

**FACTORS ASSOCIATED WITH LATE PRESENTATION TO
HIV/AIDS CARE IN BENCH MAJI ZONE, SOUTHWEST
ETHIOPIA: A CASE CONTROL STUDY**

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Jimma, Ethiopia

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ABSTRACT

Background: Early diagnosis and timely linkage to HIV medical care is necessary to monitor clinical status of HIV disease progression and to derive maximal benefit from antiretroviral therapy and other interventions. However, significant number 34.4% of People living with HIV were present late to HIV/AIDS care in Ethiopia. Late presentation to HIV care that is determined by many factors is a persisting problem in most developing countries, including Ethiopia. Moreover, there was no empirical data on risk factors for late presentation to HIV/AIDS care in the local context. Therefore this study aimed to assess risk factors associated with late presentation to HIV/AIDS care among People living with HIV in Bench Maji Zone.

Methods: A case-control study design triangulated with qualitative approach was conducted in one general hospital and eight health centers of Bench Maji Zone from March 01 to May 15/2014. For the qualitative data, a sample of 87 case and 174 controls were included in the study using a consecutive sampling technique. Purposively 15 individuals were included in the in-depth interview. Quantitative data were collected using pre- tested interview administered questionnaire and analyzed using Statistical Package for Social Science Version 20. Descriptive, Bivariate and multivariable logistic regression analysis was done to assess association among variables. Qualitative data were analyzed using thematic analysis and triangulated with quantitative finding.

Result: A total of 256 individuals were participated in the study, making a response rate of 98.1%. The independent predictors of late presentation to HIV/AIDS care were: being could not read and write [AOR = 2.59, 95%CI: (1.21, 5.53)], perceived HIV as stigmatizing disease [AOR = 2.50, 95% CI: (1.31, 4.76)], did not disclose their HIV status [AOR = 2.56, 95%CI:(1.37, 4.79)], alcohol consuming [AOR = 6.16,95%CI:(3.22, 11.78)] and traditional care experienced for HIV status [AOR = 3.07, 95%CI:(1.54, 6.09)]. The qualitative findings also explored that being not educate, perceive HIV stigma, alcohol users, non HIV status disclosure, having HIV traditional care experience were the major barriers for early presentation to HIV/AIDS care.

Conclusions and recommendations: Late presentation to HIV/AIDS care explained by not read and write, HIV stigmatization, not disclose their HIV status, consuming alcohol and having HIV traditional care experience. Thus, emphasise should given to address the identified risk factors of late presentation to HIV/AIDS care.

Key words: risk factors, late presentation, HIV/AIDS care, Bench Maji, Ethiopia

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
ART	Antiretroviral Therapy
BMZHD	Bench Maji Zone Health Department
CI	Confidence Interval
HAART	Highly Active Antiretroviral Therapy
HC	Health Center
HF	Health Facility
HIV	Human Immunodeficiency Virus
JUCPHMS	Jimma University College of Public Health and Medical Science
MOF	Ministry of Health
PLHIV	People Living with HIV
PMTCT	Prevention of mother to child transmission
RHB	Regional Health Bureau
SNNPR	Southern Nations Nationalities Peoples Region
SPSS	Statistical Package for Social Science
UNAIDS	United Nations Joint Program on Acquired Immune Deficiency Syndrome
WHO	World health organization
WoHO	Woreda health Office

UNIT ONE: INTRODUCTION

1.1. Background

The emergence of the human immunodeficiency virus(HIV) epidemic is one of the biggest public health challenges the world has ever seen in recent history [1]. According to the 2013 report of USAIDS, globally, about 35.3 million people were living with HIV at the end of 2012 and 6.6 million people had died from AIDS-related causes from 1996 to 2012 and about 2.3 million were newly infected and 1.6 million were new AIDS-related deaths in 2012 [2].

Sub-Saharan Africa remains the most severely affected region by the HIV epidemic, with nearly one in every 20 adults (4.9%) living with HIV and accounts about 69% of the world population living with HIV[3]. Ethiopia is among the countries most affected by the HIV epidemic, with an estimated adult prevalence of 1.5%. The estimated number of people living with HIV in 2013 is approximately 800,000 and about 1 million AIDS orphans [1].

In untreated HIV-infected persons, the risk of developing an AIDS-defining condition increases exponentially as the CD4 cell count drops. The current literature review discloses several definitions of late presentation, which have been used to date. Late presentation has been defined as persons presenting at HIV diagnosis with an AIDS defining illness[4]. Some have also defined it as persons presenting to HIV care after subsequent three months [5] and six months of their HIV positive test[6]. It is also defined as persons who presenting for HIV care with a CD4 count of ≤ 200 cells/mm³[7,8]. In Ethiopia, late presentation to HIV/AIDS care is considered when HIV infected people come to ART care with a CD4 count of ≤ 350 cells/mm³ or with an AIDS-defining illness [9–12].

Late entry in to HIV/AIDS care has serious public health implications because opportunities to decrease viral loads and risk of further transmission through effective HIV/AIDS treatment are lost due to initiating HIV related care at late presentation categories, which contributes to increased mortality rates, poor treatment response, onward transmission and affects impressively patient survival as well as quality of life [13]. However, timely linkage for HIV care following HIV diagnosis ensures to monitor clinical status of HIV disease progression and to derive maximal benefit from ART and other interventions like treating for opportunistic infections, receiving health education and prophylactic treatment, which reduces risk of secondary transmission because of suppressed HIV viral loads [2].

1.2. Statement of the problem

Late entry into HIV care may occur because the person is unaware of his or her HIV status or may choose to defer seeking of HIV care due to several factors [8]. Globally, up to 90% of people living with HIV may be unaware of their status; with an estimated range of 21% to 30% in developed nations [14].

According to the report of UNAIDS, globally 63.5% of 16.7 million eligible HIV positive people were on ART at the end of 2012 [2,15]. This indicates that 36.5% of eligible HIV positive people were not receiving ART according to the WHO (2010) guidelines to initiation ART. A large proportion, averagely 52.5% of HIV-infected individuals in the developed world had also presented late for HIV care [13]. Study done in Brazil shows late entry into HIV care is strongly associated with premature death among HIV-infected individuals, accounting for approximately 39.5% of all AIDS-related deaths [16].

In Sub Saharan region only 56% of people eligible for antiretroviral therapy received treatment at the end of 2011 [3]. In this region around half of people who received HIV positive result were lost between testing and being enrolled for eligibility to HIV care and 32% of the people considered as eligible for ART were lost between being assessed for eligibility and initiating ART [15]. In addition, even though the number of people on ART increases from year to year, a large proportion of adult people begin ART at CD4 counts far below those recommended in national guidelines for resource-limited settings [17]. This is also supported by Study done in Sub-Saharan Africa, 40% of HIV positive people were presented to HIV care with late presentation category, i.e. WHO stage III, IV and CD4 count ≤ 200 cells/mm³. Of those, 50% of the men, 36% of the non-pregnant women and 15% of the pregnant women were presented to HIV care at late presentation category [18].

In Ethiopia, according to the unpublished study conducted in Shashamane Hospital, the prevalence of late presentation to HIV/AIDS care among people living with HIV was 34.4% [19]. Similarly, finding from situational analysis of research conducted in Jimma reported that 38.8 % of HIV positive people in Jimma University specialized hospital and 33.1% of HIV positive people in Jimma health center were present late to ART clinic for HIV/AIDS care [20]. Moreover, a preliminary assessment done in this study showed that 36% of HIV positive individuals were present to HIV/AIDS care lately.

In response to the HIV/AIDS epidemic, the Government of Ethiopia introduced ART in 2003 on subsidized, fee-based scheme and ART became freely available since 2005. To ensure service availability, ART service has been decentralized to health center in 2006, which marked the rapid scale-up phase in the history of Ethiopian ART programme [21].

As a result, this service was transferred from physicians in hospitals to mid-level health-care workers in health centers and it was supported by the work of community health workers administering community-based and home-based care [9].

Even though, the implementation of the program has been expanded to the health center level, the utilization and presentation to care in the WHO recommended cut of point is still below the expected one and high proportion of HIV-infected people in Ethiopia are too late to fully benefit from ART. A Systematic review in Sub Saharan Africa found that in Ethiopia only 47% of people were enrolled to HIV/AIDS care immediately after HIV positive result, while 43% were enrolled within 8 weeks of positive result [22] and about 40% of people eligible for ART were not receiving it, at the end of 2012 [15].

However, only few studies were done regarding determinant factors of late presentation to HIV/AIDS care with case control design in Ethiopia [20]. These studies were conducted at referral and district hospitals in south wollo; at Jimma University specialized hospital and one health center in Jimma town. Their study identified those who have perceived stigma, perceived side effect, symptom at first diagnosis and those who lived with their family in south wollo [7]; marital status of those divorced, formally educated, those who tested HIV with symptom and chronic illness in Jimma town [20] were some of the factors associated with late presentation to HIV/AIDS care.

The above findings of late presentation focused on hospitals may not comprehensively represent to compare for different setting of health facility. In addition, these studies had not assessed the effect of some variables like traditional care experience for HIV, prior HIV negative test experience, individual perception on social support, general health status, benefit of HIV care, and sexual partnership related factors and the effects of some variables were inconsistency among studies. Moreover, these studies had not conducted in line with the WHO 2010 recommended guidelines of ART initiation and there is no empirical data regarding determinant factors of late presentation to HIV/AIDS care in the study areas. Therefore, the objective of this study was to identify factors associated with late presentation to HIV/AIDS care among persons living with HIV attending ART clinic for HIV care in Bench Maji Zone, southwest Ethiopia.

UNIT TWO: LITERATURE REVIEW

2.1. Factors associated with late presentation to HIV/AIDS care

Despite the rapid expansion of HIV/AIDS treatment service availability and accessibility as well as eligibility criteria for persons living with HIV, delayed in initiation HIV/AIDS care remains a challenge in many settings, including high-income countries as the 2010 WHO recommended guideline. HIV care seeking practices of people living with HIV have hindered by several factors in many settings and the inability to address these issues has led to failure in HIV care continuum. Thus contributes to high levels of HIV/AIDS related morbidity and mortality in the world particularly in Sub-Saharan Africa [15].

In current literature, several studies have examined about risk factors of late presentation to HIV care among persons living with HIV/AIDS. Hence, this review has examined three factors that contribute for late presentation to HIV/AIDS care including; socio-demographic and economic characteristics, behavioral risk factors and HIV care seeking behavior, and experience related factors.

2.1.1. Socio-demographic and economic factors

A number of studies examined that socio-demographic and economic related factors were associated with delay in seeking of HIV/AIDS care in various settings. As a study conducted in India shows being illiteracy, being female, age, place of residence being farness of residence from towns and marital status of being widowed and unmarried were factors associated with delayed entry into care [5,23]. Another study in the place specified above revealed that, age at presentation less than 25 were associated with decreased chances of late presentation to care [24]. However, study done in Italy observed that socio economic status, including unemployment and less educational level were not associated with late presentation to HIV/AIDS care [6].

As a developing region Sub-Saharan Africa faces several socio-demographic related factors that hinder early seeking of HIV care. A study conducted in Uganda reported that 50% of male, 36% non-pregnant and 15% pregnant female and older age being 46-50(52%), 31-45(41%) and 16-25(35%) years were associated with late presentation to HIV/AIDS care. Again findings of this study shows that educational level; 42% of those who did not educated secondary level Vs 33% being educated some secondary and above level, and 43% being unemployed and 42 % being farmers, being unmarried, widowed, and divorced were associated with late presentation to HIV care [18].

Finding from Bulawayo state of Zimbabwe indicated that being unmarried and widowed, low educational status, unemployment, older age and being female were associated with late presentation to HIV/AIDS care [25]. A study done in Malawi found that gender being male, age beyond 29 years, those never married were risk factors for late presentation to care, whereas younger age being 15-29 years, educational level and place of residence were associated with earlier presentation [26]. Another study from Uganda reported that lower educational level, being unmarried, Employment status: mostly being formers were risk factors for very late presentation to ARVs treatment, while being female and greater in age were protective factors for very late presentation [27].

If we look studies done in Ethiopia, on risk factors of late entry to HIV/AIDS care at the time of first presentation, as far as my knowledge only few literatures are available. A health facility based case-control study done in south wollo of Ethiopia in 2010 identified that living arrangement being living with their family and those lived in renting house and being not pregnant were associated with late presentation to HIV care [7]. Finding in this study reported that; HIV positive individuals who live with their parents were 3.29 times more likely to present late to HIV/AIDS care than those who live alone; HIV positive individuals who live in renting houses were 2.52 times more likely to present late to HIV/AIDS care than those who live with owning house and Non-pregnant women's were 9.3 times more likely to present late to HIV/AIDS care than pregnant women's [7].

Another case control study conducted in Jimma revealed that educational status of HIV infected individual were associated with late presentation to HIV/AIDS care. HIV positive individuals who could formally read and write were 3.7 times more likely to present late to HIV/AIDS care than those who could not read and write. Moreover those who were divorced/separated were 3.71 times more likely to present late to HIV care than those who were not married [20].

2.1.2. Behavioral risk factors

Late presentation to HIV/AIDS care has been clearly associated with behavioral related factors in a number of settings. In a study carried out in Venezuela showed that those who get test by their own initiatives were negatively associated with late presentation, whereas among those who tested by health provider initiatives were increased the risk of being late, while alcohol consumption were not associated with late presentation to HIV care [4]. According to published studies, those who had at least one negative HIV test before the first positive one were associated with a decreased probability of delayed presentation for HIV/AIDS care [6,29]

In a study conducted in Sub-Saharan Africa, alcohol consumption were associated with early presentation to HIV/AIDS care, i.e. non alcohol drinkers were associated with late presentation for care at HIV clinic that is (42%, 36% and 32% of those who are not alcohol users, moderate users and heavily alcohol users respectively). In the same study those who did not disclose their HIV status to their spouses were also associated with late presentation to HIV care [18].

Another studies study conducted reported that negative perception about the benefit of HIV care, lack of need on medical treatment, perceived poor health condition in Zambia [30] and being having poor perceived health status in Kenya [23,31] were identified as barriers to early initiation of HIV care and treatment.

HIV infected individuals found to be not comfortable to attend the clinic due to fear of stigma from either fellow community members or healthcare workers at the clinic. Studies done in Zambia, Kenya and Northern France have supported the idea that HIV/AIDS related stigma is associated with delay in seeking care [30,32,33], which reported that HIV stigma as common barriers for timely HIV care seeking behaviour. .

A study conducted in Kenya and Malawi also identified that those who did not have social support and those did not disclose their status to their spouse were associated with less likely to enrol in care early [23,26]. Another study conducted in Uganda also obtained that lack of social support especially at family level was significantly associated with very late presentation to HIV care [27].

In Ethiopia, the two studies conducted so far revealed that perceived HIV related stigma and being frequent alcohol users in South Wollo Zone [7] and being ever alcohol users in Jimma were significantly associated with late presentation to HIV/AIDS care [20].

2.1.3. HIV care seeking behavior and experience related factors

Several studies have examined risk factors for late presentation to HIV/AIDS care and treatment related to health service in the world including Sub-Saharan Countries. Studies conducted in Venezuela, Kenya and South Africa found that length of time taken to reach ART service was among the strongest risk factors for late presentation to HIV care [4,23,31].

