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PREDICTORS OF PROTECTIVE BEHAVIORS OF STREET YOUTHS ON HIV/AIDS USING HEALTH BELIEF MODEL IN MEKELLE TOWN, ETHIOPIA,2011.

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Abstract

Background; Ethiopia is among the highly affected countries in the region with the national adult prevalence rate of 6.6% with urban HIV prevalence estimate reaching as high as 13.7% and that of rural as low as 3.7% (3).Specially, affected to a considerable extent the young segment of the population (15-24 age range groups). Almost all studies on sexuality and HIV/AIDS have been conducted among high school and college youths. The less accessible group of young people (out of school and street children) has been neglected, but little is known about the perception of street youths and predictors of their protective behavior using behavioral model. **Objective;** The aim of the study was to assess the predictors of protective behaviors of street

youths on HIV/AIDS among using Health Belief Model in Mekelle town, Ethiopia, 2011.

Methods; a cross sectional survey was conducted from April 20-30, 2011 in Mekelle town on street youths who are living and spend the night on the street of Mekelle town. And both quantitative and qualitative methods were triangulated. 213 registered street youths who on the age range of 15-24 who were living and spend the night at the streets of the town. Purposive sampling technique was used for the qualitative study. Data was checked for completeness, precoded and entered then was cleaned by SPSS version 16.0.

Univariate analysis was computed, and binary analysis was made among socio-demographic variables, protective behaviors and perception associated to HIV/AIDS by HBM to analyze and avoid confounders in the findings. Binary logistic regression analysis of factors related to risk behaviors was calculated. Tests of association were made between both independent and dependent variables using odds ratio when statically significance was considered at p-value of 0.05.

Result; A total of 213 street youth respondents responded to this stud. In the age range of 15-24, study participants were 33.3%, and 66.6% between the age range of 15-19 year and 20-24 year respectively at mean age of 20.3 year.

Conclusion; street youths have been higher perceived barrier, and history of high risk sexual behavior and underestimation of street youth's risk of HIV infection by stakeholders.

Recommendation; Those responsible bodies need to have work hard to reduce perceived barriers of AC/VCT to be able street youths prevent them self against HIV/AIDS and sustains protective behavior. The responsible body has to give attention for recreational facilities as priority in youth policy and HIV/AIDS prevention intervention program.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CSW	Commercial Sex Workers
ERDO	Elisha die relief and development association.
FGAE	Family Guidance Association Of Ethiopia
FGDs	Focus group discussions
FSCE	Forum on street children Ethiopia
FSW	Female Sex Workers
HIV	Human Immune deficiency Virus
HAPCO	HIV/AIDS prevention and control office
HBM	Health belief model
IEC	Information, Education, Communication
MSP	Multiple Sexual Partner
NARHS	National HIV/AIDS and Reproductive Health Survey
STI/Ds	Sexually Transmitted Infections/Diseases
UNAIDS	Joint United Nations Program on HIV/AIDS
VCT	Voluntary Counseling Test

CHAPTER ONE

1.1 Introduction

The human immune deficiency Virus (HIV) has created an enormous challenge worldwide .since the recognition of the disease, HIV has infected close to 71 million people, and more than 30 million have died due to Acquired Immune Deficiency syndrome (AIDS).more than 66% of the 40 million people living with HIV/AIDS (PLWHA) are in sub-Saharan Africa, where AIDS is the leading cause of death (1)

The worldwide prevalence rate is 1.07%, while that of the sub-Saharan African region average is 8.58% (2-5). Across the continent, regional difference in HIV/AIDS prevalence is considerable. However, no country in the continent has escaped the virus. Nearly 10 million women and men aged 15-24 roughly one in 14 young adults are living with HIV/AIDS, and half of new infections in 2003 occurred among this age group (2) Moreover Ethiopia is among the highly affected countries in the region with the national adult prevalence rate of 6.6% with urban HIV prevalence estimate reaching as high as 13.7% and that of rural as low as 3.7% according to the recent estimate (3).the total number of people lost to HIV has reached 160000 in 2001 and current living orphans has reached 990000 (4).

Ethiopia is among the most heavily affected countries in the world by the HIV/AIDS epidemic and tuberculosis (TB).UNAIDS estimated that by the end of 1999, approximately 3 million people were living with HIV/AIDS making Ethiopia a third country in the world in number of infected people. Though Ethiopia constitutes only 1% of the world's population, it contributes about 9% of the world's HIV/AIDS cases. Between 1884, the year in which the first case was reported, and by 1989, the adult HIV prevalence had increased to 2.7 percent. The estimated adult prevalence in 1991 was 7.1 percent and increased to 7.3% (GFDRE estimate) in 2000. The current urban sentinel surveillance data shows a prevalence rate of 15%, among 15-24 year old pregnant women attending Antenatal Clinic (ANC) in Addis Ababa and 13.4% for other urban areas (5)

About 91 % of reported AIDS cases occur to adults between the age group 15 to 49. Since this is the most economically productive part of the population, the related morbidity and mortality rates create an important economic burden. There are roughly an equal number of male and female HIV/AIDS cases. This is because most infection is acquired through sexual contact. Moreover, the peak ages for AIDS cases are between 20-29 for females and 25-34 for males. The number of females infected in the 15-19 age groups is much higher than that of males in the same age group (5).

This is due to earlier sexual activity by young females (usually with older partners). To date, it is estimated that there are almost 1 million HIV/AIDS orphans existing in the country. About 75 percent of new HIV infections are due to the practice of multiple partner sexual contact whereas the rest-24% is through prenatal transmission. A small number of new infections are due to transfusions of contaminated blood and unsafe injection practices. Estimated 13.2-millon children worldwide have lost a mother or both parents to AIDS. Still others are living with and often caring for an ill parent. Ninety-five percent of the children orphaned by AIDS live in Africa. The overwhelming majority of children orphaned and otherwise made vulnerable by HIV/AIDS are living within their extended families and communities. But unfortunately, AIDS is deterring family and community capacity to protect and care for the growing number of vulnerable children (5, 6).

Youth is important stage during which values are formed. In this life span, many young people sexually active and begin to develop patterns of sexual behavior. Street youth are more exposed and involved in sexual activities than other children of similar age. They are among the high risk and insecure groups and vulnerable to various forms of exploitation and abuses (6).

1.2 Statement of the problem

youth age group of 15-24 years are found everywhere in the community account 28.4% of total population(7).it is indeed a unique period in life of an individual's, a time of marvelous new births as well as a period of storm and stress. Adolescent period is a time of worry and problems, the best of times and the worst times. The best of times comes often because of the friendship ties that are formed between boys and girls and that are often centered on sex (8).

In recent years, HIV/AIDS has been a major health problem worldwide. Since its discovery, there has been massive spread of HIV/AIDS among people of all ages, races, continents as well as countries. according to UNAID ,global reports on HIV/AIDS, 36.1 million people worldwide were living with HIV/AIDS .this body reported categorically that half of newly HIV infected persons ,whose number above 15,000 to 16,000 per day was aged 15-24.in Africa alone an estimated 1.7 million young people are infected annually. this alarming rate of spread of HIV/AIDS also includes Ethiopia where 2.2 million people are now living with the virus and syndrome and highest infection rates are concentrated among youths(9).

