisome majibu, weka alama ya vema panapohitajika*)

1=Ninaweza kufukuzwa kazi, kunyimwa kazi

2=Wanafamilia wanaweza kunifanyia vitendo tofauti/kutoheshimu maoni yangu

3=Ninaweza kupoteza marafiki

4=Mwenzi wangu anaweza akanifanyia vurugu

5=Watu wanaweza wakaanza kuniteta

6=Ninaweza kufukuzwa nyumbani/nikawa sina makazi

7=Wakwe zangu wanaweza wakamshawishi mume/mke wangu aniache

8=Watoto wangu wanaweza kuonewa au kubaguliwa

9=Watoto wangu wanaweza wakafadhaika/kuingiwa na woga

10=Ninaweza nisipate matunzo mazuri/hospitali/shule n.k.

11=Inaweza kusababisha afya ya mtu mwingine kudhoofika au kumfanya mtu mwingine akawa na wasiwasi

12=Ninaweza kunyanyapaliwa

13=Hakuna jambo lolote linaweza kutokea

14=Sababu nyingine (eleza bayana)_____

15=Sifahamu

16=Sitaki kujibu

SEHEMU D: UFAHAMU KUHUSU UMUHIMU WA UBAINISHAJI WA MAAMBUKIZI YA VVU/UKIMWI

38. Je, umeshawahi kusikia umuhimu wa kuwaeleza watu wengine kuhusiana na hali yako ya VVU?

1=Ndiyo

2=Hapana ➔ Nenda swali na. 40

39. Je, ulipata wapi taarifa hizo?

1=Mafunzo

2=Familia

3= Wahudumu wa afya

4= Marafiki

5= Wanarika

6= Walimu

7= Waumini wenzako

8= Mtandao

9= Vyombo vya habari

10=Njia nyingine (eleza) _____

11=Sifahamu

12=Sitaki kujibu

40. Je, unafikiri kuna umuhimu wa kuwaeleza watu wengine kuwa una VVU?

1=Ndiyo

2=Hapana ➔Nenda swali na. 42

41. Kwa nini unafikiri ni muhimu kuwaeleza watu wengine kuwa una VVU?

SEHEMU E: Tabia za kujamiiana za mgonjwa

42. Kwa ujumla, umeshawahi kufanya tendo la kujamiiana na watu wangapi?

_____ Idadi

1=Sifahamu

2=Sitaki kujibu

43. Je, kwa sasa una wenzi wangapi? _____

Kama jibu ni 0 (Sina mwenzi yeyote) ➔ **Nenda MWISHO**

Jedwali la wenzi (*Zungushia namba inayoonyesha jibu*)

Maswali	Mwenzi 1	Mwenzi 2	Mwenzi 3
44. Je, mwenzi huyu ni mume/mke, mchumba, mwenzi maalum au mwenzi asiye maalum?	1=Mume/Mke 2=Mchumba 3=Mwenzi maalum 4=Mwenzi asiye maalum 5=Sifahamu 6=Sitaki kujibu	1=Mume/Mke 2=Mchumba 3=Mwenzi maalum 4=Mwenzi asiye maalum 5=Sifahamu 6=Sitaki kujibu	1=Mume/Mke 2=Mchumba 3=Mwenzi maalum 4=Mwenzi asiye maalum 5=Sifahamu 6=Sitaki kujibu
45. Je, mwenzi wako ana umri gani?	_____Miaka kamili	_____Miaka kamili	_____Miaka kamili
46. Je, mwenzi wako ana kiwango gani cha elimu?	1=Hajasoma 2=Shule ya msingi 3= Kidato 1-4 4=Kidato 5-6 5=Elimu ya juu 6=Madrasa 7=Sifahamu 8=Sitaki kujibu	1=Hajasoma 2=Shule ya msingi 3= Kidato 1-4 4=Kidato 5-6 5=Elimu ya juu 6=Madrasa 7=Sifahamu 8=Sitaki kujibu	1=Hajasoma 2=Shule ya msingi 3= Kidato 1-4 4=Kidato 5-6 5=Elimu ya juu 6=Madrasa 7=Sifahamu 8=Sitaki kujibu
47. Je, mwenzi wako anajishughulisha na nini?	1=Amejiriwa 2=Amejiajiri 3=Mama wa nyumbani → Nenda swali na. 50 4=Hajaajiriwa → Nenda swali na. 50 5=Mkulima 6=Mwanafunzi → Nenda swali na. 50 7=Nyinginezo (eleza) _____	1=Amejiriwa 2=Amejiajiri 3=Mama wa nyumbani → Nenda swali na. 50 4=Hajaajiriwa → Nenda swali na. 50 5=Mkulima 6=Mwanafunzi → Nenda swali na. 50 7=Nyinginezo (eleza) _____	1=Amejiriwa 2=Amejiajiri 3=Mama wa nyumbani → Nenda swali na. 50 4=Hajaajiriwa → Nenda swali na. 50 5=Mkulima 6=Mwanafunzi → Nenda swali na. 50 7=Nyinginezo (eleza) _____