Finding from case control study in Uganda found that those who had sought HIV related non medical care from traditional healers before enrolment to modern care, due to misconception about the accessible and holistic/quality of service as compared to traditional care were significantly associated with late initiation of HIV care [27].

In Ethiopia, a case control study conducted at referral and district hospital in south Wollo and at specialized hospital and HC in Jimma town observed that HIV care seeking behaviour and experience related factors like prior experience of health service and travel time taken to get ART service were associated with late entry in to HIV/AIDS care [7,20]. According the above study in Jimma town also HIV positive individuals who initiated their HIV positive test by VCT were 2.487 times more likely to present late to HIV/AIDS care than those who initiated their HIV positive test by PIHCT [20].

As many literatures reviewed, there are several factors that affect HIV/AIDS care seeking practice in the world including Sub Saharan Africa. Despite few literatures on risk factors of late presentations to HIV/AIDS care in Ethiopia, which were not conducted in line with the 2010 WHO and national recommended guidelines of ART initiation. In addition, some predictor variables had inconsistency among the studies. Therefore, this study aimed to identify variables related to socio-demographic, behavioural, and HIV care seeking behaviour and experiences which hypothesized as risk factors for late presentation to HIV/AIDS care among People living with HIV.

2.2. Conceptual framework

In general, determinant factors of late presentation to HIV/AIDS care likely operates at multiple levels. The conceptual framework of the study on risk factors of late presentation to HIV care has shown in Figure1. This model used extensively to understand the factors that predict presentation status of HIV positive people to HIV care and treatment service. The framework contains three determinant factors measured at individual and contextual level, which includes socio-demographic and economic, behavioral, and HIV care seeking behavior and experience related factors that hypothesized to influence presentation status of HIV positive people to HIV/AIDS care.

From the framework, socio demographic and economic factors might have a major impact on timely seeking of HIV related medical care. For example from demographic factor on average females may seek HIV related care at an earlier time than men, because females have more regular contact with the health care system especially via antenatal care, or holding different health-related opportunities. Similarly, variables like age, marital status and place of residence may also influence hypothetically presentation status of HIV infected people to seek HIV/AIDS care. Additionally, socioeconomic status may predispose HIV positive individuals to delay in care seeking due to educational limitation and logistical constraints for extra competing demands. Besides, HIV positive individuals with higher-level literacy, having regular occupation and increase in income status may be more likely to seek HIV care early.

As documented in the literature, behavioral factors such as substance use, disclosing status of HIV and sexual partnership status like regular partner status and number of sexual partner exposed with him or her may also influence presentation status of HIV infected individuals to HIV related care seeking behavior. In addition to this, perception related behaviors such as perceived general health status, perceived benefits from ARV treatment, perceived social support and perceived stigma could also hinder presentation to HIV care and treatment for some HIV positive peoples.

Finally, HIV care seeking behavior and experience factors; including: time taken to reach ART clinic, HIV traditional care experiences, prior experience on health service, modes of HIV positive test and prior HIV testing status may have direct effect on HIV positive people behaviors in seeking of HIV/AIDS care. Therefore, the three hypnotized factors of late presentation were evaluate based on the variables indicated in the conceptual framework of this study.

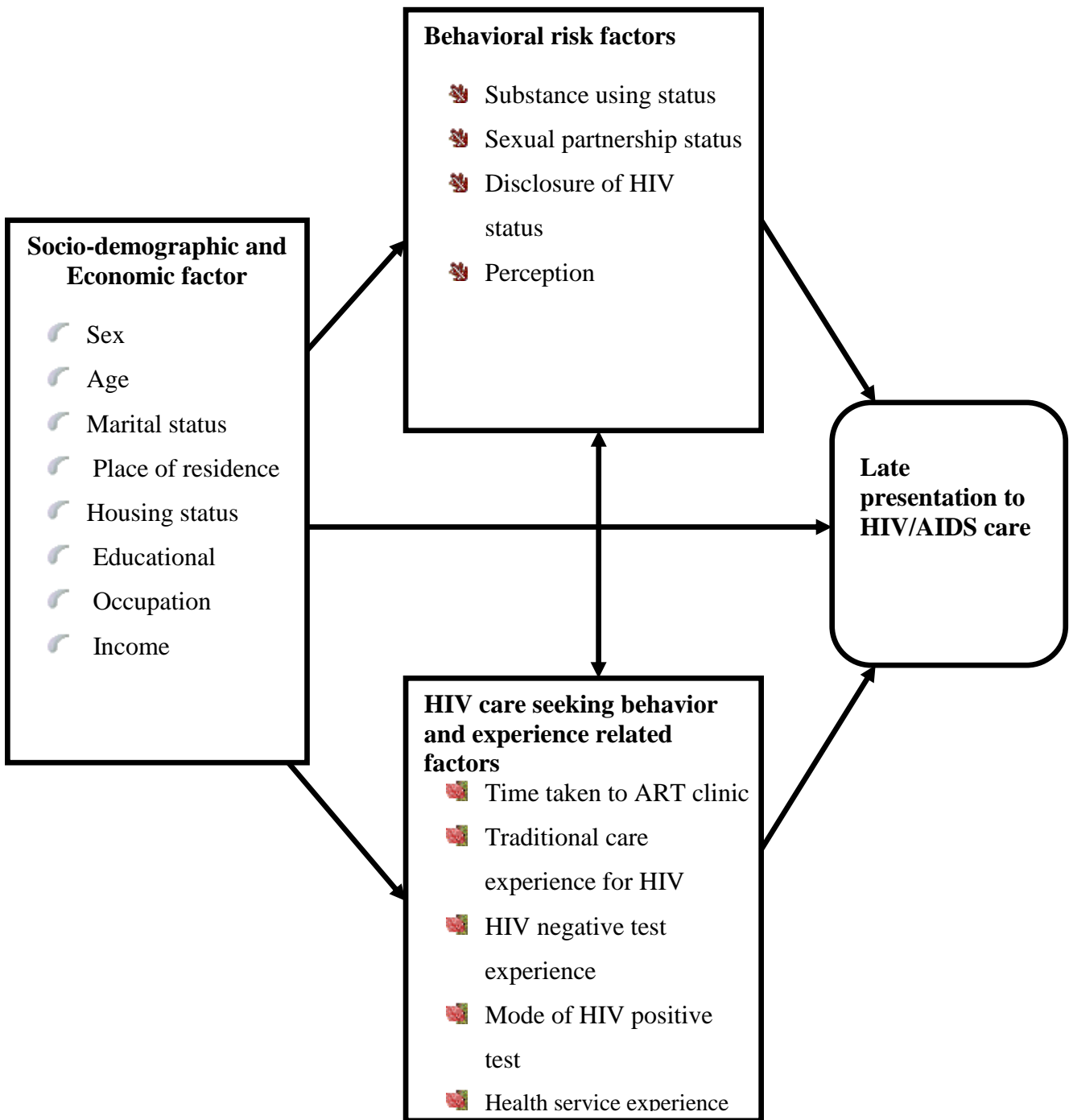


Figure 1: Conceptual framework for factors associated with late presentation to HIV/AIDS care in Bench Maji Zone, March 01-May 15/2014

2.3. Significance of the study

Despite the unprecedented government efforts to scale up comprehensive care for people living with HIV infection and acquired immunodeficiency syndrome throughout the country in Ethiopia, early seeking practice of HIV test as well as early linkage to HIV/AIDS care is low until now.

Beside the few studies on late presentation to HIV care conducted so far in Ethiopia, focused only on the old WHO (2006) ART initiation protocol. In these studies, some predictor variables like educational status, stigma and marital status were inconsistent. In addition, the risk factors for late presentation to HIV/AIDS care had not yet identified in the study area. Therefore, the objective of this study was to identify the risk factors of late presentation to HIV/AIDS care in line with the 2010 WHO recommended guideline of ART initiation.

The finding will may help to design strategies to address the risk factors and to implement interventions, which ultimately increases the effectiveness of HIV treatment scale-up in line with the WHO (2010) recommended guidelines of ART initiation. This would help to provide information for the planners and policy makers regarding to the risk factors of late presentation to HIV/AIDS care.

In addition, this study may help to design effective and appropriate intervention program to enhance the linkage among health facilities along HIV care continuum in Ethiopia particularly in the study area by offering evidence based support to People living with HIV within these risk groups. Moreover, this study will also provide pathways and information for others researchers who want to conduct further study on the issue; thus finding will help as a base line data for further study.

2.4. Research questions:

Why do HIV positive individuals presenting late to HIV/AIDS care, despite many benefits of early entry into HIV/AIDS care?

UNIT THREE: OBJECTIVE OF THE STUDY

3.1. General objective:

To identify risk factors associated with late presentation to HIV/AIDS care among People living with HIV in Bench Maji Zone, Southwest Ethiopia, from March 01 to May 15/2014.

3.2. Specific objectives:

- To identify socio-demographic and economic factors associated with late presentation to HIV/AIDS care among HIV Positive individuals.
- To identify behavioural risk factors associated with late presentation to HIV/AIDS care among HIV infected individuals.
- To assess HIV care seeking behaviour and experience related factors associated with late presentation to HIV/AIDS care among HIV infected individuals

UNIT FOUR: METHODS AND PARTICIPANTS

4.1. Study area and period

The study was conducted in Bench Maji Zone of Southern Nations, Nationalities and Peoples' Regional State from March 01- May 15, 2014. Bench Maji Zone is one of the 15 Zones of the SNNPR regional state and located at 561 km from Addis Ababa and 833 km from Hawassa in the Southwest of Ethiopia. Topography of the Zone is 5% high land, 45% midland and 50% low land, with climatic condition: annual rainfall 400 – 2000 ml, altitude of 500 - 3000 meter above sea level and temperature of 15-27⁰c.

The Zone has 10 woredas, one town administration and 247 kebeles. According to the 2007 census, the population of the Bench Maji Zone would be projected to be 804, 868 in 2013. The Zone has one General hospital, 37 health centers, 215 functional health posts and 116 private clinics. Among these, only 9 health facilities are providing ART service i.e. one general hospital and eight health centers. In all study health facilities; VCT, PMTCT, ART and treatment of opportunistic infection services are available.

4.2. Study design

A facility based case-control study design triangulated with qualitative approach has been employed in nine health facilities of Bench Maji Zone, Southwest Ethiopia.

4.3. Population

4.3.1. Source population

All HIV positive individuals under the health service coverage of Bench Maji Zone.

4.3.2. Study population

All HIV positive individuals who enrolled to HIV/AIDS care during data collection time in the study health facilities of Bench Maji Zone.

4.3.2.1. Study population for cases

All HIV positive individuals who enrolled to HIV/AIDS care with WHO clinical stage III or IV irrespective of CD4 count or a CD4 count ≤ 350 cells/mm³ irrespective of clinical stage in the study health facilities of Bench Maji Zone.

4.3.2.2. Study population for controls

All HIV positive individuals who enrolled to HIV/AIDS care with WHO clinical stage I or II or a CD4 count > 350 cells/mm³ in the study health facilities of Bench Maji Zone.

4.3.3. Eligibility Criteria's

4.3.3.1. Inclusion criteria's

All HIV positive individuals aged 18 years and above who were enrolled to HIV/AIDS care for the first time during data collection period in the study health institutions of Bench Maji Zone.

4.3.3.2. Exclusion criteria's

HIV positive individuals, who were unable to communicate due to illness or any other problems during the study period excluded from the study.

4.4. Sampling procedures

4.4.1 Sample size determination

4.4.1.1. Quantitative data

Sample size is determined using Epi-info version 7.1 StatCalc by assuming: the proportion of individuals having perceived HIV related stigma among controls to be 9.4 % with estimated odds ratio of 3.1[7], 95% CI, 80% power, control to case ratio of 2:1 and adding non response rate of 10%. Perceived HIV related stigma has selected as an independent variable, since it gives maximum sample size. According to the statistical calculation, 261 study participants were included for the quantitative study; of which 87 are cases and 174 are controls.

4.4.1.2. Qualitative data

From all study health facilities, nine-health professionals (i.e. one from each) who are working in ART clinic and six HIV case managers, totally 15 individuals were included in the study.

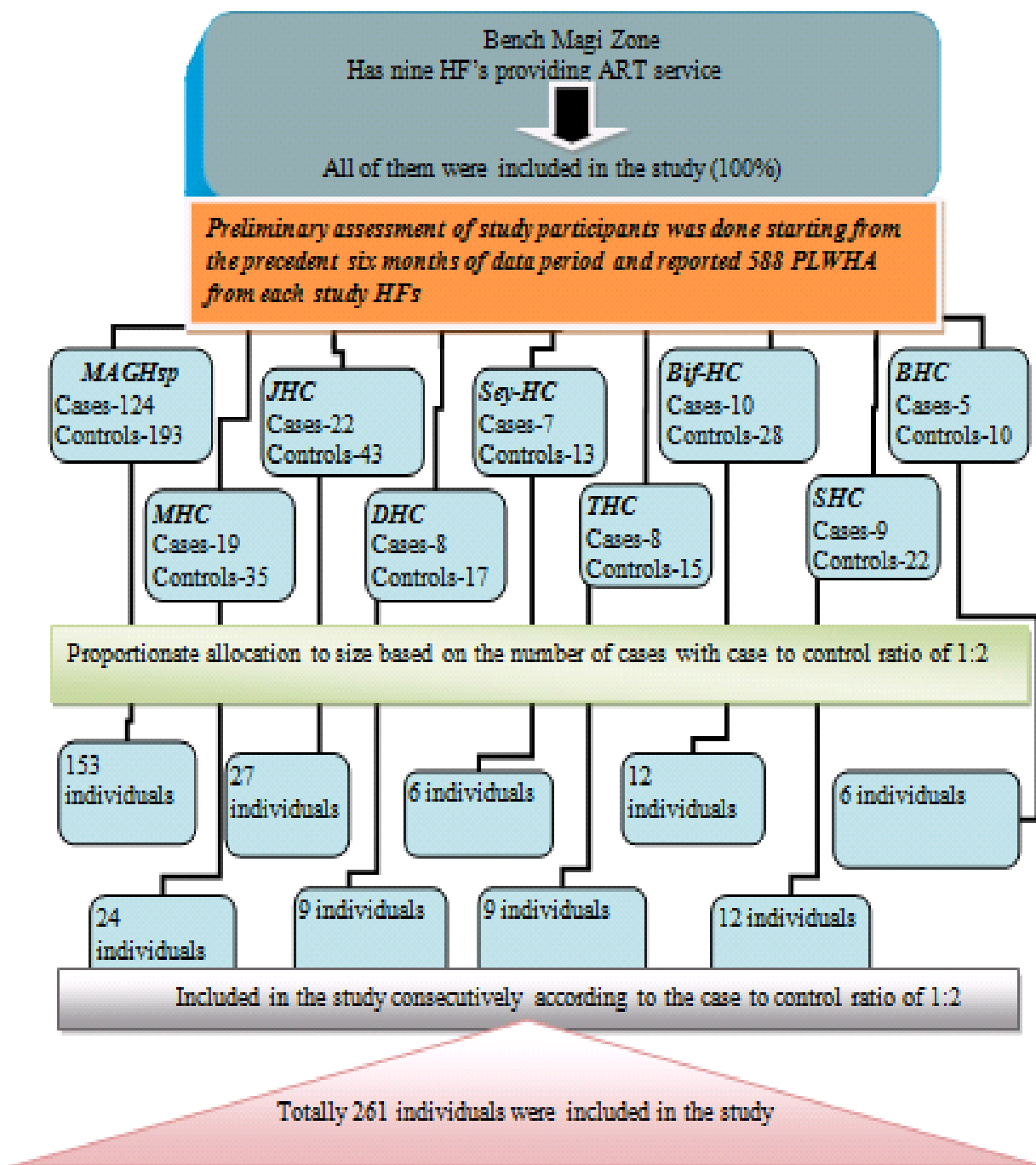
4.4.2 Sampling procedure

4.4.2.1. Quantitative part

All health facilities under the Zone providing ART service were included in the study, which includes one general hospital and eight-health centers. Before starting the actual data collection, the previous six-month (September 01 to February 30 /2014) pre-ART data were reviewed. Accordingly, 588 (212 cases Vs 376 controls) HIV positive individuals reviewed. To each study health facility, proportional to size allocation made based on the preliminary assessment considering the number of cases with cases to control ratio of 1:2. From each study health facility, study subjects were included in the study consecutively according to the case to control ratio of 1:2-until the calculated sample size reached. Finally, study participants were interviewed about the associated factors of late presentation.