The highest prevalence of HIV is seen in the age group of 15-24 years and also the peak age of HIV/AIDS case prevalence in the age 20-24 years, and peak age of new infection was 15-24 years thus today youth a major concern .youths are characterized by a period of exploration, experimentation particularly in relation to sexual activity (10).most of them start sexual intercourse at an early stage.(10). Youths are potential resource for future generations and development but currently they are highly vulnerable to HIV/AIDS.

Considering the economic and development impact, the Ethiopian Government has given a particular attention and ratified national HIV/AIDS policy in 1998 which further outlined the government focus in the strategic framework for national response. prevention and control measures includes discouraging multiple sexual relationships, promoting the use of condoms among high risk groups etc. moreover ,disseminating information through public campaigns to change social attitudes and behavior (11).in present circumstance of this scourge of HIV/AIDS, preventive measures is of paramount importance strategy to reduce youth risk to HIV infection. This is urgently needed especially by the youths who are considered as vulnerable group. A preventive measure for young people has been recognized as a major priority in many countries.

In Ethiopia the adversely interacting social, economic, and cultural factors such as extreme poverty, rapid urbanization, and poor nutritional status, among others, have lead to enormous increase in the number of children under extremely difficult circumstances. The problem of street youths in Ethiopia has become a countrywide epidemic, recent information indicating the number of such youths in the country to be 150,000 (of this 66.7% are living in Addis Ababa) (12).

In 2003 a total of a total of 1,900 street children were registered for street youths were enumerated in Mekelle town (13).

Mekelle is one of the rapidly growing cities, which is located on the center of the country. Majority of street youths are migrants from areas like Southern Region and other cities of Tigray region in search of job. When things are not like they expect they will join street life (13).

Most of the youths who are living on the streets do not have access to proper health care including reproductive health services like adequate information on HIV/AIDS. As a result while struggling to survive they are frequently exposed to adverse behavioral risks and conditions like STIs including HIV/AIDS (12, 13).

Street youths are vulnerable to HIV because many of them receive health information from Unreliable sources. Most of these children have wrong perception about the causes and mode of transmission of sexually transmitted diseases including HIV/AIDS. Due to this reason they use materials like blades, seizers and clothes even under wears in common which may increase their risk to acquire HIV and other STDs. They also tend to

use condom inconsistently and females have minimal power in relationships to negotiate safe sexual practices (. 12, 13).

The effects of losing family and cultural values are reflected by the observation of higher rates of substance use, arrest by police, and STDs among street children. Even though they are not willing to have partners female street children are forced to have at least one to be protected from others. Female street children commonly start sexual intercourse between the age of 10 and 13(14). Different types of sexual practices like anal intercourse, vaginal intercourse, oral sex, self-masturbation, and mutual masturbation are practiced among street children (15). Given that the problems of street children are very complicated, studies conducted on street children mainly focus on specific health issues like reproductive health and health related behaviors. But to alleviate the problem of street children and to minimize their risk of acquiring HIV/AIDS and other health problems (15)

There should be an evidence based data for better planning and implementation of programs targeted street children. This study has tried to assess the perception and high risk behaviors of street youths towards HIV/AIDS in northern Ethiopia, Mekelle. Town and their effect on the spread of HIV/AIDS. It is believed that the results will help to produce information that can be used by program managers and stakeholders in the planning and implementation of interventions for improving activities in rehabilitation of street children and also to protect children from going out of home (15).

CHAPTER TWO

2.1Literature review

HIV, the virus that causes AIDS, "acquired immunodeficiency syndrome," has become one of the world's most serious health and development challenges. Since the first cases were reported in 1981: More than 25 million people have died of AIDS worldwide, and another 33 million are currently living with HIV/AIDS. While cases have been reported in all regions of the world, almost all those living with HIV (96%) reside in low- and middle-income countries, particularly in sub-Saharan Africa. Most people living with HIV or at risk for HIV do not have access to prevention, care, and treatment, and there is still no cure. HIV primarily affects those in their most productive years; more than half of new infections are among those under age 25(16).

Every day, over 6800 persons become infected with HIV and over 5700 persons die from AIDS, mostly because of inadequate access to HIV prevention and treatment services. The HIV pandemic remains the most serious of infectious disease challenges to public health (17).

Young people, ages 15–24, account for 45% of new HIV infections (among those 15 and over). In sub-Saharan Africa, the HIV prevalence rate among young women is nearly 3 times that of their male counterparts (16).

Young people represent almost half of all HIV infections worldwide. Experts estimate there are 1-3 million street youth in Russia .Although the Russian street youth population is clearly at risk of HIV/AIDS (18).

Perception of risk is a key determinant in the Health Belief Model (HBM) which has been often used in AIDS risk reduction programs (19).Very low perception of risk, even in relatively high prevalence situations has been reported in a number of settings. For example, in Ethiopia, Sahlu et al. (1999) found that only 17% of men and 2% of women, despite high and correct knowledge of HIV transmission, acknowledged that they were at *any* risk of HIV/AIDS (20).

In Tanzania two recent studies have reported increases in perception of high risk among young men and women in Dar Es Salaam, though they still underestimate their own risk relative to data from the national surveillance system. Of the Tanzanian students interviewed, 25% felt that they were at personal risk of having HIV. Meanwhile, 41% thought their friends were at great risk (21).

In Zambia, Magnani et al. (2001) report that although 52% of the young people interviewed in a cross-sectional study knew someone with AIDS, most of the younger group of adolescents did not think they were at risk of getting AIDS (22).

Report that almost 70% of the young South African men they spoke to said there was "no chance of their becoming infected or that they didn't know whether or not they were personally vulnerable." Conversely, a Gambian study in a low prevalence area found that the adolescents considered that they were the *most at risk group* in the country for HIV (22).

And that this group seemed to overestimate their risk. Intense public media attention and health education programs may lead to teens overestimating their risk. The influence of experience and personal knowledge of someone with HIV/AIDS is also thought to influence risk perception, and has been studied in a number of different settings using different methods.

The notion behind this experiential theory is that AIDS does not become real, or denial is preferable, including denial of risk, until one witnesses someone ill or dying of AIDS. In 1995, Sweat et al. (1995) reported that young Thai men had very high fears of HIV, yet low perception of their own risk of acquiring the disease. In focus groups, individuals said that their perception was low because they "had never known anyone with AIDS and because "prostitutes [that they had visited] had health certificates (23).

Bosga et al.(1995) report that men who engaged in risky behavior did not perceive their behavior as such, unless they had known someone who was ill or who had died from

AIDS. In South Africa, MacPhail and Campbell (2001) report conflicting views of HIV risk among young people about the level of HIV infection in the community of Khutsong, a township outside the mining town of Carlton Ville.