48. Kama mwenzi wako ameajiriwa au amejiajiri, je, yeye ni?	1=Mfanyakazi asiye na taaluma 2=Mfanyakazi mwenye taaluma 3=Mtaalam	1=Mfanyakazi asiye na taaluma 2=Mfanyakazi mwenye taaluma 3=Mtaalam	1=Mfanyakazi asiye na taaluma 2=Mfanyakazi mwenye taaluma 3=Mtaalam
49. Ni nini kipato cha mwenzi/mpenzi wako kwa mwezi?	1=Chini ya sh. 50,000/- 2=Kati ya sh.50,000/- na 99,000/- 3=Kati ya sh.100,000/- na 299,000/- 4=Zaidi ya sh. 299,000/- 5=Hana kipato 6=Sifahamu	1=Chini ya sh. 50,000/- 2=Kati ya sh.50,000/- na 99,000/- 3=Kati ya sh.100,000/- na 299,000/- 4=Zaidi ya sh. 299,000/- 5=Hana kipato 6=Sifahamu	1=Chini ya sh. 50,000/- 2=Kati ya sh.50,000/- na 99,000/- 3=Kati ya sh.100,000/- na 299,000/- 4=Zaidi ya sh. 299,000/- 5=Hana kipato 6=Sifahamu
50. Je, unafahamu hali ya maambukizi ya VVU ya mwenzi/mpenzi wako?	1=Ndiyo 2=Hapana → Ruka swali na. 51 3=Sitaki kujibu	1=Ndiyo 2=Hapana → Ruka swali na. 51 3=Sitaki kujibu	1=Ndiyo 2=Hapana → Ruka swali na. 51 3=Sitaki kujibu
51. Je, hali ya maambukizi ya VVU ya mwenzi wako ikoje?	1=Ana VVU 2=Hana VVU 3=Sifahamu 4=Sitaki kujibu	1=Ana VVU 2=Hana VVU 3=Sifahamu 4=Sitaki kujibu	1=Ana VVU 2=Hana VVU 3=Sifahamu 4=Sitaki kujibu

<p>52. Je, umekwishamwa mbia mwenzi huyu kuwa una VVU?</p>	<p>1=Ndiyo 2=Hapana → Nenda swali na. 56 3=Sifahamu 4=Sitaki kujibu</p>	<p>1=Ndiyo 2=Hapana → Nenda swali na. 56 3=Sifahamu 4=Sitaki kujibu</p>	<p>1=Ndiyo 2=Hapana → Nenda swali na. 56 3=Sifahamu 4=Sitaki kujibu</p>
<p>53. Je, ni muda gani umepita tangu umweleze mwenzi huyu kwamba una VVU?</p>	<p>___1=Siku zilizopita ___2=Miezi iliyopita ___3=Miaka iliyopita 4=Sifahamu 5=Sitaki kujibu</p>	<p>___1=Siku zilizopita ___2=Miezi iliyopita ___3=Miaka iliyopita 4=Sifahamu 5=Sitaki kujibu</p>	<p>___1=Siku zilizopita ___2=Miezi iliyopita ___3=Miaka iliyopita 4=Sifahamu 5=Sitaki kujibu</p>
<p>54. Je, ulipomwambia mwenzi huyu kuwa una VVU, alikupiga, alikuchapa kofi au kukutendea kitu chochote kingine cha kukudhuru kimwili?</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu</p>
<p>55. Je, kuna mtu yeyote mwingine aliyewahi kukupiga, kukuchapa kofi au kukutendea kitu chochote kingine cha kukudhuru kimwili?</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu → Nenda swali na. 57</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu → Nenda swali na. 57</p>	<p>1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu → Nenda swali na. 57</p>