Table 1: Study participant allocation for each study health institution, Bench Maji Zone, Southwest Ethiopia, March 01-May 15/2014.

Name of Health facility	Study participants from the preliminary assessment			Sampled study participants		
	Cases	Controls	Total	Cases	Controls	Total
Mizan-Aman general Hosp	124	193	317	51	102	153
Mizan HC	19	35	54	8	16	24
Jeba HC	22	43	65	9	18	27
Debrework HC	8	17	25	3	6	9
Sheko HC	9	22	31	4	8	12
Tum HC	8	15	23	3	6	9
Biftu HC	10	28	38	4	8	12
Shey-Bench HC	7	13	20	3	6	9
Bachuma HC	5	10	15	2	4	6
Total	212	376	588	87	174	261



- Where:
- | | |
|--|--------------------------------|
| 1. MAGHsp- Mizan-Aman General Hospital | 6. THC- Tume Health Center |
| 2. MHC- Mizan Health Center | 7. Bif-HC- Biftu Health Center |
| 3. JHC – Jeba Health Center | 8. SHC- Sheko Health Center |
| 4. DHC- Debrework Health Center | 9. BHC- Bachuma Health Center |
| 5. Shey-HC- Shey-Bench Health Center | |

Figure 2: Schematic presentation of sampling procedure in Bench Maji Zone, March 01-May 15/2014

4.4.2.2. Qualitative data

From all study health facilities, nine-health professionals (i.e. one from each) who are working in ART clinic and six HIV case managers, totally 15 individuals were recruited in the study using purposive heterogeneous sampling technique.

4.5. Data collection procedures

4.5.1. Data collection instrument

4.5.1.1. Quantitative data

To secure accurate and complete data on determinant factors of late presentation to HIV/AIDS care among HIV infected people, data collection tools are adapted from similar literatures in line with objectives of the study. The tool consists of three parts: questions about socio-demographic and economic, behavioural, and HIV care seeking behaviour and experience related factors. This instrument has been modified from standard tools and published literatures which used validated questionnaires [20,25,34,35].

In the socio-demographic and economic characteristics, comprise questions about age, sex, and marital status, place of residence, educational status, employment status and income status.

In the behavioral characteristics, tool consist questions about HIV test experience, substance use and sexual experiences that are adapted from published literatures. Thus, the respondents asked to respond ever substance use experience including drug use, alcohol use, cigarette smoking, “shisha” smoking, and chew of khat. HIV infected individuals who acknowledged ever using any of the aforementioned substances were asked how often they had used the substance in a month before aware of their HIV positive result. In addition, this part consists variables that are measured by liker scale including perceived general health status, perceived benefit of HIV care, perceived stigma and perceived social support.

The perception of HIV positive people regarding to their general health status was measured using 5 items rated on a 5 point scale that is adapted from the short form health survey with Cronbach’s α value of 0.84 [36]. Based on these items, the overall mean were calculated and dichotomizes as low or high-perceived general health status. Higher score indicates they had perceived better general health status.

Similarly perceived benefit of HIV care was measured using 3 items with 5 point scale that is developed and used in a previous study with Cronbach's α value of 0.62 [37]. The total mean score was used to measure the perceived benefits of HIV care and dichotomize as higher or lower perceived benefit of HIV care. A higher perceived score indicates that HIV positive people who have perceived higher benefit from HIV care.

Perceived HIV stigma was measured using 23 items in a 5 point scale, rated from "strongly agree(5)" to strongly disagree(1)" that was adapted from previous study with Cronbach's α value of 0.82 [38] and 0.89 [20]. All structured item of stigma questions that are framed positively were reverse-coded to maintain a consistent interpretation of the final score. Thus, are measured based on their mean score and the mean score is recoded to be dichotomous comparing higher verses lower. The final score is used as the measure of perceived stigma, with higher scores indicating having higher perceived stigma. In addition to this perceived social support is measured using 12 items with 5 point scale, rated from "strongly agree(5)" to strongly disagree(1)" that was adapted from previous study with Cronbach's α value of 0.83 [39]. The respondents were asked to report the perceived availability of support from anyone at any time they need for their problem and reported using mean score.

Finally, tools of HIV care seeking behavior and experience characteristics; comprise questions about modes of HIV positive test, time taken to ART clinic, traditional care for HIV, prior history HIV negative test and prior experience of health institution.

4.5.1.2. Qualitative data

In-depth interview technique administered using semi-structured guiding questions to explore factors associated with late presentation to HIV/AIDS care. The questions were developed in line with the research objectives containing guiding question followed by probe questions that provide more insight information. Interview conducted in a place convenient for the study participants such as offices of ART nurse. Participants interviewed to explore regarding to people living with HIV about barriers of late presentation to HIV/AIDS care. Tape recorder and field notes also used to capture information from each study participant.

4.5.2. Data collection process

4.5.2.1. Quantitative data

CD4 count level and WHO clinical stage classification of HIV positive people had done at ART clinic during data collection period, which used to categorize presentation status of study participants. Data on exposure status with the risk factors were collected through face-to-face interview using structured questionnaires. The questionnaires, which used in this study was pretested amongst the study health facilities (i.e. in one general hospital and one health centers) prior to the actual data collection started. Training were given for data collector teams by the principal investigator on methods of data collection including interview technique, ethical issues, study protocol and procedures with respect to the study for one days. In addition during the training the data collection team had conducted mock interviews with each other. In order to maintain confidentiality issue, data collected by nine nurses working in each ART clinics of their respective institutions. In addition, four senior health officers involved as supervisors in the data collection process. The principal investigator coordinated the overall data collection process.

4.5.2.2. Qualitative data

Data were collected through face-to-face in-depth interview using semi-structured guides with voice recorders after the quantitative data. Qualitative data collected by principal investigator and other one master of public health fellow.

4.6. Variables

4.6.1. Dependent variable

- Late presentation to HIV/AIDS care

4.6.2. Independent variables

- Socio-demographic and Economic factors: includes individual information like sex, age, educational level, occupational status, marital status, place of residence, housing status, income level are assumed to have significant importance for this study.
- Behavioural risk factors: such as alcohol use, chewing “chat”, smoking cigarette, regular sexual partner status, number of lifetime sexual partner, perceived general health status, perceived benefit on HIV/AIDS care, perceived stigma and Social support.
- HIV care seeking behavior and experience factors: including time taken to ART clinic, traditional care experience for HIV, prior HIV negative test experience, modes of HIV positive test and prior experience of health facilities.

4.7. Data analysis procedure

4.7.1. Quantitative data

The collected data were checked for its completeness and consistency. Then, entered using Epi data version 3.1 statistical software and exported to SPSS version 20.0 for analysis. The data checked for outliers and missing values using cross-tabulation and graphical representations. Descriptive statistics were made to describe features of the study population in relation to socio-demographic and other relevant variables using frequencies, proportions, percentages, central tendencies and measure of variation.

Bivariate screening analysis done to assess risk factors associated with late presentation for HIV/AIDS care and variables found with p-value < 0.25 considered as candidate for multiple logistic regressions. The presence of two ways interaction between variables was tested and goodness of fit of the final model checked using Hosmer Lemeshow statistics and likelihood ratio. Finally, backward stepwise multiple logistic regression analysis were applied in order to control the effect of confounding factors and to determine factors independently associated with late presentation to HIV/AIDS care. Odds ratio used to measure the strength of association with 95% confidence interval. For all statistical significance tests, the cut- off value set is $p < 0.05$.

4.7.2. Qualitative data

The collected data from the notebook and tape recorder transcribed in to Amharic, and then translated to English. Manual thematic content analysis was used to analysis qualitative data. The data were read and re-read go through to mark up the content, coding developed by looking through the data to identify the key themes. Then data compared with each other to classify those ‘themes’ that were common in the data set.

4.8. Data quality management

To enhance the reliability of the tools used in this study, the English verse questionnaire is adapted after reviewing different literatures; it translated to Amharic; the Amharic verse also again translated to English by other experts who speak both languages. Moreover, the instruments used in this study were pre-test on 5% of the total sample size (4 cases Vs 9 controls) in the study health facilities prior to actual data collection started and modified accordingly.

Prior to data collection, training was given by the principal investigator to the data collectors and supervisors on how to encode and refill data for one day. Inadition orientation was given to the supervisors separately on how to supervise the data collectors.

This gave focusing in onsite technical support and close supervision to avoid any ambiguity and to clarify any misconception. Training manual were prepared to aid the training process; mainly focused on interviewing techniques.

The supervisors were responsible for supervising the data collectors; to check completeness of each questionnaire; and to make correction measures accordingly. The supervisor on daily basis and the principal investigator on weekly basis checked all completed questionnaires during data collection period. Finally, data was validated through double data entry by Epi-data 3.1 software.

4.9. Ethical consideration

Ethical clearance was obtained from research coordination office of JUCPHMS. Formal letter was brought from Jimma University to BMZHD in order to get permission for the study. For legality of the study setting, letter of cooperation was obtained from BMZHD to all woreda health office of the study institution as well as from all woreda health office to each study health facility. After giving brief explanation on the objective of the study formal written consent was taken from the administration body of the study area.

The study was briefly explained to all participants and their consent to participate in the study was assured before interviewing. In order to maintain confidentiality, after assuring written consent interview was conducted by nurses who work in ART clinic of the respective health institution. Personal information that identifies individual patient (e.g. name, telephone number, house number...) was not be asked by the data collectors. Any information was kept confidential and only used for the research purpose and not exposed to third party for any other reason. During data collection, privacy of respondents were kept: free to withdrawal from the interview at any time.

4.10. Dissemination plan

The findings will present to JUPHMS and will submit to the department of Epidemiology. The findings will also communicated to concerned officials such as BMZHD including the study institution and other relevant stakeholders/ local NGOs to made consideration for the intervention of the finding during their planning process. Efforts may be done to present the findings of the study in appropriate seminars, workshops, and conferences. Eventually, an effort will be made to publicize the paper in local and international journals.

4.11. Operational definitions

HIV/AIDS care:- Care regarding to HIV/AIDS, which is provided by health professionals like a nurse or doctor at ART clinic of the health institution.

Presentation to HIV/AIDS care:- When HIV positive individuals enrolled in ART clinic of the health institution for the first time for HIV/AIDS care.

Early presentation to HIV/AIDS care: - When HIV positive individuals come with WHO clinical stage II or I or with CD4 count of > 350 cells/mm³ at the time of first presentation to the ART clinics of the study health institution.

Late presentation to HIV/AIDS care: - When HIV positive individuals come with WHO clinical stage III or IV irrespective of CD4 count or a CD4 count of ≤ 350 cells/mm³ irrespective of clinical stage at the time of first presentation to the ART clinics of the study health institution.

Perceived benefit of HIV care: - This refers to the HIV positive individual's evaluation of the positive thing that will happen because of seeking HIV care. A higher perceived benefit is considered when individual scored the mean and above, where as lower is considered when individual score below the mean value.

Perceived HIV stigma: - In this study, refers to individuals perceive themselves as stigmatized or experienced stigmatization being HIV positive status. A higher perceived stigma is considered when individual scored the mean and above, where as lower is considered when individual score below the mean value.

Perceived social support:- This refers the extent to which individuals perceiving themselves the availability of support from family, friends and significant other, including emotional, informational and tangible or instrumental support. A higher availability of perceived social support is considered when individual scored the mean and above, where as lower is considered when individual score below the mean value.

Perceived general health status: In this study refers to personal evaluation of health status outlook, resistance to illness in general, individuals who scored the mean and above considers having higher perception on their general health status, whereas lower is considers as when individuals scored below the mean value.

Regular sexual partner: Partner with whom the respondent had regular sexual relationship and perceived by the respondent as spouse or regular boy/girl friend.

Substance use:- for the purpose of this study, refer to using of stimulants or chemicals for any reason other medical purposes, including, alcohol, cigarette, “shisha” and “khat”.

Occupational status:- For the purpose of this study, as formally employed including participants employed in either governmental or nongovernmental, or other organizations, as self-employed (farmers, merchants) as an unemployed (housewife and students) and as Others like daily laborer .

HIV traditional care experience:- For the purpose of this study; having a history of any non-medical care experience(not requested by medical professionals) for HIV positive status from like traditional healers, spirituality (holly water or others).

HIV case managers: - In this study, it refers HIV positive individuals who are disclose their status to the public and who are working in ART clinic permanently as HIV case supporters.

UNIT FIVE: RESULT

5.1. Socio-demographic and economic characteristics

Before starting the actual data collection, the previous six-month (September 01 to February 30/2014) pre-ART registration book was reviewed. Accordingly, 588 (212 cases Vs 376 controls) HIV positive individuals were reviewed. Proportional to size allocation was made to each study facility based on the preliminary assessment, considering the number of cases.

A total 256 individuals participated in this study, giving a response rate of 98.1% (86 (98.8%) cases Vs 170 (97.7%) controls). In this study regarding sex, 104(61.2%) of the control participants were female and around half 45(52.3%) of the study cases were males. Only four (9.7%) of the cases and fifteen (14.4%) of the controls were pregnant.

About 42(48.8%) of the study cases were found between the age of 30-39 years, followed by 26(30.3%) between the age of 18-29 years and 18(20.9) in the age of greater than or equals to 40 years with mean (SD) age of 33.44 (7.50). Among the study controls 62(36.5%), 73(42.9%) and 35(20.6%) were reported in the age of 18-29, 30-39 and greater than or equals to 40 years respectively with mean (SD) age of 32.77(8.17).

Concerning the marital status, 54(62.8%) of cases and 86(50.6%) of controls were married. In addition among the study participants, around 55(64.0%) of cases and 102 (60.0) of controls were from urban residence. With regard to educational status 44(51.2 %) of cases and 68(40.0%) of controls were not formally educated and 42(48.8) of cases and 102(60.0%) of controls were formally educated.