Some of their respondents thought AIDS "is not common here" (said by a 20-25 year old woman). This in a context of very high infection rates, with one survey (Williams et al., 1999) suggesting over 40% of South African young adults (20-25) may be infected. In the same study, other respondents agreed that AIDS *was* a threat to the community, with more women than men agreeing with this sentiment. Some commented that personal experience with AIDS was "forcing people to acknowledge that it really exists." Finally, a cross national comparative study of men's behaviors in Zambia, Uganda and Kenya found that a lower level of risky behavior, controlling for all other factors, was associated with the respondent having personally known someone who had died of AIDS (24.).

HIV/AIDS represent a permanent threat to street children, who frequently catch sexually transmitted infections (STIs)-which is an indication of unprotected sexual activity. Although the health care facilities are readily available physically in Mekelle, the youth's access to health care facilities is limited by their status and economical constraints (25).

Because of the low economical status and lack of access to proper and adequate health information and services street children suffer from various forms of health problems especially STIs and HIV/AIDS. A study conducted in Awassa states that only 35.5% of respondents attended one or more kind of health education. Their knowledge of family planning, STDs and HIV/AIDS transmission ways and prevention methods, personal hygiene and sanitation in street children and women is very low (26).

The same study also identified that only 44.3% of respondents have specified the common ways of HIV/AIDS transmission and only 37.3% of those who knew transmission routes practiced one or more of the prevention methods. In the contrary majority of street children in Addis Ababa know the transmission and prevention of

HIV/AIDS, and most get the information from non-governmental organizations and charities working on street children (27).

HIGH – RISKY BEHAVIORS

The influence of the social context and environment on individual perception of risk has been the concern of sociological and anthropological debates for many years. The concept of the relationship between modernity and risk is currently a major theme within sociological theoretical thinking. Theorists such as Douglas, Arendt, Beck and Foucault have emphasized the need to look outside the individual to the structural influences that surround us as individuals in order to judge the varied influence of risk, including the perception of risk, on our behavior and social relations. This tradition has influenced the theoretical thinking around adolescent reproductive health for several years (28) and on HIV prevention tactics for about a decade. Meanwhile, empirical studies in the U.S. have begun to test structural and environmental relationships to adolescent behavior, mostly in relation to the risk and protective factors framework (29).

The community or environmental variables that have emerged as possibly important predictors include factors related to the physical environment that lead to perceptions of safety for the community members including young people (30).

These have been measured using a rating of the cleanliness of the neighborhood, as well as how the municipality or bureaucracy functions in relation to rubbish collection, waste water management and provision of water for the inhabitants of the area. All of these measures are interpreted as possible, measurable associations between individual's perception of risk and the likelihood that he or she will act in risky ways. A well-ordered environment, often associated with higher socio-economic strata, may well co-exist with and perhaps even influence the perception that individuals within this community are at low risk for everything negative (including HIV). Conversely, a disordered and violent environment may also co-vary with a perception that members of that community are at high risk for everything, including HIV. Communal levels of the perception of risk for the general population within a specific community may well influence (through gossip or through the talk of leaders) individuals to see themselves at a particular level of low or high risk.

In sum, the picture is a mixed one, with some adolescents appearing to view the fact that they have never or rarely use condoms as indicative that they are at high risk of becoming or being HIV positive, while others may perceive themselves at high risk (in general) and therefore use condoms out of fear of contracting the disease. The calculus of risk is clearly complex, and drawing definite conclusions from this review of a few studies is unwise (31).

The premise underlying "safe sex" programs is that most individuals are assumed to want to avoid serious disease—so the determinants are the perceived probabilities (and consequences) and the perceived costs and benefits of a risk reduction strategy. However, this premise also assumes that individuals have full knowledge of both these costs and the benefits of this strategy. What are the probabilities and estimates that go into the calculation of risk? Presumably, they include: the past history of their current partner in terms of STDs, their own past history and their former partners' histories, where these partners have come from and their area of residence, whether any of them have also been exposed through other channels (e.g., drugs or Blood transfusion), etc. Are young people's prior experiences, for example, with a STD, making it more likely that they may subsequently place themselves in a high-risk group? Do friends influence each other?

Teenagers and young adults in South Africa are being forced to calculate this risk and then to operate within a very difficult, and rapidly changing environment. One writer offers a very pessimistic idea in relation to AIDS-risk when she says "accurate perceptions of AIDS risk [may be] beyond our cognitive capabilities" (32).

We take a different view—that researchers must try to disentangle the determinants and impact of perceptions of risk in order to use the information to help adolescents calculate the costs and benefits of a risk reduction strategy and offer them support and services to act on it. To this end, we employ multi-level models to identify the individual, social and environmental factors that influence the calculation of risk by adolescents living in the

heart of the AIDS epidemic in South Africa using data from the study *Transitions to* Adulthood in the Context of AIDS in South Africa (33).

A study conducted by Mitike to assess sexual violence among female street adolescents in Addis Ababa has found out that the street adolescents are at high risk of sexual violence. Among the sexually active study groups 43% initiated sexual activity as a result of forcible rape. The perpetrators used different tools to intimidate the victims such as beating, threatening with pointing a knife and verbal threat. Since they are always at high risk of being raped, using contraceptives and protecting themselves from STDs including HIV/AIDS is beyond their control Even if they have good awareness about STDs and contraceptive use (34). For the reason that street children are far from any adult supervision and live in a very harsh environmental condition they tend to use substances like chat, cigarette, ganja, shisha and benzene. While using these substances the children get lost control of them and indulge and will have a drive into unprotected sexual intercourse, criminal acts and theft (35).

They often use objects that could be contaminated to perforate the skin, such as razors or needles, to carry out scarification or blood brotherhood rituals (36).

Vaginal, oral and/or anal sexes are widely practiced among street children and a substantial minority had had intercourse with 20 or more partners during their lifetimes (37). Sexual abuse and exploitation by street boys and other members of society including police are also common threats of female street children. Out of those street children found in Nigeria forty-nine percent admitted to being sex workers and 11% had been raped and were, therefore, at risk of contacting sexually transmitted diseases (38).

The few studies that exist on the sexual behavior of street youths show that these children are more prone to high-risk behavior and are sexually active at an early age. Often such relationships start as abusive. The circumstances in which they live and work increases their vulnerability also to sexual exploitation and abuse and put them at a higher risk of sexually transmitted infections and HIV/AIDS. The problem is further compounded by the lack of access to reproductive health information and services4. A number of individual and social factors, often associated with street survival, propel the street teenagers toward high risk behavior for HIV/AIDS. While youth is generally a time of relatively good health, nature of continuous exposure to streets and the associated lifestyles makes street teenagers vulnerable to the range of health and other problems which are not typically experienced by other young people(6).

CONCEPTUAL FRAMEWORK FRAMEWORKS

Perception of risk is a key determinant in the Health Belief Model (HBM) (39) which has been often used in AIDS risk reduction programs (40). The argument is that people use condoms (or have only one partner or postpone sexual initiation) if they think the costs of the potential illness (the negative consequences) outweigh the costs of buying condoms being abstained and tested, overcoming reluctance to wear a condom ,to be abstain and to be tested and demanding that it be used every time. Many of these models that are based on rational, logical thought processes also acknowledge that emotion (self-efficacy and self-esteem) may have a mediating effect on the risk perception, but few have examined the mechanisms behind emotion (32).