<p>56. Je, una uhakika kiasi gani kwamba unaweza kuongea na mwenzi wako katika mwezi ujao kuhusu kupima VVU?</p> <p>(Ruka swali hili kama swali na. 50 na 52 majibu ni NDIYO na kama swali na.51 jibu ni Ana VVU)</p>	<p>1=Nina uhakika mkubwa</p> <p>2=Nina uhakika</p> <p>3=Nina uhakika kiasi</p> <p>4=Sina uhakika kabisa</p> <p>5=Sifahamu</p> <p>6=Sitaki kujibu</p>	<p>1=Nina uhakika mkubwa</p> <p>2=Nina uhakika</p> <p>3=Nina uhakika kiasi</p> <p>4=Sina uhakika kabisa</p> <p>5=Sifahamu</p> <p>6=Sitaki kujibu</p>	<p>1=Nina uhakika mkubwa</p> <p>2=Nina uhakika</p> <p>3=Nina uhakika kiasi</p> <p>4=Sina uhakika kabisa</p> <p>5=Sifahamu</p> <p>6=Sitaki kujibu</p>
<p>57. Una wasiwasi kiasi gani wa kumuambukiza VVU mwenzi huyu?</p> <p>(Ruka swali hili kama swali na. 50 na 52 majibu ni NDIYO na kama swali na.51 jibu ni Ana VVU)</p>	<p>1=Nina wasiwasi mkubwa</p> <p>2=Nina wasiwasi kiasi</p> <p>3=Sina wasiwasi kabisa</p> <p>4=Sifahamu</p> <p>5=Sitaki kujibu</p>	<p>1=Nina wasiwasi mkubwa</p> <p>2=Nina wasiwasi kiasi</p> <p>3=Sina wasiwasi kabisa</p> <p>4=Sifahamu</p> <p>5=Sitaki kujibu</p>	<p>1=Nina wasiwasi mkubwa</p> <p>2=Nina wasiwasi kiasi</p> <p>3=Sina wasiwasi kabisa</p> <p>4=Sifahamu</p> <p>5=Sitaki kujibu</p>
<p>58. Je, mwenzi wako anatoa msaada wowote wa kifedha kwako au kwa mtoto wako yeyote?</p>	<p>1=Ndiyo</p> <p>2=Hapana</p> <p>3= Sifahamu</p> <p>4=Sitaki kujibu</p>	<p>1=Ndiyo</p> <p>2=Hapana</p> <p>3= Sifahamu</p> <p>4=Sitaki kujibu</p>	<p>1=Ndiyo</p> <p>2=Hapana</p> <p>3= Sifahamu</p> <p>4=Sitaki kujibu</p>
<p>59. Je, unatoa msaada wowote</p>	<p>1=Ndiyo</p> <p>2=Hapana</p>	<p>1=Ndiyo</p> <p>2=Hapana</p>	<p>1=Ndiyo</p> <p>2=Hapana</p>

wa kifedha kwa mwenzi huyu?	3= Sifahamu 4=Sitaki kujibu	3= Sifahamu 4=Sitaki kujibu	3= Sifahamu 4=Sitaki kujibu
60. Je, katika miezi 3 iliyopita, umefanya tendo la kujamiiana mara ngapi na mwenzi huyu?	_____ Idadi 3=Sifahamu 4=Sitaki kujibu	_____ Idadi 3=Sifahamu 4=Sitaki kujibu	_____ Idadi 3=Sifahamu 4=Sitaki kujibu
61. Ni mara ngapi huwa unatumia kondomu wakati wa tendo la kujamiiana na mwenzi wako?	1=Kamwe → Nenda MWISHO 2=Mara chache 3=Karibu kila mara 4=Kila mara 5=Sifahamu 6=Sitaki kujibu	1=Kamwe → Nenda MWISHO 2=Mara chache 3=Karibu kila mara 4=Kila mara 5=Sifahamu 6=Sitaki kujibu	1=Kamwe → Nenda MWISHO 2=Mara chache 3=Karibu kila mara 4=Kila mara 5=Sifahamu 6=Sitaki kujibu
62. Je, wewe au mwenzi wako alitumia kondomu mara ya mwisho mlipofanya tendo la kujamiiana?	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu
63. Je, unaweza kukataa kufanya tendo la kujamiiana kama mwenzi wako hataki mtumie kondomu?	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu	1=Ndiyo 2=Hapana 3= Sifahamu 4=Sitaki kujibu