Among the study participants above half 64 (76.7%) of cases and 126 (74.1%) of controls were employed or working either in governmental, nongovernmental or self-employed (merchants and farmers), but 20(23.3%) of cases and 44(25.9%) of controls were unemployed.

From the total study participants about 39(45.3%) of cases and 84(49.3%) of controls were living in rented house. In this study, majority of the study participants accounting for 71(82.6%) of cases and 155 (91.2%) of controls had regular income source and out of those who had regular income source about 30(34.9%) of cases and 71(41.8%) of the controls earn an income less than equal to 727 birr per month.

From the socio-demographic and economic variables included in the bivariate screening analysis sex of respondents, educational status and regular income status were statistically associated with late presentation to HIV/AIDS care, at 5% significance level. However, age, marital status place of residence, housing status and occupational status of HIV positive individuals have no statistically significant relationship with late presentation to HIV/AIDS care (Table 2).

Table 2: Possible socio-demographic risk factors of late presentation to HIV/AIDS care, Bench Maji Zone, Southwest Ethiopia, **March 01-May 15/2014** (n = 256)

Variable	Cases (n=86) N (%)	Controls (n=170) N (%)	COR (95% CI)	P-value
Sex				
Female	41(47.7)	104(61.2)	1.00	
Male	45(52.3)	66 (38.8)	1.73(1.02, 2.92)	0.04
Age				
18-29	26(30.3)	62(36.5)	1.00	0.580
30-39	42(48.8)	73(42.9)	1.37(0.76, 2.49)	0.297
≥40	18(20.9)	35(20.6)	1.23(0.59, 2.55)	0.584
Marital status				
Single	15(17.4)	38(22.4)	1.00	0.316
Married	54(62.8)	86(50.6)	1.59(0.80, 3.16)	0.186
Divorced	9(10.5)	22(12.9)	1.04(0.39,2.76)	0.940
Widowed	8(9.3)	24(14.1)	0.84(0.31, 2.29)	0.740
Place of residence				
Urban	55(64.0)	102(60.0)	1.00	
Rural	31(36.0)	68(40.0)	0.85(0.49, 1.45)	0.540
Educational level				
Formally educated	42(48.8)	102(60.0)	1.00	0.004
Can read & write	14(16.3)	40(23.5)	0.85(0.42,1.72)	0.652
Can't read & write	30(34.9)	28(16.5)	2.60(1.34, 4.88)	0.003
Housing status				
Owing/relatives	47(54.7)	86(50.6)	1.00	
Renting	39(45.3)	84(49.4)	0.85(0.51, 1.43)	0.539
Occupational status				
Formally employed	18(20.9)	31(18.2)	1.00	0.634
Self employed	40(46.5)	71(41.8)	0.97(0.48, 1.95)	0.932
Unemployed	20(23.3)	44(25.9)	0.78(0.36, 1.72)	0.541
Others	8(9.3)	24(14.1)	0.57(0.21, 1.54)	0.271
Regular income source				
Had regular	71(82.6)	155(91.2)	1.00	
Had no regular	15(17.4)	15(8.8)	2.19(1.02, 4.71)	0.047

5.2. Behavioral risk factors

The mean (SD) value of perceived HIV stigma among case and controls were 72.8(15.7) and 65.8(16.3) respectively. About 54(62.8%) of cases and 72(42.4%) of controls had higher HIV stigma. With regard to perceived social support, the mean (SD) value among cases and controls were 33.5(10.3) and 37.3(10.50) respectively. In this study more than half 55 (64.0%) of the study cases had perceived social support below the mean, and 93(54.7%) of controls had perceived social support expectation the mean and above.

Similarly the mean (SD) score of HIV positive individuals' about-perceived benefit of HIV care among cases and controls were 9.2 (3.6) and 9.1(3.5) respectively. About 40(46.5%) of cases and 90(52.9%) of controls had low perceived benefit of HIV related care. In addition the mean (SD) values of study participants' on perceived general health status among cases and controls were 15.7(5.6) 18.5(5.28) respectively and majority 52 (60.5%) of cases scored below the mean value, while 100 (58.8%) of controls scored the mean value and above.

Regarding the reliability of perception measurement scales, Cronbatch's α of perceived HIV stigma, Perceived social support, perceived general health status and perceived benefit of HIV care were 0.86, 0.83, 0.77 and 0.72 respectively.

All the respondents had at least one sexual partner in their lifetime. Of these 50(58.5%) of cases had multiple sexual partner whereas 111(65.3%) of control groups had a history of single sexual partner in their lifetime. Majority of the study participants, 63(73.3%) of cases and 99(58.2%) of controls had regular sexual partners at the time of their HIV positive status. One hundred eleven, (82.9%) controls disclosed their HIV status, while only thirty-one (36.0%) case disclosed their HIV status.

Regarding substance use, 57(66.3%) of study cases and 49(28.8%) of controls had a history of alcohol use at least once. Similarly 21(24.4%) of cases and 37(21.8%) of controls had a history Khat chewing. eleven (12.8) of cases and sixteen (9.4%) of controls had a history cigarette smoking.

The bivariate screening analysis indicated that among the behavioral risk factors: perceived HIV stigma, perceived social support, perceived general health status, HIV status disclosure, regular sexual partner status and ever alcohol consuming status were significantly associated with late presentation to HIV/AIDS care. However, HIV positive persons' perception about benefit of HIV care, number of lifetime sexual partner, ever cigarette smoking and khat chewing were not significantly associated with late presentation to HIV/AIDS care (Table 3).

Table 3: Possible behavioural related risk factors of late presentation to HIV/AIDS care, Bench Maji Zone, Southwest Ethiopia, **March 01-May 15/2014** (n = 256)

Variable	Cases (n=86) N (%)	Controls(n=170) N (%)	COR (95%CI)	P-value
Perceived HIV stigma				
Low	32(37.2)	98(57.6)	1.00	
High	54(62.8)	72(42.4)	2.30(1.35, 3.91)	0.002
Perceived social support				
High	31(36.0)	93(54.7)	1.00	
Low	55(64.0)	77(45.3)	2.14(1.26, 3.65)	0.005
Perceived benefit of HIV care				
High	46(53.5)	90(52.9)	1.00	
Low	40(46.5)	80(47.1)	0.99(0.58, 1.65)	0.934
Perceived general health status				
High	34(39.5)	100(58.8)	1.00	
Low	52(60.5)	70(41.2)	2.19(1.29, 3.71)	0.004
HIV disclosing status				
Yes	31(36.0)	111(65.3)	1.00	
No	55(64.0)	59(34.7)	3.34(1.94, 5.74)	0.001
Number of lifetime sexual partner				
Single	36(41.9)	87(51.2)	1.00	
Multiple	50(58.1)	83(48.8)	1.46(0.86, 2.46)	0.160
Regular partner at HIV + test				
No	23(26.7)	71(41.8)	1.00	
Yes	63(73.3)	99(58.2)	1.96(1.12, 3.46)	0.019
Ever alcohol use				
No	29(33.7)	121(71.2)	1.00	
Yes	57(66.3)	49(28.8)	4.85(2.78, 8.47)	0.001
Ever Chat chewing				
No	65(75.6)	133(78.2)	1.00	
Yes	21(24.4)	37(21.8)	1.16(0.63, 2.14)	0.632
Ever cigarette smocking				
No	75(87.2)	154(90.6)	1.00	
Yes	11(12.8)	16(9.4)	1.41(0.62, 3.19)	0.407

5.3. HIV care seeking behavior and experience factors

From the total 256 participants, 45(52.9%) of the case and 96 (57.5%) of controls had at least one visit to healthcare service for any reason rather than HIV positive status during the preceding 6 months of the data collection period. With regard to the HIV screening modes, about 52(60.5%) of the study cases and 84(50.6%) of study controls had received their positive test result by PIHCT and VCT modes respectively. One-third 29(33.7%) of cases and more than half 105(61.8%) of controls had at least one HIV negative test prior to their current status. In this study, about 36(41.9%) of the study cases and 33(19.4%) of controls had a history of traditional care experience for HIV status.

The average (SD) time to travel to ART clinic among the study case and controls were 105.34(134.58) and 104.14(118) minutes respectively. About 55 (71.7%) of the cases and 131(77.1%) of controls were travelled more than 30 minutes to receive HIV/AIDS care.

In the bivariate screening analysis only HIV traditional care experience has significant association with late presentation to HIV/AIDS care. Nevertheless, previous 6-month health service experience, prior HIV negative test status, modes of HIV positive test and time taken to reach ART service were not significantly associated with late presentation to HIV/AIDS care (Table 4).

Table 4: Possible health service related risk factors of late presentation to HIV/AIDS care, Bench Maji Zone, Southwest Ethiopia, **March 01-May 15/2014** (n = 256)

Variable	Cases (n=86) N (%)	Controls (n=170) N (%)	COR(95% CI)	P-value
Health service experience (last 6 month)				
Yes	45(52.9)	96(57.5)	1.00	
No	40(47.1)	71(42.5)	1.20(0.71, 2.03)	0.492
Mode of HIV positive test				
VCT	34(39.5)	84(50.6)	1.00	
PIHCT	52(60.5)	86(49.4)	0.67(0.40, 1.13)	0.135
Traditional care experience for HIV status				
No	50(58.1)	137(80.6)	1.00	
Yes	36(41.9)	33(19.4)	2.99(1.69, 5.30)	0.001
HIV negative test experience				
Yes	27(31.4)	105(61.8)	1.00	
No	59(68.6)	65(38.2)	1.35(0.78, 2.35)	0.282
Time take to ART clinic(minutes)				
< 30	21(24.4)	39(22.9)	1.00	0.936
30-120	42(48.9)	87(51.2)	0.90(0.47, 1.71)	0.740
>120	23(26.7)	44(25.9)	0.97(0.47, 2.02)	0.937

5.4. Independent predictors of late presentation to HIV/AIDS care

Multivariable logistic regression analysis was done to identify independent predictors of late presentation to HIV/AIDS care. Only variables with p-value < 0.25 in the bivariate analysis [40] were further examined in the multivariable analysis to see their relative effects on the late presentation to HIV/AIDS care using backward stepwise logistic regression (Likelihood ratio) method.

Based on the criteria set (p-value < 0.25): sex, educational level, regular income, perceived HIV stigma, perceived social support, perceived general health status, HIV disclosing status, regular sexual partner status, lifetime number of sexual partner, alcohol consumption, modes of HIV positive test and HIV traditional care experience were variables included in the final model. However, only educational level, perceived HIV stigma, HIV disclosing status, alcohol consumption and HIV traditional care experience were significantly associated with late presentation to HIV/AIDS care (table 5).

Educational level has shown a significant association with late presentation to HIV care. HIV positive individuals who cannot read and write were 2.59 times more likely to present late to HIV/AIDS care as compared to HIV positive individuals who formally educated [AOR = 2.59, 95%CI: (1.21, 5.53)]. However, there is no difference between HIV positive individuals, who can read and write (informally), compared to those who were formally educated with late presentation to HIV/AIDS care. Moreover, Most of the in-depth interview participants also pointed this result. Majority of them said being higher in educational level of HIV positive individuals had a great contribution for early presentation to HIV testing and care seeking practice.

A 34 years old male health officer from one of the health center said;

“...In my experience, Because of their awareness on health service utilization related to HIV is very low, most of the time uneducated HIV positive people seek health care after they become seriously ill. So this may hinder them from timely HIV diagnosis as well as early seeking of HIV related care.....”

This study revealed that HIV positive individuals who had high perceived HIV stigmatization were 2.50 times more likely to present late to HIV/AIDS care as compared to HIV positive individuals who didn't perceive HIV stigmatization [AOR = 2.50, 95%CI: (1.31, 4.76)]. This finding is also supported by the qualitative result.

A 33 years old female HIV case manager from a health facility said;

“...There is no any stigma from health care provider. It is from the community and family. The stigma from the community is much higher especially in three town are becoming big challenge for us. Let me tell you what I have experienced recently, we gave health education on HIV/AIDS for the public at “X” town and after a week I went back to the town for other personal issues. I saw some individuals pointing at me saying you see that guy? He is HIV positive. I said nothing as if I did not hear them. This make HIV positive people become irritated and not to come for care...”

People living with HIV who didn't disclose their HIV status to anyone were 2.56 times more likely to present late to HIV/AIDS care as compared to HIV positive individuals disclosed their HIV status to anyone [AOR = 2.56, 95% CI:(1.37, 4.79)]. Finding of this qualitative study also showed that HIV disclosing status has effect on late presentation to HIV care.

A 25 years old female nurse from one health facility said;

“...Most of the time as we observed HIV positive individuals who did not disclose their HIV status becomes late. From my experience, People living with HIV who sought HIV care alone present lately. Those people most of the time failed to disclose their HIV status to other people that may be due to fear conflict with their family members or they may feel not respected in the community. For example, the husband does not disclose his status to his wife and the wife does to, so it is difficult to expect to present timely to HIV care themselves....“

People living with HIV who ever drink alcohol were 6.16 times more likely to present late to HIV/AIDS care as compared to HIV positive individuals who didn't drink alcohol ever [AOR = 6.16, 95% CI:(3.22, 11.78)]. Most of the study participants from the qualitative study also agreed that being substance users were associated with late presentation to HIV/AIDS care.

A 27 years old male HIV case manager from one health facility said;

“...First of all when an individual is addicted to risky behavior he can't think about being tested for HIV. Even those who know their HIV status do not come for the care. Because, they afraid of stopping chewing chat, stopping drinking alcohol and other addictions also when they start ART drugs. Most of individuals who are in addiction come for care very late after they become very weak...”

This study also found that seeking traditional care for HIV status before enrolment to modern HIV care increases the likelihood of late presentation to HIV/AIDS care. This finding showed that the odds of late presentation to HIV care among those who get HIV traditional care were 3.07 times higher than those who did not get HIV related traditional care [AOR = 3.07, 95% CI: (1.54, 6.09)].

This is also similar with the qualitative finding explored that HIV positive individuals who sought HIV care from traditional healers and/or holly water and/or spiritual places before they sought formal HIV care from health facilities were contributed for the increased risk of late presentation to HIV/AIDS care.

A 37 years old male HIV case manager from one health facility stated that;

“...As far as my experience most of the time I observe that some HIV positive individuals were seeking traditional care from traditional healer and spiritual place like holly water rather than from healthcare facilities, henceforth they present to HIV/AIDS care after they become seriously ill. For example, I myself had sought HI/AIDS care after trying with different traditional cares like holly water for about six months then after I came to health facility for HIV/AIDS care being seriously ill... ”

In addition to this in the qualitative finding perception with lack social support, distance from the ART service, transportation cost and poor linkage along HIV care continuum were mentioned as the major barriers of late presentation to HIV/AIDS care.