2.2 Significance of the study

HIV/AIDS is a significant burden to the public health and a leading cause of death among person aged 15-29, this age group also continues to having the highest rate of HIV/AIDS infection. Several studies founded that the peak age of HIV/AIDS case prevalence in the age 20-29 years, and peak age of new infection is15-24 years (41).

In Ethiopia, almost all studies on sexuality and HIV/AIDS have been conducted among high school and college youths. The less accessible group of young people (out of school and street children) has been neglected (15). Street youths are overlooked and deserve more attention. To date, little is known about the sexuality of street children and youth, how HIVAIDS affects this group, whether they have access to AIDS prevention information and, if so, to what extent (15).

As a consequence understanding of determinants/ predictors of street youth perception allowed health professionals and non-professionals working in HIV/AIDS preventive unit to transfer tailored messages to target group accordingly design bring behavioral change. So for, identifying the characteristics of individuals or group and factors makes street Youth at risk of HIV/AIDS infection are helpful for health promoter can to develop monitoring and evaluate.

As far as the researcher knowledge, there is no study done among street youth at Mekelle town even if there is youth center.

Thus this study was done to assess the predictors of protective behaviors to HIV/AIDS Using health belief model as its framework. The study drives from great concern about why street youths are vulnerable to HIV/AIDS infection and less likely to protective behavior in local contexts may also provide greater insight research endeavors and HIV/AIDS prevention-based program.

CHAPTER THREE

3.1General objective

To determine predictors of protective behaviors of street youths for HIV/AIDS using Health Belief Model approach in Mekelle town, 2011, Ethiopia.

3.2 Specific objectives

- To determine predictors of protective behaviors of HIV/AIDS among street youths.
- To determine perceived susceptibility of street youths towards HIV/AIDS among street youths.
- To determine perceived severity of street youths towards HIV/AIDS among street youths.
- To determine perceived benefits and barriers of street youths on protective behaviors (Abstinence, condom use and VCT).
- To describe street youth's self-efficacy on implementing protective behaviors among street youths.
- To describe street youths cues to action towards their protective behaviors on HIV/AIDS.

CHAPTER FOUR

Methods and Measurements

4.1Study Area

Mekelle is the principal town of the Regional State of Tigray located at a distance of about 780 Km North of Addis Ababa. It is a special administrative city of the Regional State which consists of 10 kebelles, and a municipality. Spread out on a plain and partly encircled by a chain of mountains, Mekelle covers 28 km square and setting 2200 meters above sea level it enjoys good weather all the year round. The population of the town was estimated at 233,012 with a sexual distribution of 49% males and 51% females. In Mekelle the average family size was four and the average Number of persons per room was three. The city has ample medical services .there are three governmental health centers and one referral and training hospital. There is one regional referral hospital for the 3.2 Million population of the region. Further, voluntary counseling and testing (VCT) service is given in five centers.

4.2 Study Period

The study was conducted in April 20-30, 2011 in Mekelle town, the capital city of Tigray.

4.3 Study Design

The study design was a cross sectional survey in which both quantitative and qualitative methods of data collection employed.

4.4. Population

4.4.1Source Population

Street youths fulfilling the inclusion criteria of age range between 15-24 years who are living and spend the night on the streets of Mekelle.

4.4.1Study Population

Street youths fulfilling the inclusion criteria of age range between 15-24 years who are living and spend the night on the streets of Mekelle.

4.5 Inclusion and Exclusion Criteria

4.5.1 Inclusion Criteria

All street youths found in the age range group of 15-24 years and those who are living and spent the night on the streets.

4.5.2 Exclusion Criteria

The study was not included Street children below fifteen, and those who have hearing and speech impairment, and with obvious mental health. And those who are Street off youths who are working and back home at night were not included in the study.

4.6 population size

4.6.1For Quantitative Study

Servey was conducted from April 20-30, 2011 in Mekelle town, 213 registered street youths who are on the age range of 15-24 who were living and spend the night (street off youths) at the streets of the town. Cross sectional survey was employed. The census was include every street youths whose age range between 15-24 who were living and spend the night on all the streets of Mekelle town.

4.6.2. For Qualitative Study

Seven key informants of non-governmental and one governmental organization that are closely worked on the issues of street youths were included in the in-depth interview study. And some self expressive and dominant street youths were interviewed using interview guide line.

4.7 Recruitment Procedures

4.7.1 Recruitment procedures for quantitative

Registration of all street youths was made the first two days to check whether the total sample size is manageable or not and to make comparison with existing record of number of street youths and Interviewing of street youths was done with the help of the representative of Bureau of Social and Labor Affairs of Mekelle town, recruitment of the street youths through observation and consulting some dominant street youth and individuals working in the area of street youths.

4.7. 2 Recruitment procedures for qualitative study

A purposive sampling technique was employed to recruit Seven key informants of nongovernmental and one governmental organization that are closely worked on the issues of street youths were included in the in-depth interview study. And snow ball technique used to recruit some self expressive and dominant street youths were interviewed using interview guide line.

4.8 Measurement and Variables

4.8.1Independent Variable

1. Perceived susceptibility, severity, benefits and barriers of street youths towards HIV/AIDS.

A. Perceived susceptibility; is defined as the respondents 'belief regarding chance of acquiring HIV due to their risky sexual behavior.

In this study, Perception of street youth on sexually risk behaviors towards HIV/AIDS means Perceived susceptibility was measured by 7 items using Likert five-scale of point ;1.Strongly agree ,2.Agree, 3.Donot know/neutral, 4.Disagree, 5.Strongly disagree.

B. Perceived severity; is defined as the respondents 'evaluation of the potential physical and psychological consequences of HIV/AIDS. In this study, Perception of street youth on towards HIV/AIDS means Perceived severity was measured by 5 items using likert five-scale of point ;1.Strongly agree ,2.Agree, 3.Donot know/neutral, 4.Disagree, 5.Strongly disagree.

C. Perceived barriers; is defined as the respondents 'perception regarding difficulty or obstacles which may prevent them to practice preventive behavior to HIV/AIDS. In this study, Perception of street youth towards HIV/AIDS means Perceived barriers was measured by10 items using likert five-scale of point ;1.Strongly agree ,2.Agree, 3.Donot know/neutral, 4.Disagree, 5.Strongly disagree.

D. Perceived benefit; of taking action to prevent HIV/AIDS is defined as the respondents belief regarding the effectiveness of various behaviors in reducing the threat of HIV/AIDS. In this study, Perception of street youth towards HIV/AIDS means Perceived benefit was measured by 9 items using likert five-scale of point ;1.Strongly agree ,2.Agree, 3.Donot know/neutral, 4.Disagree, 5.Strongly disagree.

A person who say to have no/low level perception if he answers 1,2, and 3.Of the five scale points for positive statements. If a person answers 4 and 5 for positive statements, he/she was considered to have yes/high level of perception or above mean score (mean as three) for each statement. Overall level of street youth's perception on HIV/AIDS was assessed by using a cut of points of 60% (fieher, US America. Operation research handout).if more than 60% of street youth answer the above questions correctly, overall

perception regarding susceptibility, severity, benefits and barriers and threat was labeled as high, and vice versa.