Mhojaji atasoma: Ahsante kwa kutumia muda wako kushiriki katika mahojiano haya.

8.3 Appendix C: INFORMED CONSENT FORM (ENGLISH VERSION)

Patient Consent Form

Hello, my name is on behalf of Muhimbili University of Health and Allied Sciences (MUHAS), we are doing research on HIV status disclosure and factors influencing disclosure among PLWHA in Kisarawe Hospital.

The aim of the study

The aim of this study is to find out factors influencing PLWHA to disclose their HIV status disclosure to their partners and/or significant others. At the end of this study, the findings will contribute to the existing knowledge enable suggestions for proper intervention measures for promoting disclosure in the community which in turn will reduce the spreading and transmission of HIV.

Procedure

I would like you to participate in this study. If you choose to participate in this study, an interviewer will ask you a series of questions about your background, your health, what you know about the importance of HIV status disclosure, what cultural beliefs hinder or facilitate disclosure, attitudes on HIV status disclosure, violence history, disclosure status, time of disclosure, audience of disclosure, gender relation, perception towards disclosure and societal related factors. Medical history data such as ARV status, CD4 count, opportunistic infection such as TB infection will be collected. It will take about 20 minutes to finish the interview.

Confidentiality

All the information obtained from you will be kept private, only study staff will be able to see any information you give us. The information will be used for the purpose of the research study only and not for any other reason. Your name or anything else that might identify you will not appear in any reports, instead number will be used.

Right to refuse or withdraw

It is your choice to be in this study, you can skip any question you do not want to answer. You are free to drop out from the study whenever you feel like, the drop out will not affect the services you receive here at this clinic or any other clinic. However, we would like you to participate in this study because your views are very important.

Benefit

Your participation in this study will provide useful information for us and other stakeholders.

Risks

We do not expect any harm to you or your family as a result of participation in this study although some questions will be personal like about your sexual behaviour.

Whom to contact

In case of any inquiry please contact the principal investigator, Ms. Jamilla A. Mwangi. MUHAS, P. O. BOX 65001, Dar es Salaam, mobile number 0712-266555 or Dr. Elia J. Mmbaga, MUHAS, P. O. BOX 65001, Dar es Salaam.

I have read or been told about the contents of this form and understand. My questions have been answered. I agree to participate in this study.

Signature of participant.....

Signature of witness (if participant cannot write).....

Date.....

Signature of researcher/research assistant

8.4 Appendix D: INFORMED CONSENT FORM (KISWAHILI VERSION)

Fomu ya Idhini ya Mgonjwa

Habari, mimi naitwa..... kwa niaba ya Chuo Kikuu cha Afya na Sayansi ya Tiba cha Muhimbili tunafanya utafiti kwa watu wanaoishi na virusi vya ukimwi (VVU) kujua sababu zinazopelekea au kuzuia mtu anayeishi na VVU kubainisha hali yake kwa watu wengine.

Lengo la Utafiti

Utafiti huu unalenga kuainisha sababu zinazopelekea au kuzuia mtu anayeishi na VVU kubainisha hali yake kwa watu wengine. Taarifa hii itasaidia kuongeza ufahamu utakaowezesha kubuni mikakati itakayohamasisha watu wanaoishi na VVU kubainisha hali zao kwa watu wengine na hivyo kupunguza maambukizi ya ukimwi.