Table 5: Independent predictors of late presentation to HIV/AIDS care, Bench Maji Zone, Southwest Ethiopia, March 01-May 15/2014 (n = 256)

Variable	Cases (n=86) N (%)	Controls (n=170) N (%)	Odds Ratio (95%CI)	
			Crude	Adjusted
Educational level				
Formally educated	42(48.8)	102(60.0)	1.00	1.00
Can read & write	14(16.3)	40(23.5)	0.85(0.42, 1.72)	0.78(0.34, 1.77)
Cannot read & write	30(34.9)	28(16.5)	2.60(1.34, 4.88)	2.59(1.21, 5.53) *
Perceived HIV stigma				
Low	32(37.2)	98(57.6)	1.00	1.00
High	54(62.8)	72(42.4)	2.30(1.35, 3.91)	2.50(1.31, 4.76) *
HIV disclosing status				
Yes	31(36.0)	111(65.3)	1.00	1.00
No	55(64.0)	59(34.7)	3.34(1.94, 5.74)	2.56(1.37, 4.79)*
Ever alcohol use				
No	29(33.7)	121(71.2)	1.00	1.00
Yes	57(66.3)	49(28.8)	4.85(2.78, 8.47)	6.16(3.22, 11.78) **
Traditional care experience for HIV status				
No	50(58.1)	137(80.6)	1.00	1.00
Yes	36(41.9)	33(19.4)	2.99(1.69, 5.30)	3.07(1.54, 6.09)*

Note: Significance at p-value < 0.05*, < 0.001 **

UNIT SIX: DISCUSSION

Despite measures to encourage earlier initiation of HIV/AIDS care in Ethiopia large proportion of HIV positive individuals present lately to HIV care, which hindered to early assessment of treatment eligibility, counseling and start of ART. This is the first study tried to identify factors associated with late presentation to HIV/AIDS care in the study area. Moreover our study addressed factors like perceived social support, prior HIV negative test status and traditional care experience for HIV status, which had not been addressed by previous similar studies done in Ethiopia, and is conducted based on the recent 2010 WHO and national recommended guidelines for ART initiations.

Accordingly, this study had identified five independent predictor variables of late presentation to HIV/AIDS care in nine health facilities (one general hospital and eight health centers) of Bench Maji Zone. These are educational status, perceived HIV stigma, HIV disclosure status, ever alcohol consumption and experience of HIV traditional care. These factors affect the presentation time of HIV positive peoples implicating a great potential negative effect on HIV prevention and control program.

The study revealed that, educated HIV positive individuals were more likely to present early to HIV/AIDS care themselves than uneducated once, which is similar with other studies [5,18,25,27], stating that HIV-positive people with higher level of education had a better tendency to come to HIV/AIDS care early. However this finding is not consistent with the study done in Jimma that found formally educated HIV positive people were more likely to become late as compared to those who cannot read and write [20]. This could be due to the sampled participant difference in distribution among those cannot read and write, meaning in the Jimma study most of them fall in the control group while almost equally distributed in our study.

Regarding HIV stigma, HIV positive people those perceived to be stigmatized become lately to HIV/AIDS care compared to those did not perceived to be stigmatized. This investigation is supported by a study done in Ethiopia, which revealed that besides access to HIV/AIDS care the influence of stigmatization has made HIV positive people to hinder their HIV testing and care seeking behaviour[7]. Similarly other studies [30,32,33], reported that HIV stigma as common barriers for timely HIV care seeking behaviour.

HIV disclosure status of HIV positive individuals showed a significant effect on late presentation to HIV care. People living with HIV who did not disclose their status to their families or spouse or any else were increased the risk of late coming to HIV/AIDS care compared with those who disclosed their status. This finding is consistent with other studies, which is found to be those who did disclose HIV status to their spouse or families were less likely to present late to HIV/AIDS care as compared to those who did not disclose HIV status to their spouse or families [7,20,23]. This might be due to HIV positive individuals who describe their HIV status to their families or to ever else may get encourage for timely HIV care. Another explanation could be, those who are fearful at disclosing their status to their family or ever else may be hindered for early seeking of HIV related care.

This study also revealed that, HIV positive individuals who at least once consumed alcohol were significantly associated with late presentation to HIV/AIDS care, which is similar with the studies done in Ethiopia [7,20] and Ugandan [18]. There may be several explanations; drunkard HIV infected individuals might be careless concerning their health condition. Moreover, alcohol addicted HIV positive individuals might not be ready for behavioural change, seeking HIV/AIDS care rather they concern more about the alcohol they use.

From the HIV care seeking behavior and experience related factors, HIV positive individuals who sought traditional care for their HIV status were significantly associated with late presentation to HIV/AIDS care. this finding is consistent with the study done in Uganda [27]. This might be due to perceived stigma, they may belief traditional care as easily accessible and/or concern of extra cost such as transport.

This study shows variables that were not significantly associated with late presentation to HIV/AIDS care in multivariable logistic regression analysis. These are sex, regular income, perceived social support, perceived general health status, regular partnership status, and number of lifetime sexual partner and modes of HIV positive test.

Our study found that no difference between male Vs female with late presentation to HIV/AIDS care, which is inconsistent with other studies that suggest females to have more frequent healthcare utilization than male had interlinked them with better opportunity for HIV diagnosis [5,23].

In this study HIV positive individuals' perception with social support, number of lifetime sexual partners and regular partnership status were not significantly associated with late presentation to HIV/AIDS care, which is not consistent with other studies done in elsewhere [4,26,31]. This may be attributed to social, cultural, economic and demographic difference.

This study found that there is no significant association between modes of HIV positive test and late presentation to HIV care, which is in contrary with study done in Ethiopia reporting that test by own motive increases the likelihood of late presentation to HIV/AIDS care than testing by the others initiation [20]. The study suggested that poor linkage to care after getting test by VCT and/or PIHTC for symptom relief may affect presentation status of HIV positive individuals to HIV/AIDS care.

In our study, there is no difference between HIV positive people general health perception score with late presentation to HIV/AIDS care. This finding is contrary with the study done in south Africa [31] that found having poor perception about their general health condition hinders timely healthcare utilization. The possible reason might be those who had poor perceived general health condition may feel desperate than those who had higher/or good general health perception, so that they may not seek HIV care before they develop sign and symptom.

UNIT SEVEN: STRENGTH AND LIMITATION OF THE STUDY

7.1. Strength

This study is the first of its kind in our country done in line with recent and recommended ART guideline (WHO, 2010). Moreover, it has triangulated quantitative and qualitative findings, which offers a cross-validation of the report. Since this study includes all health facilities that have been providing ART service in the study area it could be more representative.

7.2. Limitations

The study may have some limitations. As the study relied on participants' self report of historical events at sometime before enrolment to HIV care recall biases could present. The use of ART nurses in their respective institution as data collectors may have been introduced social desirability bias. Moreover sample of cases and controls were included in the study consecutively based on their enrolment to ART clinic for HIV care, hence selection bias can be expected. In addition, this study did not assure the direction of causal relationship between some exposure/risk factors and event of outcome.

UNIT EIGHT: CONCLUSION AND RECOMMENDATION

8.1. Conclusion

This study examined factors associated with late presentation to HIV/AIDS care. People living with HIV, those who cannot read and write; those perceive HIV stigma, those non HIV status disclosure, those use alcohol and those who have traditional care experience for HIV status were associated with late presentation to HIV/AIDS care.

In this study most of the independent predictor variables were consistent with previous studies done in Ethiopia and abroad. However, educational status and HIV stigma were inconsistent among some studies.

This study did not show significant association between some expected independent variables; like sex, mode of HIV positive test, time taken to ART clinic, and marital status with late presentation to HIV/AIDS care.

8.2. Recommendations

Overall, investigating the risk factors of late presentation to HIV care may have substantial benefits for improved way of life, particularly for People living with HIV in our country. These findings have important policy implication for health intervention programs. In the long run, HIV care continuum should be in a position to offer all services under one umbrella. In addition, in the long-term solution, there are interventional strategies that should perform to alleviate the problem. Cognizant of this, we forward the following recommendations to concerned bodies.

Ministry of health and regional health bureau

1. MOH/RHB should design programs to strengthen HIV testing and care seeking behavior focusing on individuals who are not educated, HIV status non-disclosure, perceive HIV as a stigmatize disease, alcohol consumers and who have HIV traditional care experience.
2. MOH/RHB should design strategy to strength linkage to care more by optimizing and simplifying the referral process across the HIV care continuum. In addition, should develop a comprehensive interventional plan to address non medical care facilities like traditional healer, holly water facilities in the treatment continuum.
3. MOH/RHB should design strategy to include report of presentation status to HIV/AIDS care in line with the monthly report and to evaluate regularly.

Zone Health Department, Woreda Health Offices and Health facilities

1. BMZH/WoHO managers should strength information educational and communication programs that emphasize on stigma, disclosing HIV status, benefit of timely seeking of HIV care from health facilities rather than traditional care.
2. BMZH/WoHO managers should promote activities regularly on HIV testing and starting HIV care programs that motivate early initiation of HIV care.
3. BMZH/WoHO managers should take measures aiming to increase accessibility to HIV/AIDS care, to guaranty confidentiality and quality of HIV counselling
4. HF managers and professionals should better to work on community mobilization and awareness creation programme aiming to increase the perception of HIV positive individuals with regard to HIV testing and care seeking behaviour.
5. HF managers and professionals should work to strength HIV related awareness focusing on behavioural change communication and information education communication packages.

Researchers

1. Further study should be done on different areas with the recent WHO recommended guideline for ART initiation.
2. Better if further similar study conducted especially focusing on variables like perceived social support, educational status, HIV traditional care experience.

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ANNEXS

1. English Version questioners

Part one: Quantitative part

Jimma University College of Public Health and Medical Science, Department of Epidemiology, Questionnaire for a Study on Risk Factors Associated with Late Presentation to HIV/AIDS care Among HIV Positive People in Bench Maji Zone, Southwest Ethiopia, 2014.

I. Study Information sheet

Title of Study: - factors associated with late presentation to HIV/AIDS care among HIV positive people in Bench Maji Zone, SNNPR.

Principal Investigator: Teklit Tesfom

Contact adders: Phone- 0913662602, Place- Mizan town

Hello, my name is _____ I am working in this clinic of ART department as data collector in this study. The purpose of this study is to get more information on risk factors for late presentation from HIV Positive people. This will be help us to better understand the situation and will contribute to improve the health status of HIV positive people by identifying the risk factors for late presentation to HIV/AIDS care and helps to the policy makers so as to adjust the continuum of HIV care with the local context. You are selected consecutively as one of our study participants and the interview will take 30-40 minutes.

There is no any risk being participating in this study and if you say no, will not affect you negatively in any way what so ever. Your honest and genuine participation by responding to the questions prepared is highly appreciated and helpful to attain the objective of the study.

Your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential and participation is voluntary. You do not have to answer any question that you don't want to answer and you are also free to withdraw from the study at any point, even if you do agree to take part.

Please, if you cooperate by responding to the questions, it means that you have your own contribution to the success of this study.

Are you willing to answer?

If yes, proceed to the next page

If no, please stop here.

Thank you!

II. Consent form

I the undersigned have heard the information needed from me for this study and understood that the purpose of this particular research project is to find out factors associated with late presentation to HIV/AIDS care among HIV positive peoples. I have been informed that the information I give will be used only for the purpose of this study; my identity, the information I give will be treated confidentially. I have also been informed that I can refuse to participate in the study, not to respond to question I am not interested or stop responding to question at any time in the process. Based on the above information I agree to participate in the research voluntarily.

Participant Sign _____

Data collector Name _____ Sign _____ date _____

Questionnaire for a Study on Factors Associated with Late Presentation to HIV/AIDS care Among HIV Positive People in Bench Maji Zone, Southwest Ethiopia, 2014

Questionnaire Number _____

Instruction:

1. Interview respondents who come for HIV care for the first time with age 18 and above years old.
2. Encircle the response of the respondents for multiple-choice questions and for short answers write on the space provided.

Section-one: General Background information

Q.N	General information needed	Response
100	Health facility name	_____
101	Interviewer's Name	_____
102	Supervisor's Name	_____
103	Date of interview	_____ dd _____mm/2014
104	Interview time taken in minute and hour	Started _____ ended _____
105	Unique ART .NO. (Interviewer: review from document.)	_____
106	CD4 count level (Interviewer: review from document.)	_____cells/mm ³
107	WHO clinical stage (Interviewer: review the stage from document.)	1. Stage I 2.Stage II 3. Stage III 4.Stage IV

Section-two: Socio demographic and economic Factors

Q.N	Question	Response code	Skip
200	What is your sex?	1. Male 2. Female	
201	How old were you?	1. _____years 99 .I don't know	
202	What is your marital status?	1. Single 2. Married 3. Widowed 4. Divorced	
203	What is your religion?	1. Protestant 2. Orthodox 3. Muslim 4. Other(Specify)_____	
204	What is your ethnicity?	1. Bench 2.Me'enit 3. Sheko 4. Dizu 5. Keffa 6. Amhara 7.Other(Specify)_____	
205	Where is your area of residence?	1. Urban 2. Rural	

206	Currently/now with whom do you live?	1. Living alone → 2. with pouse only 3. Family 4. Other(Specify)_____	To Q 210
207	At this moment how many persons lived with you?	_____	
208	Do you have offspring?	1. Yes 2. No →	To Q 210
209	If Q208 is yes how many Offspring do you have? (write actual number)	1. ≤ 5 years old _____ 2. Above 5 years old _____	
210	Who is the owner of the house you are living in?	1. Self 2. Rent 3. Other(Specify)_____	
211	What is your educational level?	1. Unable to read and write 2. Able to read and write but no formal education 3. Literate (write the highest level)_____	
212	What is your Occupation?	1. Goveriment employed 2. Privet emoloyed 3. Merchant 4. Farmer 5. Housewife 6. Student 7. Daily labor 8. Others(Specify)_____	
213	Do you have any regular income source?	1. Yes 2. No →	To Q 215
214	If Q213 is yes, what is your estimated annual income of the family in birr? (ask number of Quintal of cereals produce a year)	1. Cash (in Birr)/month _____ 3. Coffee _____ 4. Maize _____ 5. 'Khat' _____ 6. Cassava _____ 7. Others (specify)_____	
215	At the moment of your HIV positive test what is your pregnancy status?	1. Pregnancy 2. No pregnancy 3. I don't know	

Section-three: Health service delivery related factors

Q.N	Question	Response code	Skip
300	How long did it take you to travel to reach this ART clinic?(in minutes)	_____Minutes.	
301	How did you travel to reach this ART service?	1. Walked 2. Took public vehicle 3.Others(specify)_____	
302	Did you pay any money from your or families pockets for any reason to access this ART service?	1. Yes 2. No _____	To Q 304
303	If Q302 is yes How much did you pay from your or families pockets to access ART service?(in birr)	_____ birr	
304	Where did you diagnose for your HIV positive status?	1. Hospital 2. Health centers 3. Health post 4.Others (Specify)_____	
305	How did you take HIV counselling and testing for your positive status?	1. VCT 2. PICT 3.Other(Specify)_____	
306	Did you get counselling from health provider/counsellor at the time of your HIV positive test?	1. Yes 2. No _____	To Q308
307	If Q307 is yes when did you get counselling?	1. Pre-test counselling only 2. Post test counselling only 3. Both-during pre and post counselling 4.Others(Spcify)_____	
308	After you got your first positive HIV test result, how long was it until you got HIV medical care? (in week)	_____weeks	
309	Did your counsellor referred to ART clinic for HIV car during your positive result?	1.Yes, in the same site 2. Yes, in deferent site 3. No	

310	During your positive test for HIV, how long did you wait from the time you arrived to the time you actually visited by your health provider/counselor?(in minute)	1. _____minute 99 .I don't know	
311	Did you receive HIV negative test prior to your positive test for HIV?	1. Yes 2. No _____	To Q314
312	If Q 311 is Yes how many negative tests you received?	_____	
313	If Q 311 Yes how long the time gab between the most recent negative test and first positive test for HIV?(in months)	_____in months	
314	Do you have any AIDS-defining illnesses or opportunistic infections at first enrolment to ART service? (Interviewer: review from document.)	1. No have 2. tuberculosis 3.Fever >1 month 4. Herpozester 5. Diarrhea >1month 6. STD 7.Others(Spcify)_	
315	Did you ever receive traditional care for your HIV status?	1. Yes 2. No _____	To Q317
316	If Q315 is Yes from where you received?	1. Traditional healer 2. Holly water 3.Other(Specify)_____	
317	Have you ever visited any health facility for other health problem prior to the current health problem to receive medical care?	1. Yes 2. No _____	To Q400
318	If Q317Yes did you receive any health related service from any health facility in the last 6 month for any reason other than the current health problem?	1. Yes 2. No _____	To Q400
319	If Q318 is Yes, how was your satisfaction with the health service you received in general?	1. very dissatisfied 2. dissatisfied 3. neutral 4. satisfied 5. very dissatisfied	
320	If Q318 is Yes how would you rate the quality of health service delivery you received in general?	1. poor 2.fair 3. good 4. very good 5. excellent	

Section-four: Behavioral Factors

The statements in the following questions are regarding ones perception/personal feeling about benefit of HIV care, general health status and social support respectively. The statements are constructed so that you make your judgment/agreement. Depending on the degree of your judgment /agreement with the statements provided, I will read the questions for you and then indicate your judgment for each statement.