Finally, the result was categorized in two (dichotomies) groups as high/low or yes/no perception and good/poor knowledge after transform, and computed to create new variables like comprehensive knowledge and perceived threat.

2, Socio-demographic characteristics

A written structured instrument was prepared to measure street youths' Socio demographic characteristics including Age, sex, and educational status, ethnicity, and religion, having attended school and the number of schooling years successfully completed, and the place where they generally spend the night. Knowledge of the means of transmission and the AC HIV/AIDS prevention means (Abstinence, to one HIV-negative sexual partner and Cues to act ion including Sources of information, education, place of time spent also was included in the independent variables.

3. Cues to act

Sources of information, education, place of time spent

4. Sexual behavior;

Age of first sexual partner Use of condom in the last 12 months Number of sexual partner

4.8.2 Dependent Variables

Protective behaviors of street youths including

- > Abstinence,
- Condom use and
- Voluntary Counseling Test

4.9 Data Collection Instrument and Methods

4.9.1Quantitative Study:

For the quantitative part of the study;

- Data was supervised by three Supervisors and was collected by ten trained data collectors of both genders (Diploma graduates) for ten days who have an experience on data collection and those who properly speak the local language and know the culture of the study population.
- Data collectors were trained by the principal investigator for two days about the objectives of the study and ways of data collection.
- Street youths' fingers were painted by gentian violet; no incentive was given to avoid double counting during data collection.
- Questionnaire was prepared in English and then was translated to Tigrigna and then translated back in to English in order to check for accuracy. Questionnaire was design from similar studies.
- Data collectors had had a fieldwork diary to put all the notes of the field work for latter consideration.
- The investigator and supervisors was strictly follow the overall activities on daily bases to insure the completeness of the questionnaire, to give further clarification and support for data collectors.

4.9.2 Qualitative Study:

An in-depth interview technique was employed using interview guideline in order to provide more insight and explore the predictors or interplay of factors leading to HIV/AIDS and their perception among street youths.

4.10 Data Analysis and Presentation

4.10.1For quantitative;

Data was checked for completeness, pre-coded and entered then was cleaned by SPSS version 16.0. Data was organized and presented using tables. Univariate analysis was computed.

Binary logistic regression analysis of factors related to perception associated to HIV/AIDS and protective behaviors was calculated. Tests of association were made between both independent and dependent variables using odds ratio when statically significance was considered at p-value of 0.05.

Binary analysis was made among socio-demographic variables, protective behaviors and perception associated to HIV/AIDS by HBM to analyze and avoid confounders in the findings.

4.10.2 For qualitative;

Themes obtained from respondents were coded and recoded, then analyzed using thematic analysis.

4.11 Data Quality Control

The following measures were taken to maximize the quality of data;

- Data collectors were given proper training; about the purpose of data collection, objectives and procedures of data collection.
- The importance of the study as well as the significance of true information was told to the participants.
- Participants were told that their responses are extremely confidential at any circumstances and they can refuse if they wish to do so.
- Adapted instruments were used and adequate supervision was done.

- Participants were told that their responses are extremely confidential at any circumstances
- > Data was checked for completeness and cleaned before and after data entry.

4.12 Ethical Consideration

Ethical clearance for the study was received from Jimma University college of Medicine and public health school of graduate studies. Accordingly, letter of Permission was sought to the Bureau of Social and Labor Affairs of Mekelle town and Local authorities was contacted and informed about the general overview of the study.

The aim of the study was explained to the respondents and confidentiality was assured using code numbers instead of names, personal identifiers was not recorded on the study questionnaire. And it was maintained throughout the research process.

An informed consent form was used to explain the basic nature of the study then informed verbal consent was obtained from all study participants to get the agreement of the respondents to be interviewed.

In addition, during the data collection, we were providing health information about HIV/AIDS risk practices and preventive measure based on the level of each street youth respondent

4.13 Dissemination Plan

Final results (findings) were presented to the Jimma University medical and public health post graduate office, and to the department of health education and behavioral science.

Organizations and all stakeholders who were participating on the study were also present about findings and provide the. And a complete research document with hard copy and electronic data was delivered to Elishadai relief and development association.

4.15 Operational definitions

- 1. **Multiple sexual partners**; having More than one sexual partner the last six months.
- 2. **HIV/AIDS related risk behaviors-** those who had unprotected sex , have sex with non regular partner, exchange sex for money, have more than one sexual partner, use condoms inconsistently and do not use condom at all.
- 3. **Street youths;** youths between the age range of 15- 24 who are absolutely living and spent the night on the street.
- 4. **Substance Abuse**: Poor lifestyle that predispose to HIV/AIDS Infection including chat chewing, alcohol drinking, cocaine, heroin, marijuana, and other drug abuse.
- 5. **Risky Sexual behaviors;** are activities or practices such as; sex with more than one sexual partner ,inconsistent condom use during the last 6(six)sexual encounter, non-paid/paying partner during the preceding 6(six) months , unprotected sex and exchange sex for money will be considered as practicing risky sexual behavior.
- 6. **Perceived susceptibility;** is defined as the respondents 'belief regarding chance of acquiring HIV due to their risky sexual behavior.
- 7. **Perceived severity;** is defined as the respondents 'evaluation of the potential physical and psychological consequences of HIV/AIDS.
- 8. **Perceived barriers;** is defined as the respondents 'perception regarding difficulty or obstacles which may prevent them to practice preventive behavior to HIV/AIDS.
- 9. **Perceived benefit;** of taking action to prevent HIV/AIDS is defined as the respondents belief regarding the effectiveness of various behaviors in reducing the threat of HIV/AIDS.
- 10. **Protective behaviors;** is the direct and indirect influence of the Abstinence ,condom use and VCT to taking the likelihood of preventive measure

- 11. **Perceived barriers of condom;** is defined as the respondents 'perception regarding difficulty or obstacles which may prevent them to use condom.
- 12. **Perceived benefit of condom;** is defined as the respondents belief regarding the effectiveness of using condom in reducing the threat of HIV/AIDS.
- 13. **Perceived barriers of abstinences;** is defined as the respondents 'perception regarding difficulty or obstacles which may prevent them to be abstain
- 14. **Perceived benefits of abstinences;** is defined as the respondents belief regarding the effectiveness of being abstain in reducing the threat of HIV/AIDS.
- 15. **Perceived barriers of VCT;** is defined as the respondents 'perception regarding difficulty or obstacles which may prevent them to be tested.
- 16. **Perceived benefits of VCT;** is defined as the respondent's belief regarding the effectiveness of being tested in reducing the threat of HIV/AIDS.

CHAPTER FIVE

RESULTS

Socio-demographic characteristics of the respondents;

In the age range of 15-24 study participants 33.3% and 66.6% were found between the age range of 15-19 year and 20-24 year respectively at mean age of 20.3 year. This constitutes 7.89% and 92.01% were females and males respectively.

Out of the total respondents 213, 98.1% and 1.9% respondents were orthodox and Muslim, respectively.