Utaratibu

Tungependelea kushiriki kwako katika utafiti huu. Kama utachagua kushiriki, mhojaji atakuuliza mfululizo wa maswali kuhusu historia yako, afya yako, kile unachojua kuhusiana na umuhimu wa kubainisha hali yako ya kuishi na VVU, utamaduni unaoweza kuhamasisha au kuzuia ubainishaji, mitizamo kuhusu ubainishaji, vurugu zozote zilizowahi tokea, hali ya ubainishaji, muda unaopita mpaka kubainisha, ubainishaji ni kwa watu gani, masuala ya jinsia na mengineyo. Historia ya kitabibu kama vile mtu yuko kwenye dawa za kupunguza makali ya VVU/UKIMWI au la, seli ngapi za CD4 n.k. vitaulizwa. Mahojiano yetu yatachukua dakika kama 20 hivi.

Usiri

Majibu yote utakayotoa yatakuwa siri na hayataonyeshwa kwa wengine zaidi ya wafanyakazi wa utafiti huu tu. Taarifa utakazotoa zitatumika kwa lengo la utafiti tu na sio sababu nyingine yeyote. Jina lako au kitu chochote cha kukutambulisha hakitaonekana kwenye ripoti badala yake tutatumia namba.

Haki ya kujitoa au vinginevyo

Ushiriki katika utafiti huu ni wa hiari. Unaweza kusitisha mahojiano wakati wowote endapo utaona ni vyema kufanya hivyo na hakutakuwa na athari zozote na hutapoteza stahili zako za kupata huduma katika kliniki hii au nyingine. Hata hivyo, kama utashiriki utatusaidia sana katika utafiti huu kwani taarifa utakazotoa zitasaidia sana katika kupanga mikakati ya kupunguza maambukizi ya VVU/Ukimwi.

Faida

Kama utakubali kushiriki katika utafiti huu, tunategemea kwamba taarifa tutakazozipata kutoka kwako zitakuwa na maana kwetu na kwa wadau wengine katika huduma za kliniki ya tiba na matunzo kwa watu wanaoishi na VVU.

Madhara

Hatutegemei ya kwamba utapata madhara yoyote kwa kushiriki kwako katika utafiti huu japo baadhi ya maswali utakayoulizwa ni ya binafsi zaidi, kama yale yanayohusu tabia za kujamiiana.

Watu wa kuwasiliana nao

Kama una maswali katika utafiti huu unaweza kuwasiliana na mtafiti mkuu, Jamilla A. Mwanga kutoka Chuo Kikuu cha Tiba na Sayansi Muhimbili, S.L.P. 65001, Dar es Salaam. Simu namba 0712-266555 au Dr. Elia J. Mmbaga wa Chuo Kikuu cha Tiba na Sayansi Muhimbili, S.L.P. 65001, Dar es Salaam.

Mimi.....nimesoma/nimesomewa fomu hii ya idhini na nimeielewa. Maswali yangu yamejibiwa. Nakubali kushiriki katika utafiti huu.

Saini ya mshiriki.....

Saini ya shahidi (kwa wasiojua kuandika)

Tarehe.....

Saini ya mtafiti/ mtafiti msaidizi

8.5 Appendix E: In-depth interview guide for PLWHA attending CTC in Kisarawe Hospital

IN-DEPTH INTERVIEW ON HIV STATUS DISCLOSURE

INTRODUCTION:

Hello, my name is I am here on behalf of Muhimbili University of Health and Allied Sciences. I am here today to interview PLWHA about HIV status disclosure. All comments, both positive and negative are welcomed. I would like to have many points of view from you. With your permission, I will use a tape recorder to ensure accuracy of the data collection. I would like to assure you that all information you give me/us will be confidential and will be used for research purpose only. You are allowed to withdraw any moment you feel like doing so and you may refuse to answer any question you do not want to. However, we would like so much to have your comments. Are you willing to participate in the interview? Thank you for your acceptance.

Participant ID NO.....

Interviewer ID NO.....

Date of Interview.....

PART A: PARTICIPANT DEMOGRAPHIC INFORMATION

- | | | |
|------------------------|----------------------------|----------------------------|
| 1. Date of birth..... | 2. Sex of participant..... | 3. Age of participant..... |
| 4. Marital status..... | 5. Residence area..... | 6. Education level..... |
| 7. Occupation..... | 8. Religion | |

PART B: ATTITUDES TOWARDS HIV/AIDS STATUS DISCLOSURE

9. How do community members feel/think about disclosure of HIV/AIDS status? Why?

10. How do community members feel about a person who has disclosed his/her status? Why?

<ul style="list-style-type: none"> • Can he/she work with others • Relationships with others (in household/village) • Can he/she get married
<p>11. What is your feeling about disclosure of HIV/AIDS status?</p> <ul style="list-style-type: none"> • Probe reasons • Why so?