Note for interviewer: - indicate him/her respond as the coded number in the columns provided in front of each statements.

Note- Respond question 400 for statement number one as: 1= Excellent(E), 2= Very Good(VG), 3= Good(G), 4= Fair(F), 5= Poor(P) and for statement number 2-5 as: 1= Definitely true(DT), 2= Mostly true(MT), 3= Do not know(D’N), 4= Mostly false(MF), 5= Definitely false(DF).

400	Perceived general health status					
1	In general, would you say your health is(reve)	E	VG	G	F	P
2	You are somewhat ill	DT	MT	D’N	MF	DF
3	You are as healthy as others(reve)					
4	You have been feeling bad recently					
5	Your health is excellent(reve)					

Note- Respond question 401 & 402 for each statement as: 1=strongly disagree (SD); 2=disagree (D); 3=neutral (N); 4=agree (A); 5=strongly agree (SA).

401	Perceived benefit of HIV care	SD	D	N	A	SA
1	You believe that taking HIV related care can prolong your life.					
2	You believe that taking HIV related care can decrease the chance of becoming ill/getting sick					
3	You believe that the HIV related care that you will be took improves your health(i.e. raise immune system, cause weight gain etc)					
402	Perceived social support	SD	D	N	A	SA
1	There is a special person around you when you need					
2	There is a special person with whom, you can share your joys and sorrow					
3	Your family really tries to help you					
4	You get the emotional help and support you need from your family					
5	You have special person, who is a real source of comfort to you					
6	Your friends really try to help you					
7	You can count on your friends when think wrong					
8	You can talk about your problems with your family					
9	You have friends with whom, You can share your joys and sorrows					
10	There is special person in your life that cares about your life					
11	Your family is willing to help you to make decisions					
12	You can talk about your problems with your friends					

Q.No	Question	Response code	Skip
403	Had You ever drink alcohol? (like Tej,Tella,Areke, Beer and the like)	1. Yes 2. No →	To Q406
404	If Q403 is Yes for how long did you drink alcohol?(in months)	_____	
405	If Q403 is Yes Had you drink alcohol in the last one month?	1. Yes 2. No	
406	Have you ever chewed Khat?	1. Yes 2. No →	To Q409
407	If Q406 is Yes for how long you chew khat?(in months)	_____	
408	If Q406 is Yes have you chewed Khat in the last one month?	1. Yes 2. No	
409	Did you ever smoke cigarette?	1. Yes 2. No →	To Q412
410	If Q409 Yes for how long you smoked cigarette?(in months)	_____	
411	If Q409 Yes did you smoke Cigarette in the last one month?	1. Yes 2. No	
412	Did you ever smoke shisha?	1. Yes 2. No →	To Q415
413	If Q412 is Yes for how long you smoked shisha?(in months)	_____	
414	If Q412 is Yes did you smoke shisha in the last one month?	1. Yes 2. No	
415	Did you ever have sexual partner?	1. Yes 2. No →	To Q422
416	If Q415 Yes how many sexual partner/s did you ever have?	_____	
417	If Q415 is Yes did you have sexual partner in the last 12 months?	1. Yes 2. No →	To Q419
418	If Q417 is Yes how many sexual partner/s did you have in the last 12 months?	_____	
419	Do you have a regular sexual partner or lover at the time of your positive test for HIV?	1. Yes 2. No →	To Q422
420	If Q419'Yes' for how long did you live with your regular sexual partner?(in months)	_____months	
421	If Q419'Yes' What is the HIV serostatus of your stable sexual partner?	1. Positive 2. negative 3. not known	
422	Did you disclose your HIV status to ever else rather than your health care provider?	1. Yes 2. No →	To Q424
423	If Q422 is yes for whom you disclose your HIV status?	1. Spouse 2. family 3.friends 4.Others(Specify)_	
424	If Q422 is no why?	1.Stigma /discrimination 2. Fear of spouse conflict 3. Fear of family conflict 4. Other (specify)____	

I will read for you the following questions respond to each of them as you feel and perceive them as (SD=Strongly disagree, D=Disagree, N= Neutral, A=Agree ,SA=Strongly Agree)

425	Perceived stigma and discrimination	SD	D	N	A	SA
		1	2	3	4	5
1	In many areas of your life, no one knows that you have HIV					
2	you feel guilty because you have HIV					
3	People's attitudes about HIV make you feel worse about yourself					
4	Telling someone you have HIV is risky					
5	People with HIV lose their jobs when their employers find out					
6	you work hard to keep your HIV a secret					
7	you feel you are not as good a person as others because you have HIV					
8	you never feel ashamed of having HIV(+)					
9	People with HIV are treated like outcasts					
10	Most people believe that a person who has HIV is dirty					
11	easier to avoid new friendships than worry about telling someone that you have HIV					
12	Having HIV makes you feel unclean					
13	Since learning you have HIV, you feel set apart and isolated from others					
14	Most people think that a person with HIV is disgusting					
15	Having HIV makes you feel that you are a bad person					
16	Most people with HIV are rejected when others find out					
17	You are very careful who you tell that you have HIV					
18	Some people who know you have HIV have grown more distant					
19	Since learning you have HIV, you worry about people discriminating against you					
20	Most people are uncomfortable around someone					
21	you never feel the need to hide the fact that you have HIV(+)					
22	you worry that people may judge you when they learn you have HIV					
23	Having HIV in your body is disgusting to you					

Do you have any questions for me?

Thank you for your time and cooperation!

Part two: Qualitative Part

I. Study Information sheet

Title of Study: - Factors associated with late presentation to HIV/AIDS care, among HIV positive people in Bench Maji Zone, SNNPR, southwest Ethiopia.

Principal Investigator: Teklit Tesfom

Contact adders: Phone- 0913662602, Place- Mizan town

Dear participant, my name _____ I am working in this health institution as data collector of this study from health professionals and HIV case managers on determinant factors of late presentation for HIV/AIDS care among HIV positive individuals in Bench Maji Zone. You are selected purposively as one of our study participants and the interview will not take more than 40 minutes. If you are willing, I will ask you few questions about barriers and facilitators for seeking of HIV/AIDS care among HIV positive individuals.

There is no any risk being participating in this study and if you say no, will not affect you negatively in any way what so ever. Your honest and genuine participation by responding to the questions prepared is highly appreciated and helpful to attain the objective of the study.

Your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential and participation is voluntary. You do not have to answer any question that you don't want to answer and you are also free to withdraw from the study at any point, even if you do agree to take part.

. Now, do you agree to participate in the survey?

Yes No if no, respect the decision and thank her/him.

If yes, participant signature _____ continue the interview.

Interviewer name _____ signature _____

2.1 Guiding questions for in-depth interview

2.1.1. In-depth interview guide for health care providers

1. Name of Health facility _____ 2. Sex of respondent: 0. Male 1. Female
3. Professional category _____ 4. Work experience ART clinic _____
5. From your experience does late presentation to HIV/AIDS care among HIV positive people vary with socio-demographic characteristics? (Allow respondent to say what they want, then probe for more details with: sex, age, ethnicity, place of residence, educational status, Occupational status and Income status). What do you think could be done to improve this?
6. What do you think about the risk behavior related factors that affect seeking of HIV/AIDS care among HIV positive individuals? (Allow respondent to say what they want, then probe for details on: alcohol use, drug use, chewing chat, smoking cigarette and sexual partner status).
7. In your experience does perception related factors hinder seeking of HIV/AIDS care among HIV positive individuals? (Allow respondent to say what they want, then probe for details on: perceived general health status, perceived benefit of HIV care, social support and stigma):
 - 7.1. In what way does perceived stigma as well as social support affect seeking of HIV/AIDS care (probe: stigma from family, community and health professionals as well as having social support from family, friends and significant others).
 - 7.2. In what way does perceived benefit of HIV care hinder and facilitate seeking of HIV/AIDS care (probe: issue like: - believe status, could be help to prolong life, improve health condition, decrease chance of getting sick).
 - 7.3 In what way does perceived general health status hinder and facilitate seeking of HIV/AIDS care (probe: conditions like: - general health outlook, resistance to illness and seriousness of illness). What do you think could be done to improve this?
8. From your experience does late presentation to HIV/AIDS care among HIV positive people vary with disclosing of their HIV status? (Probe for more details on: disclosing and not for partner, families, friends and others) What do you think about the difficulties with disclosing their HIV status? What do you think could be done to improve this?
9. What do you think about the health service delivery barriers and facilitators for people seeking HIV/AIDS care? (Allow respondent to say what they want, then probe for more details on: distance to the facility, traditional care experience, initiation to HIV testing and service seeking experience in health facility). What do you think could be done to improve this?

Do you have any questions for me?

Thank you for your time and cooperation!

2.1.2. In-depth interview guide for HIV case managers

1. Name of Health facility_____2. Sex of respondent 0. Male 1. Female
3. Educational status_____4. Work experience of in ART clinic_____
5. From your experience does late presentation to HIV/AIDS care among HIV positive people vary with socio-demographic characteristics?(Allow respondent to say what they want, then probe for more details with: sex, age, ethnicity, place of residence, educational status, Occupational status and Income status). What do you think could be done to improve this?
6. What do you think about the risk behavior related factors that affect seeking of HIV/AIDS care among HIV positive individuals in year experience? (Allow respondent to say what they want, then probe for more details on: alcohol use, drug use, chewing chat, smoking cigarette and sexual partner status). What do you think could be done to improve this?
7. From your experience does perceived stigma hinder seeking of HIV/AIDS care among HIV positive individuals? (Allow respondent to say what they want, then probe for more details on: from family, community and health professionals): What do you think could be done to improve this?
8. From your experience, how do you think perceived social support could hinder and facilitate seeking of HIV/AIDS care among HIV positive individuals? (Allow respondent to say what they want, then probe for more details on: having Vs not having social support from family, friends and significant others). What do you think could be done to improve this?
9. From your experience does late presentation to HIV/AIDS care among HIV positive people vary with disclosing of their HIV status? (Allow respondent to say what they want, then probe for more details on: having disclose to partner, families, friends and others) What do you think about the difficulties with disclosing their HIV status? What do you think could be done to improve this?
10. What do you think about the health service delivery barriers and facilitators for people seeking HIV/AIDS care? (Allow respondent to say what they want, then probe for more details on: distance to the facility, traditional care experience).
- 10.1. In what way does seeking of traditional care hinder early seeking of HIV/AIDS care (probe: seeking of HIV related care from traditional healer and spiritual/holly water). What do you think could be done to improve this?

Do you have any questions for me?

Thank you for your time and cooperation!

2. Amharic Version questioners

የአማርኛ መጠይቅ

በጅም ዩኒቨርሲቲ የኅብረተሰብ ጤናና ህክምና ሳይንሶች ኮሌጅ የኢ.ፒ.ደ.ዮ.ሞሎጂ ትምህርት ክፍል፣ በጌታ ማጂ ዞን ደቡብ ምእራብ ኢትዮጵያ በጤና ተቋም ደረጃ ኤች.አይ.ቪ. ፖስት-ቫ ከሆኑት ሰዎች መሃከል የኤች.አይ.ቪ ሕክምና ዘገይቶ እንዲወሰዱ የሚያደርጋቸው ምክንያቶች ለማወቅ ለሚደረገው የተዘጋጀ መጠይቅ፣2006 ዓ/ም

I. የጥናቱ መረጃ

ስሜ _____ ይባላል። እኔ በጅም ዩኒቨርሲቲ በህብረተሰብ ጤና ሳይንስ ኮሌጅ በኢ.ፒ.ደ.ዮ.ሞሎጂ ትምህርት ክፍል በሚካሄደው ጥናት በጊዜያዊ መረጃ አሰባሳቢነት በመስራት ላይ እገኛለሁ። በዚህም በጤና ተቋም ደረጃ ከኤች.አይ.ቪ. ቫይረስ ጋር ከሚኖሩ ሰዎች መሃከል የኤች.አይ.ቪ ሕክምና ዘገይቶ እንዲወሰዱ የሚያደርጋቸው ምክንያቶች ማወቅ ነው። ወደ ጥናቱ የተካተቱ በጥናቱ ጊዜ ለኤች.አይ.ቪ ሕክምና ግልጋሎት በተከታታይ ከሚመጡ ፍቃደኛ የሆኑትን ሁሉ ስለሚካተቱ ነው። ቃለመጠይቁ ከ30-40 ደቂቃ ነው የሚፈጀው ስለሆነም በዚህ ጥናት የተለያዩ ስለ ማህበራዊና ኢኮኖሚያዊ ሁኔታዎች፣ የግል ባህሪዎችና የጤና አገልግሎት ጋር የተያያዙ ጥያቄዎችን የሚጠየቁ ስለሆነ የእርሶን ትብብርና ፈቃደኝነት ወደ ቃለ ምልልሱ ከመግባታችን በፊት ማግኘት ወሳኝ ነው።