Regarding ethnicity, out of 213 (100%) street youths 98.6% were Tigre, and 1.4% Amhara, respectively.

Concerning the educational status of street youths, 93.0% of them were completed and in between primary school (1-8). And the remaining 7.0% were secondary school (9-10) (table 1).

socio-demographic charact	teristics of	Sex		total
street youths		Female No (%)	Male No (%)	No (%)
Age (year)	15-19	6(35.3%)	65(33.2%)	71(33.3%)
	20-24	11(64.7%)	131(66.8%)	142(66.6%)
	Total	17(100%)	196(100%)	213(100%)
Religion of the subject	Muslim	0(00%)	4(2.04%)	4(1.9%)
	orthodox	17(100%)	192(97.9%)	209(98.1%)
	Total	17(100%)	196(100%)	213(100%)
Ethnicity	Amhara	0(00%)	3(1.5%)	3(1.4%)
	Tigre	17(100%)	193(98.5%)	210(98.6%)
	Total	17(100%)	196(100%)	213(100%)
Educational status Primary so	chool(1-8)	9(52.9%)	189(96.4%)	198(93.0%)
Secondary s	chool(9-10)	8(47.1%)	7(3.6%)	15(7.0%)
Total		17(100%)	196(100%)	213(100%)

Table 1: Distribution of street youth's socio-demographic status by sex in mekelle

town, 2011.

Street youth's response to cues acts (education, place of time spent and sources of information);

Out of 213 street youth, only 4(17.4%) youths were illiterate of which male were 2.04% respectively. The remaining at least can read and write (informally learned) up to secondary school level learned accounts 209(98.1%).

Regarding the question if they have been in the school for the last 12 months, out of the 213(100%) respondents, 71(33.3%) and 142(66.6%) of were in the school and out the school for the last 12 months respectively.

Out of 213 street youth study participants 177(84.3%) spent their time at Market/street of which female and male were 12(70.6%) and 165(85.5%) followed by 9.0%9, 2.4% and 4.3% at school, seen video film, and youth center were respectively.

Result from the qualitative study indicates "We are young, unemployed and living in a place where there are virtually no recreational facilities. When we are bounded by these problems and left with other alternatives we forcedly spent our time in unnecessary places and turn to sex thereby increasing our chances of infection HIV".

Out of the total street youth participants, as to their source of information of HIV/AIDS, radio, TV ,radio and newspaper, and FGAE SRH youth center 90(42.3%),61(28.6%),26(12.2%)and 36(16.9) ranked first , second , and third respectively.

 Table 2- distribution of street youths response to cues act (education, place of time

 spent and seen/supported HIV/AIDS cases) by sex in mekelle town, 2011.

Cues to act variables of street youths	5	sex		Total
		Female	Male	No (%)
		No (%)	No (%)	
Education status of the respondents	Illiterate	0(00%)	4(2.04%)	4(17.4%)
Primary	v school(1-8)	9(52.9%)	185(94.4%)	194(91.1%)
Second.	. school(9-10)	8(47.1%)	7(3.6%)	15(7.0%)
total		17(100%)	196(100%)	213(100%)
Was in the school since the last 12 mo	nths Yes	6(35.3%)	65(33.2%)	71(33.3%)
	No	11(64.7%)	131(66.8%)	142(66.6%)
	total	17(100%)	196(100%)	213(100%)
places street youths spent time	Youth center	2(11.8%)	7(3.6%)	9(4.3%)
	School	3(17.6%)	16(8.3%)	19(9.0%)
	Video/film	0(00%)	5(2.6%)	5(2.4%)
	Market/street	12(70.6%)	165(85.5%)	177(84.3%)
	Total	16(100%)	193(100%)	210(100%)
Sources of information on HIV/AIDS	Radio	5(5.55%)	85(94.45%)	90(42.5%)
Te	elevision	7(11.5%)	54(88.5%)	61(28.6%)
Ra	adio and TV	13(50%)	13(50%)	26(12.2%)
Y	outh center	2(5.55%)	34(94.4%)	36(16.9%)
to	tal	15(100%)	186(100%)	213(100%)

PERCEPTION

Over all forty –nine perceptions measurement statements were asked of which youths score below 60% only for three statements. This were people like me to not contract HIV infection, people with HIV/AIDS will die after a protracted period of suffering and if I am positive, I might suffer from the stigma scored 56%,68.1% and 48.3% respectively.

 Table 3- distribution of youth respondents who have low perception for given

 statement in mekelle town, 2011.

Perception of street youths towards	Agree/correct	Neutral	Disagree/incorrect
HIV/AIDS	No%	No%	No %
People like me do not contract HIV	120(56.3%)	18(8.5%)	75(35.2%)
infection.			
People with HIV/AIDS will die after a	119(55.9%)	13(6.2%)	65(30.5%)
Protracted period of suffering.			
If I am positive I might suffer from the	98(48.3%)	21(10.4)	82(40.4%)
stigma			

Out of total of 213 street youth respondents for the statements of perceived risk of which 42.2% participants have high perceived risk of HIV/AIDS. And also out of females and male youths 52.9% and 47.4% participants have high perceived risk of HIV/AIDS respectively.
Out of the total street youth perceived severity of which 86.8% participants have high perceived severities of HIV/AIDS. And also out of 17 females And 196 male street youths 13(76.5%) and 171(87.7%) participants have high perceived severity of HIV/AIDS respectively.

From the total street youth respondents' 58(27.4%) participants have high perceived threat of HIV/AIDS. 3(18.6%) and 55(28.1%) females and males have high perceived threat of HIV/AIDS respectively.

The street youths have low perceived benefit; high barrier and low self efficacy for all protective behaviors (AC and VCT) are 73.7%, 67.7% and 69.8%, 71.4%, 86.8% and 73.7%, 73.7%, 72.3% and 71.4% respectively.

Despite the overall perception of the severity of HIV/AIDS and associated susceptibility, the finding of the qualitative part showed that there were also perceived barriers to protective behavior notably abstinence. In this regard, majority of female IDI participants agreed that there were barriers to abstain from sexual intercourse as explained by different themes such as "males insist us to make sex (coercive or forced sex), poor knowledge and ignorance especially in age group 18-24, due to high sexual derive(feeling), & seeking money and material benefits.

However; there were higher perceived barrier than benefit to C/VCT except in perceived barrier of abstains (table -4).

Table 4- distribution of street youth perception on susceptibility, severity, threat, onHIV/AIDS in mekelle town, 2011.