PART C: BELIEFS REGARDING HIV STATUS DISCLOSURE

<p>12. Where do you go first when you fall sick? Why?</p>
<p>13. In your community, do you have any chronic diseases before HIV/AIDS?</p> <ul style="list-style-type: none"> • If Yes, what are they?
<p>14. How was the disclosure of these chronic diseases conducted?</p> <ul style="list-style-type: none"> • Probe more
<p>15. How is disclosure of HIV/AIDS status in your community (explore the extent)?</p> <ul style="list-style-type: none"> • Do people in this community disclose their status?
<p>16. What are the factors affecting disclosure? • Probe more on cultural issues</p>

PART D: KNOWLEDGE ON THE IMPORTANCE OF HIV STATUS DISCLOSURE

<p>17. Why do you think, it is important to disclose HIV/AIDS status? Probe more</p>
<p>18. To whom do you prefer to tell about your HIV status? Probe more</p>
<p>19. What sort of information regarding HIV status disclosure may be helpful for the PLWHA?</p>

Thank you for taking your time to talk to me.

8.6 Appendix F: In-depth interview guide for PLWHA attending CTC in Kisarawe Hospital (Kiswahili Version)

MAHOJIANO YA KINA KUUSU UBAINISHAJI WA KUWA NA VVU

UTANGULIZI:

Habari, mimi naitwa niko hapa kwa niaba ya Chuo Kikuu cha Afya na Sayansi ya Tiba cha Muhimbili. Tunafanya utafiti kwa watu wanaoishi na virusi vya ukimwi (VVU) kujua sababu zinazopelekea au kuzuia mtu anayeishi na VVU kubainisha hali yake kwa watu wengine. Tunakaribisha maoni yako yoyote utakayotoa yawe hasi au chanya tunayakaribisha. Ningependa kupata maoni na mawazo mengi kutoka kwako. Kama utaniruhusu nitatumia kinasa sauti ili kuhakikisha usahihi wa kile utakachoniambia kwani kwa kuandika naweza kusahau mengine na maoni yako ni muhimu sana. Kwa mara nyingine ningependa kukuhakikishia usiri wa taarifa utakazotoa, ya kwamba zitatumika kwa lengo la utafiti tu na si vinginevyo. Unaruhusiwa kukatisha mahojiano yetu wakati wowote utakaona ni vema kufanya hivyo, japo tungependa sana kupata maoni yako. Je, uko tayari kushiriki katika utafiti huu? Ahsante kwa ukubali wako.

Namba ya kitambulisho cha mshiriki.....

Namba ya kitambulisho cha mhojaji..... Tarehe ya mohoiano.....

SEHEMU A: TAARIFA ZA KIJAMII NA KIDEMOGRAFIA

- | | |
|-----------------------------------|-----------------------------|
| 1. Tarehe ya kuzaliwa..... | 2. Jinsia ya mshiriki |
| 3. Umri wa mshiriki | 4. Hali ya ndoa |
| 5. Mahali anapoishi mshiriki..... | 6. Kiwango cha elimu |
| 7. Kazi ya mshiriki..... | 8. Dini ya mshiriki |

SEHEMU B: MITIZAMO KUHUSU UBAINISHAJI WA KUWA NA VVU

9. Je, jamii inafikiriaje kuhusu suala la kubainisha hali ya kuwa na VVU kwa wengine? Kwa nini?

10. Je, jamii inamfikiriaje mtu aliyebainisha hali yake ya kuwa na VVU? Kwa nini?

- Je, anaweza kufanya kazi na wengine?
- Je, mahusiano na wengine yakoje? (Katika familia, kijiji n.k)
- Je, anaweza kuoza au kuolewa?

11. Je, ni nini mtizamo (hisia) wako kuhusu kubainisha hali yako ya kuwa na VVU?

- Uliza zaidi kuhusu sababu
- Kwa nini?