የጥናቱን አላማ ለማሳካት እርስዎ ለጥያቄዎቹ የሚሰጡት ትክክለኛና ቀና መልስ ወሳኝ ሚና አለው። በመጠይቁ ላይ ስምም ሆነ ሌሎች የእርስዎን ማንነት የሚገልፅ ነገር አይጻፍም። የግሎ ምላሽም ተለይቶ ሪፖርት የማይደረግ መሆኑን ከወዲሁ እንገልጻለን። መጠይቁን የሚሞላው እርሶ ፍቃደኛ ሲሆኑ ብቻ ነው። መጠይቁን ለመሙላት ፍቃደኛ ከሆኑ በኋላም ቢሆን መመለስ ያልፈለጉትን ጥያቄ አለመመለስ መብቶ ነው። ነገር ግን ሁሉም ጥያቄዎች ካልተሞሉ የጥናቱን አላማ ሙሉ በሙሉ ለማሳካት አስቸጋሪ ስለሚሆን መጠይቁን በሙሉ እንዲሞሉልን በማክበር እንጠይቃለን። ጥናቱ ላይ ላለመሳተፍ በመወሰን ወይም በማቋረጥ ምንም የሚደርስበት ጉዳት የለም። በጥናቱ ለመሳተፍ ፈቃደኛ ናት? በጥናቱ ለመሳተፍ ፍቃደኛ ከሆኑ ቀጥለው ባለው የስምምነት ማረጋገጫ ቅፅ ይላኩ። በጥናቱ ለመሳተፍ ፍቃደኛ ካልሆኑ አመሰግኘ/ሽ ያሰናበቷቸው።

II. የ ስምምነት ማረጋገጫ ቅፅ

ከታች ፊርማዬን ያኖርኩት የጥናቱን አላማ በማንበብና መረጃ ሰብሳቢውን ባነበበልኝ መሰረት በሚገባ ተረድቻለሁ። እኔ የምሰጠው መረጃ ለዚህ ጥናት አገልግሎት ብቻ የሚውል መሆኑንና በሚስጥር እንደሚጠበቅ እንዲሁም ማንነቴ እንደማይገለጽ ተነግሮኛል። በተጨማሪም በጥናቱ መሳተፍ አለመሳተፍ ወይም በማንኛውም ጊዜ ከጥናቱ ተሳታፊነት አቋርጬ መውጣት እንደምችል ሙሉ መብት እንዳለኝ ተረድቻለሁ።

ስለዚህ ይህን መጠይቅ ለመሙላት ፍቃደኛ መሆኔን በፊርማዬ አረጋግጣለሁ።

የተጠያቂው ፊርማ _____

የቃለ-መጠይቅ አድራጊው/ዋ ስም _____ ፊርማ _____

የመጠይቁ መለያ ቁጥር _____

መመሪያ ለቃለ-መጠይቅ አድራጊው/ዋ፦

1. ለመጀመሪያ ጊዜ ወደ ኤ.ፕ.አይ.ቪ ሕክምና የመጡ ዕድሜያቸው 18 ዓመትና ከዛ በላይ የሆኑትን ታካሚዎች ያናግሩ።
2. ለምርጫ ጥያቄዎች የጥያቄውን መልስ ያክብቡ፡ ሌላ መልስ ካለ በተሰጠውን ክፍት ቦታ ላይ ይግለጹ።

ክፍል -1፡ አጠቃላይ የታካሚ መለያ መረጃ

ተ.ቁ	መጠይቅ	መልስ
100	የ ጠፍ ድርጅቱ ስም	_____
101	የ ቃለ-መጠይቅ አድራጊው/ዋ ስም	_____
102	የ ተቆጣጣሪው/ዋ ስም	_____
103	ቃለ መጠይቅ የ ተደረገበት ቀን	ቀን _____ ወር _____ 2006 ዓ/ም
104	ቃለ መጠይቅ የ ተደረገበት ጊዜ በሰዓትና ደቂቃ	የ ተጀመረበት _____ የ ተጠናቀቀበት _____ በአጠቃላይ የ ፈጀበት _____
105	የ ተጠቃሚው የቁጥር (ከካርድ ይመልከቱ)	_____
106	የ ተጠቃሚው ሲዲፎር ቁጥር (ከካርድ ይመልከቱ)	_____ cells/mm ³
107	በዓለም የ ጠፍ ድርጅት መሰረት የ በሽታው ደረጃ (ከካርድ ይመልከቱ)	1. ደረጃ 1 2. ደረጃ 2 3. ደረጃ 3 4. ደረጃ 4

ክፍል -2፡ ማህበራዊና ኢኮኖሚያዊ ሁኔታዎች በተመለከተ

ተ.ቁ	ጥያቄዎች	የመልሶች ኮድ	ይለፉ
200	ጾታዎ ምን ድን ወን?	1. ወንድ 2. ሴት	
201	ዕድሜዎ ስንት ነው?	1. _____ (ዓመት) 99. አላውቅም	
202	የ ጋብቻ ሁኔታዎ ምን ድን ወን?	1. ያገባ 2. ያላገባ 3. የ ፈታኞች 4. ሚስት/ባል የ ሞተበት/ባት	
203	ሐይማኖት ምን ድን ወን?	1. ኦርቶዶክስ 2. ፕሮቴስታንት 3. ሙስሊም 4. ሌላ (ይግለጹ) _____	
204	ብሔራዎ ምን ድን ወን?	1. ቤንች 2. ሜኒት 3. ዲዙ 4. ሸኮ 5. ካፋ 6. አሜራ 7. ሌላ (ይግለጹ) _____	
205	የ መኖሪያ አካባቢዎ የት ነው?	1. ከተማ 2. ገጠር	
206	የ ማኖሪያ ከመን ጋር • ነው?	1. ለ-ብቻዬ _____ 2. ከባለቤቱ ብቻ 3. ከቤተሰቦቼ 4. ሌላ (ይግለጹ) _____	ወደተ.ቁ210

207	አብርዎት የሚኖር ቤተሰብ ካለ በአጠቃላይ ብዙ ታች ስንት ናቸው?	_____	
208	ልጅ አለዎት?	1. አዎ 2. የለኝም	ወደ ተ.ቁ210
209	ለጥያቄ 208 መልስዎ አዎ ከሆነ የስንት ዓመት?	1. 5 ዓመትና በታች _____ 2. ከ5 ዓመት በላይ _____	
210	አሁን የሚኖሩበት ቤት ባለቤትነቱ የማን ነው?	1. የግሌ 2. የክራይ 3. ሌላ (ይግለጹ) _____	
211	የትምህርት ደረጃዎ ስንት ነው?	1. ማንበብና መጻፍ የማይችሉ 2. ማንበብና መጻፍ የሚችሉ ነገር ግን መደበኛ ት/ት ያልተማዱ 3. የተማሩ/የደረሰብኩትን የት/ት ክፍል ይግለጹ _____	
212	የመደበኛ ሥራዎ ምንድን ነው?	1. የመንግስት ቅጥረኛ 2. የግል ቅጥረኛ 3. ነጋዴ 4. አርሶ አደር 5. የቤት አመቤት 6. ተማሪ 7. የቀን ሰራተኛ 8. ሌላ (ይግለጹ) _____	
213	መደበኛ የገቢ ምንጭ አሉዎት?	1. አዎ 2. የለኝም	ወደ ተ/ቁ215
214	ለጥያቄ 213 መልስዎ አዎ ከሆነ በግምት በአማካኝ ዓመታዊ ገቢዎ ስንት ይሆናል?	1. በብር _____ 2. ከበና (በብር) _____ 3. ከበቆሎ (በብር) _____ 4. ከጫት (በብር) _____ 5. ከጎደሬ (በብር) _____ 6. ሌላ (ይግለጹ) _____	
215	ኤ.ቸ.አይ.ቪ በደምዎ ውስጥ መኖሩን ሲያወቁ እርግዝና ነበርዎት? (ለሴት ብቻ)	1. አዎ 2. የለኝም 3. አላውቅኩም	

ክፍል-3: ከጠፍ ግልጋሎት ጋር የተያያዙ ምክንያቶች በተመለከተ

ተ.ቁ	ጥያቄዎች	የ መልሶች ኮድ	ይለፍ
300	ከቤትዎ ወደ እዚህ ጠፍ ተቋም የኤ.ች.አይ.ቪ/ኤዲስ ህክምና ለማግኘት ምን ያህል ጊዜ ይፈጅብዎታል?(በደቂቃ)	በደቂቃ _____	
301	ወደ እዚህ ጠፍ ተቋም በምን ተጉዘ ወ.መጡ?	1. በእግር 2. በህዝብ መሞለለሻ/ተሽከርካሪ 3. ሌላ(ይግለፁ) _____	
302	ከመኖሪያ ቤትዎ ወደ እዚህ ጠፍ ተቋም የኤ.ች.አይ.ቪ/ኤዲስ ህክምና ለማግኘት ያወጡት ወጪ አለ?(በገንዘብ)	1. አዎ 2. የለኝም _____	ወደ ተ.ቁ304
303	ለጥያቄ 302 መልሶዎት አዎ ከሆነ በደርሶ መልስ በደምዱ ምን ያህል ገንዘብ ያወጣሉ?	_____	
304	ኤ.ች.አይ.ቪ ወጠቱዎን ያወቁት በየትኛው ጠፍ ተቋም ነበር?	1. በሆስፒታል 2. ጠፍ ጣቢያ 3. በጠፍ ከላ 4. ሌላ(ይግለፁ) _____	
305	ኤ.ች.አይ.ቪ ወጠቱዎ ያወቁት እንዴት ነበር?	1. በፈቃደኝነት የኤ.ች.አይ.ቪ ምርመራ በሚደረግበት 2. በጠፍ ባለሞያ አነሳሽነት የኤ.ች.አይ.ቪ ምርመራ በሚደረግበት 3. ሌላ(ይግለፁ) _____	
306	ኤ.ች.አይ.ቪ በደም ውስጥ መኖሩን ሲያወቁ የኤ.ች.አይ.ቪ ምርመራና የምክር አገልግሎት ተሰጥቶታል ነበር?	1. አዎ 2. የለኝም _____	ወደ ተ.ቁ 308
307	ለጥያቄ 306 መልሶዎት አዎ ከሆነ የኤ.ች.አይ.ቪ ምርመራና የምክር አገልግሎት ያገኙት እንዴት ነበር?(ለጠያቂው መላክት ከምርመራ በፊትና በኋላ)	1. ለኤ.ች.አይ.ቪ ምርመራ ደም ከመስጠቴ በፊት ብቻ 2. ለኤ.ች.አይ.ቪ ምርመራ ደም ከሰጡ በኋላ ብቻ 3. ለኤ.ች.አይ.ቪ ምርመራ ደም ከመስጠቴ በፊትና በ%ላ 4. ሌላ(ይግለፁ) _____	
308	ኤ.ች.አይ.ቪ በደም ውስጥ መኖሩን ካወቁ ጀምሮ የኤ.ች.አይ.ቪ/ኤዲስ ህክምና እስከ ጀመሩበት ምን ያህል ጊዜ ቆይተዋል?(በሳምንት ያስቀምጡ)	_____ ሳምንት	
309	ለመጀመሪያ ጊዜ ኤ.ች.አይ.ቪ በደም ውስጥ መኖሩን ሲያወቁ የሚመርዙት ባለሞያ ወደ ኤ አር ቲ ክፍል የኤ.ች.አይ.ቪ/ኤዲስ ህክምና እንዲያገኙ ሪፈር ብሎዎት/እንዲገቡ አድርጎ ነበር?	1. አዎ እዛው ጠፍ ተቋም 2. አዎ ወደ ሌላ ጠፍ ተቋም 3. የለም	

310	ለሚጀመሩ ጊዜ ኤች.አይ.ቪ በደም ውስጥ መኖሩን ሲያወቁ ጤና ተቋሙ ከደረሰብት ጀምሮ በባለሞያ መታየት እስከጀመሩበት ድረስ ምን ያህል ጊዜ ፈጅቶ-በዎት/ጠበቆ ነበር?	1. _____ ደቂቃ 2. አላወቅዎም	
311	ኤች.አይ.ቪ በደም ውስጥ መኖሩን ከማወቅዎ በፊት የኤች.አይ.ቪ ምርመራ አድርገው ያወቁ ነበር?	1. አዎ 2. አላወቅዎም	→ ወደ ተ.ቁ 314
312	ለጥያቄ 311 መልሶዎት አዎ ከሆነ ስንት ጊዜ የኤች.አይ.ቪ ምርመራ አድርገው ያወቁ?	በቁጥር _____	
313	ለጥያቄ 311 መልሶዎት አዎ ከሆነ በመጨረሻ ጊዜ የኤች.አይ.ቪ ቫይረስ በደም ውስጥ አለመኖሩን ካረጋገጡ ጀምሮ እስከ ኤች.አይ.ቪ በደም ውስጥ መኖሩን ያወቁበት ምን ያህል ጊዜ ይሆናል?(በወር)	_____ በወር	
314	የኤች.አይ.ቪ /ኤዲስ ህክምና ለማግኘት ለሚጀመሩ ጊዜ ሲገቡ የተጓዳኝ በሽታ ምልክት/ቶች ነበሩት?(ከካርድ ይመልከቱ) ማሳሰቢያ: ከአንድ በላይ መመለስ ይቻላል	1. የለ-በዎትም 2. ቲቢ 3. ለአንድ ወር የቆየ ተከታታይ ትኩላት 4. አልማዝ ባለጭ 5. ለአንድ ወር የቆየ ተቅማዮ 6. የአባላዘር በሽታ 7. ሌላ (ይግለፁ) _____	
315	ከኤች.አይ.ቪ ወጠቅዎ ጋር በተገናኘ/ተያይዞ ባህላዊ ህክምና ተጠቅመው ያወቁ?	1. አዎ 2. አላወቅዎም	→ ወደ ተ.ቁ 317
316	ለጥያቄ 315 መልሶዎት አዎ ከሆነ ምን ዓይነት ባህላዊ ህክምና ተጠቅመዎ ማሳሰቢያ: ከአንድ በላይ መመለስ ይቻላል	1. ከባህላዊ ክሊኒክ 2. ጠበል ቦታ 3. ሌላ (ይግለፁ) _____	
317	ለኤች.አይ.ቪ ህክምና ከመጣትዎ በፊት ለሌላ ህክምና/ግልጋሎት ጤና ተቋማት ሂደው ታክመው/ግልጋሎት አግኝተው ያወቁ?	1. አዎ 2. አላወቅዎም	→ ወደ ተ.ቁ 400
318	ለጥያቄ 317 መልሶዎት አዎ ከሆነ ባለፈው 6 ወር ውስጥ ለሌላ ህክምና/ግልጋሎት በጤና ተቋማት የጤና አገልግሎት አግኝቶ ያወቁ?	1. አዎ 2. አላወቅዎም	→ ወደ ተ.ቁ 400
319	ለጥያቄ 318 መልሶዎት አዎ ከሆነ በአጠቃላይ ባገኙት የጤና ግልጋሎት ምን ያህል ረክተዋል?	1. ምንም አልረካሁም 2. አልረካሁም 3. ገለልተኛ 4. ረክቻለሁ 5. በጣም ረክቻለሁ	
320	ለጥያቄ 318 መልሶዎት አዎ ከሆነ በአጠቃላይ ባገኙት የጤና ግልጋሎት አሰጣጥ ጥራት እንዴት ያዩታል?	1. ጥሩ አልነበረም 2. ደህና 3. ጥሩ 4. በጣም ጥሩ 5. እጅግ በጣም ጥሩ	