Perception of street youth	ception of street youth			Total
		Female	Male	No (%)
		No (%)	No (%)	
Perceived susceptibility	Low	11(64.7%)	143(72.9%)	154(72.3%)
	High	6(35.5%)	53(27.1%)	59(27.7%)
	Total	17(100%)	196(100%)	213(100%)
Perceived severity	Low	4(23.5%)	24(12.3%)	28(13.2%)
	High	13(76.5%)	171(87.7%)	184(86.8%)
	Total	17(100%)	195(100%)	212(100%)
Perceived threat	Low	13(81.3%)	141(71.9%)	154(72.3%)
	High	3(18.6%)	55(28.1%)	58(27.4%)
	Total	16(100%)	196(100%)	212(100%)
		S	EX	Total
Perception of street youth		P 1		
		Female	Male	No (%)
		No (%)	No (%)	
perceived benefit for	Low	2(11.8%)	54(27.8%)	56(26.3%)
abstinence	High	15(88.2%)	142(72.2%)	157(73.7%)*
	Total	17(100%)	196(100%)	213(100%)
perceived barriers for	Low	5(33.3%)	62(32.1%)	67(32.2%)
abstinence	High	10(66.6%)	131(67.9%)	141(67.7%)*
	Total	15(100%)	193(100%)	208(100%)
perceived self efficacy for	Low	7(43.8%)	57(29.1%)	64(30.2%)
abstinence	High	9(56.3%)	139(70.9)	148(69.8%)
	Total	16(100%)	196(100%)	212(100%)

perceived benefit of condom	Low	8(47.1%)	53(27.0%)	61(28.6%)
use	High	9(52.9%)	143(73.0%)	152(71.4%)*
	Total	17(100%)	196(100%)	213(100%)
perceived barriers of	Low	4(23.5%)	24(12.3%)	28(13.2%)
condom use	High	13(76.5%)	171(87.7%)	184(86.8%)*
	Total	17(100%)	195(100%)	212(100%)
perceived self efficacy of	Low	2(11.8%)	54(27.8%)	56(26.3%)
condom use	High	15(88.2%)	142(72.2%)	157(73.7%)
	Total	17(100%)	196(100%)	213(100%)
perceived benefit of VCT	Low	2(11.8%)	54(27.8%)	56(26.3%)
	High	15(88.2%)	142(72.2%)	157(73.7%)*
	Total	17(100%)	196(100%)	213(100%)
perceived barriers of VCT	Low	6(35.5%)	53(27.1%)	59(27.7%)
	High	11(64.7%)	143(72.9%)	154(72.3%)*
	Total	17(100%)	196(100%)	213(100%)
perceived self efficacy of	Low	8(47.1%)	53(27.0%)	61(28.6%)
VCT	High	9(52.9%)	143(73.0%)	152(71.4%)
	Total	17(100%)	196(100%)	213(100%)

NB:-Perceived threat: it is the (perceived susceptibility + severity)/2

Sexual experience and history of street youths;

A total of 213 street youths responded, of which 84% were have history of penetrative sex within a range of age group 10-24 at mean age 17.3 year SD 2.6 year. 58.5% of street youths started penetrative sex was in age group of 15-19 year and also, 5.2% had used condom during first sex. 94.7% have been multiple sexual partners and 46.2% have used Coincidental as sexual partner (table 5).

Table.5-Distribution of street youth's sexual history in mekelle town, 2011.

Sexual history		sex		Total
Measurements		Female	Male	No (%)
		No (%)	No (%)	
1. Have you ever had penetrative sex?	Yes	11(64.7%)	131(66.8%)	142(66.6%)
	No	6(35.3%)	65(33.2%)	71(33.3%)
	Total	17(100%)	196(100%)	213(100%)
2. Age of at first penetrative sex by year	10-14year?	2(12.5%)	32(16.3%)	34(16.0%)
	15-19year	13(81.3%)	111(56.6%)	124(58.5%)
	20-24year	1(6.3%)	53(27.0%)	54(25.5%)
	Total	16(100%)	196(100%)	212(100%)
3.During your first penetrative sex are used condor	m Yes	2(11.8%)	9(4.6%)	11(5.2%)
	No	15(88.2%)	187(95.4%)	202(94.8%)
	Total	17(100%)	196(100%)	213(100%)
4. Number of sexual partners in the last 12 months.	One	0(00%)	11(5.7%)	11(5.3%)
	More than two	15(100%)	181(94.3%)	196(94.7%)
	Total	15(100%)	192(100%)	207(100%)
5.type of sexual partner	Peer	3(18.8%)	14(7.2%)	17(8.1%)
	CSW	0(00%)	83(42.7%)	83(39.5%)
	Coincidental	11(68.8%)	91(46.9%)	97(46.2%)
	I do not know	2(12.5%)	6(3.1%)	6(2.9%)
	Total	16(100%)	194(100%)	210(100%)

Protective behaviors of street youths;

Street youths have practiced to protect themselves against HIV/AIDS from expected categories, 26.3%,33.3% and 23.4% are abstained, condom used, and VCT respectively taken as a protective behavior in the last 12 months(table 6).

Table.6-Distribution of street youth's responses by their protective behaviors and sex in mekelle town, 2011.

Currently used Protective	behaviors of	Sex	Total	
street youths.		Female	Male	No (%)
		No (%)	No (%)	
Abstinences	Yes	2(11.8%)	54(27.8%)	56(26.3%)
	No	15(88.2%)	142(72.2%)	157(73.7%)
	Total	17(100%)	196(100%)	213(100%)
Using condom	Yes	6(35.3%)	65(33.2%)	71(33.3%)
	No	11(64.7%)	131(66.8%)	142(66.6%)
	Total	17(100%)	196(100%)	213(100%)
Tested for VCT	Yes	6(35.3%)	45(22.9%)	51(23.4%)
	No	11(64.7%)	151(77.0%)	162(76.6%)
	total	17(100%)	196(100%)	213(100%)

Street youth's risk perceived on HIV/AIDS with protective behaviors taken to avoid HIV infection;

A total of 213 street youths responded on risk perceived of HIV/AIDS of which majority street youths 713 have taken at least one protective behavior (AC/VCT) of those strategies of this 64.7% have been both perceived risk and protective behavior. Also out of 71 respondents those have both low perceived risk and have not protective behavior were 19.9%. This indicated as when youths have higher perceived susceptibility of HIV Street infection is proportionally result a high taking protective behavior (AC/VCT) against infection.

Table.7-Distribution of street youth's risk perceived on HIV/AIDS with protective behaviors taken to avoid HIV infection in mekelle town, 2011.

Perceived risk of street youths	Perceived risk		Total	
			No (%)	
	Low	High		
Protective behavior YES	11(64.7%)	6(35.3%)	17(100%)	
NO	131(66.8%)	65(33.2%)	196(100%)	
Total	162(76.6%)	51(23.4%)	213(100%)	

As the binary logistic regression result shows, there is significant association between perceived barriers and not abstained. Those who had perceived barrier are 0.47 times less likely to abstained than those who had not had perceived barriers at OR=0,47 (95% CI;0,28,0.80).

And there is Significant association between perceived severities for HIV infection and abstained. Those who had perceived susceptibility are 1.6 times more likely to abstain than those had not had perceived severity at OR=1.67(95% CI; 1.14, 2.14).

According to the binary logistic regression analysis, there is Significant association between perceived benefits of abstains and abstained were also obtained. Those who had perceived susceptibility are 2.38 times more likely to abstained than those who had not had perceived benefits at OR=2.38(CI;1.4,4.03).

Table.8-DistributionsofsignificantlyassociatedindependentvariablesandAbstinence in mekelle town, 2011.