SEHEMU C: IMANI KUHUSU UBAINISHAJI WA KUWA NA VVU

12. Huwa unaenda wapi kwa mara ya kwanza kupata matibabu unapoumwa? Kwa nini?

13. Katika jamii yako, kuna magonjwa yoyote yasiyo na tiba (sugu) mbali na UKIMWI?

- Kama ndiyo, ni yapi hayo?

14. Je, ubainishaji wa magonjwa hayo sugu ulikuwaje?

- Uliza zaidi?

15. Je, ubainishaji wa kuwa na VVU/UKIMWI ukoje katika jamii yako?

- Watu katika jamii hii wanaweza kuwaambia watu wengine kuhusiana na hali yao ya kuwa na VVU?

16. Je, ni sababu gani zinazoathiri ubainishaji wa kuwa na VVU?

- Uliza zaidi kuhusu mambo ya mila na utamaduni

SEHEMU D: UFAHAMU KUHUSU UMUHIMU WA KUBAINISHA HALI YA KUWA NA VVU

17. Kwa nini unafikiri ni muhimu kuwaeleza watu wengine kuhusu hali yako ya kuwa na VVU? Uliza zaidi

18. Je, ni nani unayependelea kumweleza hali yako ya kuwa na VVU? Uliza zaidi

19. Je, unafikiri ni taarifa gani za ubainishaji zinaweza kuwasaidia watu wanaoishi na VVU?

Ahsante kwa kutumia muda wako kuongea na mimi.

8.7 Appendix G: In-depth Interview guide for health care provider

IN-DEPTH INTERVIEW ON HIV STATUS DISCLOSURE

INTRODUCTION:

Hello, my name is I am here on behalf of Muhimbili University of Health and Allied Sciences. I am here today to interview health care provider about HIV status disclosure. All comments, both positive and negative are welcomed. I would like to have many points of view from you. With your permission, I will use a tape recorder to ensure accuracy of the data collection. I would like to assure you that all information you give me/us will be confidential and will be used for research purpose only. You are allowed to withdraw any moment you feel like doing so and you may refuse to answer any question you do not want to. However, we would like so much to have your comments. Are you willing to participate in the interview? Thank you for your acceptance.

Health care provider ID NO..... Interviewer ID NO.....

Date of Interview.....

PART A: PARTICIPANT DEMOGRAPHIC INFORMATION

1. Date of birth.....
2. Sex of participant.....
3. Age of participant.....
4. Marital status.....
5. Residence area.....
6. Education level.....
7. What is your profession?
8. How long have you been working as health care provider in Kisarawe hospital?
.....
9. How long have you been working at this CTC?

PART B: INTERVIEW GUIDING QUESTIONS ON HIV/AIDS STATUS DISCLOSURE

1. Have you ever taken training on counseling of disclosure of HIV/AIDS status?

If Yes, when?

For how long?

2. Do you feel adequately prepared to counsel PLWHA about disclosure?

If no, what do you think is the weakness in your training?

- Content of disclosure counseling? (Probe more)
- Method of teaching? (Probe more)

3. Do you think discussion of HIV disclosure with client is important? Why?

4. Do you discuss disclosure with your clients during counseling session?

- Disclosure to partner?
- Disclosure to significant others? (relatives/parents/friends)

5. About how many PLWHA do you counsel on disclosure each day in this CTC?

6. What do you think are reaction of the community to PLWHA who have disclosed?

7. What do you think about the factors that affect disclosure among PLWHA in Kisarawe district?

Probe more on cultural issues

8. What do you think are community attitudes toward PLWHA who have disclosed their status?

9. What challenges have you faced in counseling PLWHA on status disclosure?

10. Do you have any suggestions on how the counseling on HIV status disclosure could be improved? If yes, describe them.

Thank you for taking the time to talk to me

8.8 Appendix H: In-depth interview guide for health care provider (Kiswahili Version)

MWONGOZO WA MAHOJIANO YA KINA KWA MHUDUMU WA AFYA KUHUSU UBAINISHAJI WA KUWA NA VVU

UTANGULIZI:

Habari, mimi naitwa niko hapa kwa niaba ya Chuo Kikuu cha Afya na Sayansi ya Tiba cha Muhimbili. Tunafanya utafiti kwa watu wanaoishi na virusi vya ukimwi (VVU) kujua sababu zinazopelekea au kuzuia mtu anayeishi na VVU kubainisha hali yake kwa watu wengine. Tunakaribisha maoni yako yoyote utakayotoa yawe hasi au chanya tunayakaribisha. Ningependa kupata maoni na mawazo mengi kutoka kwako. Kama utaniruhusu nitatumia kinasu sauti ili kuhakikisha usahihi wa kile utakachoniambia kwani kwa kuandika naweza kusahau mengine na maoni yako ni muhimu sana. Kwa mara nyingine ningependa kukuhakikishia usiri wa taarifa utakazotoa, ya kwamba zitatumika kwa lengo la utafiti tu na si vinginevyo. Unaruhusiwa kukatisha mahojiano yetu wakati wowote utakaona ni vema kufanya hivyo, japo tungependa sana kupata maoni yako. Je, uko tayari kushiriki katika utafiti huu? Ahsante kwa ukubali wako.

Namba ya kitambulisho cha mhudumu wa afya.....

Namba ya kitambulisho cha mhojaji..... Tarehe ya mohoiano.....

SEHEMU A: TAARIFA ZA KIJAMII NA KIDEMOGRAFIA

- | | |
|---|-----------------------------|
| 1. Tarehe ya kuzaliwa..... | 2. Jinsia ya mshiriki |
| 3. Umri wa mshiriki | 4. Hali ya ndoa |
| 5. Mahali anapoishi mshiriki..... | 6. Kiwango cha elimu |
| 7. Ni nini taaluma yako?..... | |
| 8. Ni kwa muda gani umekuwa ukifanya kazi kama mhudumu wa afya hapa hospitali ya Kisarawe? | |
| 9. Ni kwa muda gani umefanya kazi hapa kliniki ya matunzo na tiba kwa watu wanaoishi na VVU/UKIMWI? | |

SEHEMU B: MASWALI YA MWONGOZO WA MAHOJIANO KUHUSU UBAINISHAJI WA KUWA NA VVU

1. Je, umeshawahi kupata mafunzo ya ushauri nasaha juu ya ubainishaji wa kuwa na VVU?

Kama ndio, lini?

Kwa muda gani?

2. Je, unafikiri umeandaliwa vya kutosha kutoa ushauri nasaha kuhusu ubainishaji kwa watu wanaoishi na VVU?

Kama hapana, unafikiri mapungufu yako wapi kwa upande wa mafunzo?

- Je, ni dhana nzima ya ushauri nasaha juu ya ubainishaji? (Uliza zaidi)
- Njia za ufundishaji? (Uliza zaidi)

3. Je, unafikiri majadiliano na mgonjwa juu ya ubainishaji wa hali yake kwa watu wengine ni muhimu? Kwa nini?

4. Je, huwa unajadili na wagonjwa wako juu ya ubainishaji wa hali zao wakati wa kutoa ushauri nasaha?

- Kumweleza mwenzi?
- Kuwaeleza watu wengine wa muhimu (kama ndugu/wazazi/rafiki)

5. Je, kwa wastani kila siku unashauri wagonjwa wangapi wanaoishi na VVU juu ya ubainishaji wa hali zao hapa kliniki?

6. Je, unafikiri ni nini mwtikio wa jamii kwa watu wanaoishi na VVU ambao tayari wamebainisha hali zao?

7. Je, unafikiri ni sababu gani zinazoathiri ubainishaji wa kuwa na VVU kwa watu wanaoishi na VVU hapa wilayani Kisarawe?

Uliza zaidi kuhusu mila na utamaduni

8. Je, unafikiri ni nini mtizamo wa jamii kwa watu wanaoishi na VVU ambao tayari

wameshabainisha hali zao?
9. Ni changamoto zipi ambazo unakumbana nazo wakati wa kutoa ushauri nasaha kwa watu wanaoishi na VVU juu ya ubainishaji wa hali zao kwa watu wengine?
10. Je, una maoni yoyote juu ya namna ambavyo ushauri nasaha kuhusu ubainishaji unaweza kuboreshwa? Kama ndiyo, eleza.

Ahsante kwa kutumia muda wako kuongea na mimi.

8.9 Appendix I: Letter of ethical clearance