ክፍል 4: ባህሪያዊ ምክንያቶች በተመለከተ

ከዚህ በታች የምገኝቱን ሰዎች ጥያቄዎችና በያንዳንዱ ባለትን ዓረፍተ-ነገር ከቫይረሱ ጋር የሚኖሩት ወገኖች ያላቸው ስሜትና አስተሳሰብን ይመለከታል፡፡ እያንዳንዱ ጥያቄ አምስት አሜጭ አለት፡፡ ስለዚህ ከነዚህ ወሰን ጥያቄዎቹን ሳነብሎት አንድ በትክክል ስሜትዎን የሚልፀውን ይምረጡ፡፡

ማሳሰቢያ ለታላ-መገይቅ አድራጊው፡ በያንዳንዱ ጥያቄዎች ባለት ዓረፍተ-ነገር ፍትላፊት ላይ በምርጫው ያለውን የቁጥር ኮድ ያስቀምጡ፡፡

የሚከተለውን ጥያቄ ለዓረፍተ-ነገር አንድ፡ 1= እጅግ በጣም ጥሩ(እ.በ.ጥ)፤ 2 =በጣም ጥሩ(በጣጥ)፤ 3 =ጥሩ ፤ 4=ደህና፤ 5 = ጠፃኝነት አይሰማኝም(ጤአይሰ) በሚለትና ለዓረፍተ-ነገር ሀላት እስከ አምስት ያሉትን፡ 1ሙሉ በሙሉ ትክክል(መብመት)፤ 2=በአብዛኛው ትክክል (በአብዛ.ት)፤ 3=አላውቅም (አላ) ፤ 4=በአብዛኛው ሀላት (በአብዛ.ሀ) ፤ 5=ሙሉ በሙሉ ሀላት (መብመሀ) በሚለት ይመልሱ፡፡

400	አጠቃላይ የጠፃኝነት ሁኔታ አስተሳሰብን በተመለከተ					
1	በአጠቃላይ የጠፃኝነትዎን ሁኔታ እንደት ይገልጹታል	እ.በ.ጥ	በጣጥ	ጥሩ	ደህና	ጤአይሰ.
2	የህመም ስሜት ይታይባታል፡፡	መብመት	በአብዛ.ት	አላ	በአብዛ.ሀ	መብመሀ
3	ከሌሎች እርሶ ከሚያወቁት አካል ጠፃኝነት ስት፡፡	መብመት	በአብዛ.ት	አላ	በአብዛ.ሀ	መብመሀ
4	ከቅርብ ጊዜ ወዲህ የህመም ስሜት እየተባባሰ ነው፡፡	መብመት	በአብዛ.ት	አላ	በአብዛ.ሀ	መብመሀ
5	ፍጹም ጠፃኝነት ይሰማታል፡፡	መብመት	በአብዛ.ት	አላ	በአብዛ.ሀ	መብመሀ

የሚከተሉትን ጥያቄዎች በያንዳንዱ ስር ባለትን ዓረፍተ-ነገር 1=በጣም አልሰማኝም(በጣ/አል)፤ 2=አልሰማኝም(አል)፤ 3=እንጃ(እ)፤ 4=እስማላሁ(እስ)፤ 5=በጣም እስማላሁ(በጣ/እስ) በሚለት ይመልሱ፡፡

401	የኤች.አይ.ቪ ህክምና ጠቀሜታ ላይ ያለዎትን አስተሳሰብ በተመለከተ	በጣ/አል	አል	እ	እስ	በጣ/እስ
1	የኤች.አይ.ቪ ህክምና ማገኘት እድሜያራዝምላታል፡፡					
2	የኤች.አይ.ቪ ህክምና አገልግሎት ማገኘት የመታመም እድል ይቀንሳል፡፡					
3	የኤች.አይ.ቪ መድከኒት መውሰድ ጠፃኝነትን ያሻሽላል፡፡ ማለትም በሽታ የሚከላከል አቅሚያ ይጨምራል፤ ከብደቱም ይጨምራል					
402	ከሚበረሰብ ድጋፍ የማገኘት ላይ ያለ አስተሳሰብ በተመለከተ	በጣ/አል	አል	እ	እስ	በጣ/እስ
1	እገዛ ባስፈለገዎት ጊዜ ወሳኝ የሆኑ ሰዎች በአጠቃላይ ብዙ አልዎት፡፡					
2	ደስታዎን እና ሀዘኖዎን የሚከፍልዎቸው ወሳኝ የሆኑ ሰዎች አሉዎት፡፡					
3	ቤተሰብዎ በትክክል ለረዳዎት ይሞክራሉ፡፡					
4	እርዳታ እና ድጋፍ ባስፈለገዎት ጊዜ ቤተሰብዎ በጥሩ ስሜት ያደርጉለዎታል፡፡					
5	በተመቻቹ ሁኔታ እንዲኖሩ ምንጭቶቹ ሆኖዎት ወሳኝ ሰዎች አሉዎት፡፡					
6	ጓደኞችዎ በትክክል ለረዳዎት ይሞክራሉ፡፡					
7	መጥፎ ነገር ቢያጋጥምዎት የሚደርስልዎት አስተማማኝ ጓደኛ አለዎት፡፡					
8	ስለችግርዎ ከቤተሰብዎ ጋር ያወራሉ፡፡					
9	ደስታዎ እና ሀዘንዎ የሚከፍልዎቸው ጓደኞች አሉዎት፡፡					
10	ስለ ህይወቶ የሚጠነቀቁላቸው ወሳኝ ሰዎች አሉዎት፡፡					
11	የራስዎን ወሳኔ እንዲወስኑ ቤተሰብ ፈቃደኞች ናቸው፡፡					
12	ስለችግርዎ ከጓደኛዎ ጋር ያወራሉ፡፡					

ተ.ቁ	ጥያቄዎች	የመልሶች ኮድ	ይለፍ
403	የአልኮል ማጠጥ ጠጥተው ያወቃሉ?	1. አዎ 2. አላወቅም	→ ወደ ተ.ቁ 406
404	ለጥያቄ 403 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ ጠጥተዋል? (በወር ያስቀምጡ)	ለ _____ ወር/ራት	
405	ለጥያቄ 403 መልሶዎት አዎ ከሆነ ባለፈው አንድ ወር ውስጥ አልኮል ጠጥተው ነበረ?	1. አዎ 2. አልጠጣም	
406	ጫት ቅመው ያወቃሉ?	1. አዎ 2. አላወቅም	→ ወደ ተ.ቁ 409
407	ለጥያቄ 406 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ ቅመዋል?(በወር ያስቀምጡ)	ለ _____ ወር/ራት	
408	ለጥያቄ 406 መልሶዎት አዎ ከሆነ ባለፈው አንድ ወር ውስጥ ጫት ቅመው ነበር?	1. አዎ 2. አልቃምኩም	
409	ሲጋራ አጫክው ያወቃሉ?	1. አዎ 2. አላወቅም	→ ወደ ተ.ቁ 412
410	ለጥያቄ 409 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ አጫክዋል? (በወር ያስቀምጡ)	ለ _____ ወር/ራት	
411	ለጥያቄ 409 አዎ ከሆነ ባለፈው አንድ ወር ውስጥ ሲጋራ አጫክዋል?	1. አዎ 2. አላወቅም	
412	ሺሻ አጫክው ያወቃሉ?	1. አዎ 2. አላወቅም	→ ወደ ተ.ቁ 415
413	ለጥያቄ 412 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ ሺሻ አጫክዋል? (በወር ያስቀምጡ)	ለ _____ ወር/ራት	
414	ለጥያቄ 412 መልሶዎት አዎ ከሆነ ባለፈው አንድ ወር ውስጥ ሺሻ አጫክዋል?	1. አዎ 2. አላጫክኩም	
415	ወሲብ የሚፈጸሙ ተግባራት ያወቃሉ? •	1. አዎ 2. አላወቅም	→ ወደ ተ.ቁ 422
416	ለጥያቄ 415 መልሶዎት አዎ ከሆነ ስንት ወሲብ የሚፈጸሙ ተግባራት ነበርዎት? •	_____	
417	ለጥያቄ 415 መልሶዎት አዎ ከሆነ ባለፈው አስራ ሁለት ወር ውስጥ ወሲብ የሚፈጸሙ ተግባራት/ባቸው ጓደኞች ነበርዎት?	1. አዎ 2. አልነበረኝም	→ ወደ ተ.ቁ 419 ይለፉ
418	ለጥያቄ 417 መልሶዎት አዎ ከሆነ ስንት ወሲብ የሚፈጸሙ ተግባራት ነበርዎት? •	_____	
419	ለጥያቄ 419 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ ከቋሚ የወሲብ ጓደኛ ጋር አብሮ የኖሩ? (በወር ይጠቁ)	1. አዎ 2. አልነበረኝም	→ ወደ ተ.ቁ 422 ይለፉ
420	ለጥያቄ 419 መልሶዎት አዎ ከሆነ ለምን ያህል ጊዜ ከቋሚ የወሲብ ጓደኛ ጋር አብሮ የኖሩ? (በወር ይጠቁ)	_____ በወር	
421	ለጥያቄ 419 መልሶዎት አዎ ከሆነ የቋሚ የወሲብ ጓደኛዎ የኤች.አይ.ቪ ሁኔታ/ወጠኩ ምን ድንገት ነው?	1. ከቫይረሱ ጋር ነው የሚከሰተው 2. ከቫይረሱ ነጻ ነው 3. አላወቅኩም	
422	ኤች.አይ.ቪ በደም ውስጥ መኖሩን ያሳወቁት ሰው አለ? ማሳሰቢያ: የኤች.አይ.ቪ ምርመራ ወይም ህክምና ከሰጡት ባለሙያ ውጪ	1. አዎ 2. አላሳወቅኩም	→ ወደ ተ.ቁ 424 ይለፉ
423	ለጥያቄ 422 መልሶዎት አዎ ከሆነ ለማንኛውም ሰው ያሳወቁት? ማሳሰቢያ: ከአንድ በላይ መመለስ ይቻላል	1. ለባለቤቱ 2. ለቤተሰብ 3. ለጓደኞቹ 4. ሌላ (ይግለፁ) _____	
424	ለጥያቄ 422 መልሶዎት አላሳወቁት ከሆነ ያላሳወቁት ምክንያት? ማሳሰቢያ: ከአንድ በላይ መመለስ ይቻላል	1. መገለጫ አድልዎን እንዳይደርስብኝ ፈሪቸ 2. ከባለቤቱ እንዳልጣላ ፈሪቸ 3. ከቤተሰቦቼ እንዳልጣላ ፈሪቸ 4. ሌላ (ይግለፁ) _____	

ከዚህ በታች የምንችቱን 23 ጥያቄዎች ከቫይረሱ ጋር የሚኖሩት ወገኖች ስሜትና አመለካከትን እንዲሁም ህብረተሰቡ ለነሱ ያለውን ምላሽ ይመለከታል። እያንዳንዱ ጥያቄ አምስት አሜራ ስሜት ስለዚህ ከነዚህ ውስጥ አንድ በትክክል ስሜትን የሚገልጸውን ይምረጡ። ጥያቄዎቹን ሳነብሎ በጣም እስማህሁ እስማህሁ እንጂ አልስማምም በጣም አልስማምም ብለው ይጻፉልሉኝ።

425	መግለጫና መጽልዎን በተመለከተ	በ/አል ስማም 1	አልስማ ማም 2	አንጃ3	አስማህ ሁ 4	በ/አስማ ማህሁ 5
1	ኤች አይ ቪ እንዳለብዎት ማንም ሰው አያወቅም ::					
2	ኤች አይ ቪ ስላለብዎት ሁል ጊዜ ጥፋተኝነት ይሰማታል::					
3	ሰዎች ስለኤች አይ ቪ ያላቸው አመለካከት ሆድዎ ያስብዎታል::					
4	ኤች አይ ቪ እንዳለብዎት ለሰዎች ማናገር አደገኛ ነው::					
5	ከቫይረሱ ጋር የሚኖሩ ሰዎች ኤች አይ ቪ እንዳለባቸው ቀጣይያቸው ካወቀ ከስራ ይባረራሉ::					
6	ኤች አይ ቪ እንዳለብዎት ሰዎች እዳያወቁ በጣም ይጠኑ ቀቃሉ::					
7	ኤች አይ ቪ ስላለብዎት እንደሌሎች ሰዎች ጥሩ እንዳልሆኑ ይስማማታል::					
8	ኤች አይ ቪ ስላለብዎት ሀፍረት ተሰምቶብዎት አያወቅም(+)::					
9	ከኤች አይ ቪ ጋር የሚኖሩ ሰዎች ይገለጻሉ::					
10	ብዙ ሰዎች ከኤች አይ ቪ ጋር የሚኖርን ሰው እንደ ጉድፍ ይቆጥሩታል::					
11	ብዙ ሰዎች ከኤች አይ ቪ ጋር እደሚኖሩ ለማናገር ከመጨቅ አዳስ ጓደኝነትን አለመወሰን ይመርጣሉ::					
12	ከኤች አይ ቪ ጋር በመሆናቸው ንጹህ እንዳልሆኑ ይሰማታል::					
13	ኤች አይ ቪ እንዳለብዎት ካወቁ ጀምሮ ብቸኝነት ይሰማታል::					
14	ብዙ ሰዎች ከኤች አይ ቪ ጋር የሚኖርን ሰው ይጸዩፋሉ::					
15	ኤች አይ ቪ ጋር በመሆንዎ መጥፎ ሰው እንደሆኑ ይሰማታል::					
16	ብዙ ሰዎች ከኤች አይ ቪ ጋር የሚኖሩ ሰዎችን ቫይረሱ እንዳለባቸው ስያወቁ ያገልግላቸዋል::					
17	ኤች አይ ቪ እንዳለብዎት ለማንም እንዳይናገሩ በጣም ይጠኑ ቀቃሉ::					
18	አንዳንድ ከኤች አይ ቪ ጋር እደሚኖሩ የሚያወቁ ሰዎች ርቆዎታል::					
19	ኤች አይ ቪ እንዳለብዎት ካወቁ ወዲህ ሰዎች ስለሚደርሱብዎት መጽልዎ በጣም ይጨቃሉ::					
20	ብዙ ሰዎች ከኤች አይ ቪ ጋር የሚኖሩ ሰዎችን ጋር ሲሆኑ ደስተኛ አይደሉም::					
21	ኤች አይ ቪ እንዳለብዎት መደበቁ አስፈላጊነቱ አይታይዎትም(+)::					
22	ሰዎች ኤች አይ ቪ እንዳለብዎት ካወቁ ይዘብቱበታል ብሎ ይጨቃሉ::					
23	ኤች አይ ቪ በደምዎ ውስጥ ማና ራስዎን እንዲጸዩፋ አድርጎታል::					

ጥያቄ አለዎት ?

ጊዜዎን ወስደው መጠይቁን እንድንሞላ ስለተባበሩን ከልብ አናመሰግናለን::

DECLARATION

I the undersigned declare that this thesis is my original work, has not been presented for a master of public health (MPH) in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

Name: _____

Signature_____

Name of institution: _____

Date of submission: _____

This thesis has been submitted after examination with my approval as the university advisors.

Name of the First advisor: _____

Date_____ Signature_____

Name of the second advisor: _____

Date_____ Signature_____