Ind. Variables		Response		Abstains			
		Yes	No	Crude		Adjust	
				OR	95%CI	OR	95%CI
Perceived barrier to abstain	No	157	193	1		1	(.28,.80)
	Yes	56	24	1.07	(.65,1.75)	.47**	
Perceived susceptibility	No	168	189	1		1	(1.14,2.46)
	Yes	52	28	.953*	(.57,1.52)	1.67**	
Perceived benefit to abstain	No	24	56	1		1	(1.40,4.03)
	Yes	193	157	.963	(.56,1.63)	2.38**	

There were significant association between perceived severity for HIV infection and use condom. Those who have not had perceived susceptibility is 0.84 times less likely to use condom than those have not had perceived susceptibility at OR=0.84(95% CI; 0.22, 0.12).

A finding from the binary logistic regression showed that there is significant association between used condoms at first time sexual history and currently (the last 12 months) used condom. Those street youth who used condom at first time sexual history and currently (the last 12 months) used condom .645 Times sexual intercourse (penetrative sex) at) OR=.645.

A result from the binary logistic regression showed that there is significant association between perceived severity for HIV infection and use condom was observed. Those who have perceived severity are 1.42 times more likely to use condom than those who have not had perceived severity at OR=1.42(95% CI ; (1.17, 2.99)).

According to the finding of binary logistic regression analysis there is significant association between age and use condom was observed. Those who have 20-24 year 0.73 times less likely used condom compared group less than this age group at OR=0.73(95% CI;(0.24,0.22)).

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Table.9-Distributions of significantly associated independent variables and condom use in mekelle town, 2011.

Individual variables		Respon	esponse		Condom use		
		Yes	No	Crude		Adjust	
				OR	95%CI	OR	95%CI
Perceived	High/yes	150	103	1		1	(.22,.12)
susceptibility	Low/no	53	15	.60	(.20,1.74)	.84**	
Age	15-19	31	59	1		1	(.24,.22)
	20-24	18	40	.71	(.31,1.60)	.73**	
Condom use	Not used	142	5	1		1	(.24,.22)
during first time	Yes used	24	58	.615.2	(.56,1.63)	.644	
sexual							
intercourse							
Perceived	Low	28	35	1		1	(1.17,2.99)
severity	High	38	83	1.49	(.78,2.85)	1.42**	

A finding from the binary logistic regression showed that there is significant association between time spent and done VCT. Those who have spent their time at market/street 1.63 times less likely is being tested than those who spent their time at youth center.

Table.10-Distributions of significantly associated independent variables andVoluntary counseling and test in mekelle town, 2011.

Ind. Variables		Response		Voluntary counseling and test			
		Yes	No	Crude		Adjust	
				OR	95%CI	OR	95%CI
	School	3	12	1	1	1	
Cues to act	Market/street	126	84	1.481	(.94,2.32)	1.53	(.93,2.42)
Place time	Video/film	8	6	1.457	(.50,.13.3)	2.35	(.45,12.3)
spent	Youth center	5	7	1.588*	(1.03,2.4)	1.51	(1.05,2.51)

NB.

Condom used -not included street youths were not have information about condom and

abstained.

Abstains-do not included those who are tested.

VCT- not included those did not have information about HIV/AIDS.

QUALITATIVE STUDY

IN – DEPTH INTERVIEW PROFILES

Street Youth have access for HIV/AIDS information

All stockholders replied that youths in mekelle town have been accesses to HIV/AIDS information and then they acknowledged different street youths source of information's as follow youth center and school by mekelle town municipal health office; FGAE, FHI, MAMs for MAMs, Tesfago, and national campaigns of HIV/AIDS by the mekelle town HAPCO and Anti AIDS clubs and youth center by FGAE youth center in mekelle town. FGAE youth center head emphasize on their effort to provide health information to bring youths(including street youths) behavioral change concluding that youth behavioral change seen very minimal.

HIV/AIDS is the problem of street youth

For the question HIV/AIDS is the problem of mekelle town street youth on reply seen the difference mekelle town youth, sport and culture office and FGAE, youth center in mekelle town agreed that it is the major health problem of youth this is reflected by many street youth we know they are missed parents, peer and also seen high prevalence of VCT tested result among age group 19-24 years respectively. in the opposite replied from mekelle Town Municipality health office and HAPCO were rationalize the new theme" HIV/AIDS is not a problem of street youth" from observation there is no street youth death like before from HIV/AIDS and then imp sized by connotation that" street youths

problem is acute case like malaria rather than chronic disease HIV/AIDS" and he estimated" its prevalence is 11.4% in town mekelle".

Can HIV/AIDS be prevented by street youths?

For the Question asked about street youths can prevent HIV/AIDS. FGAE SRH youth center and HAPCO were agreed and provided abstains as better strategy to promote before marriage even if it's difficult due to peer pressure. Moreover, they stated different Alternatives like AC that help street youth to prevent HIV/AIDS with increasing their knowledge about HIV/AIDS .Beliefs on HIV/AIDS Beliefs of street youth on HIV/AIDS mentioned by mekelle Town Municipality health office are some street youths dislike condom because they believe that" condom itself causes HIV and it's a result of sin". mekelle town HAPCO and FGAE SRH youth center" condom causes HIV/AIDS and virus made artificially to destroy humankind".

Does street Youths are Vulnerable for HIV infection

For the question why street youths are highly vulnerable in mekelle town ,youth and sport office that youths do not accept our advice especially in age group of 15-24 year and saying among youths" there is no HIV/AIDS after at night(4.00pm) ". In addition there is no recreational area like library, sport material and even place for youth to spend their time. FGAE, youth center in mekelle town mentioned there is large number of unemployed and lack of recreation area for youth Increase Street youths exposed for high – risk sex.

Suggestions given for street youth program intervention

- There is no integrated (net work) activity among different NGO, Ider leaders, religious leader and us (Municipality health office, mekelle Town).
- Fight HIV/AIDS considering is problem of all of us, responsibility and accountability to all organization/sectors and also all individuals, family and community (FGAE, SRH youth center, mekelle Town).
- There are differences in commitment for example HIV/AIDS prevention conceded as additional duty so others sectors not give due attention to the program. HIV/AIDS prevention it not one time activity like a ceremony meaning not consistent throughout the year (IDI, mekelle town youth, and sport mekelle town),

CHAPIER SIX DISCUSSION

The study attempted to assess predictors of protective behavior of street youths on HIV/AIDS, using Health Belief Model, in mekelle town. The study findings may serve as important contribution to public health especially in identifying essential predictors of protective behavior of HIV/AIDS and by exploring new themes using qualitative study for behavioral change communication.

In this study, 66.6% street youths were found to have a history of penetrative sex with in a range of age group 10-24 year and with a mean age of 17.3 year (SD+ 2.4).of which 58.5% had started penetrative sex in age group 15-19 years. Surprisingly 94.8% street Youths had not used condom at first sexual intercourse. Virtually, other studies in three towns (Diire Dawa, jigiga and bahlr dar.) found that 45-55 % of youths were sexually active and 17.4% had had risky sex (20). This indicates that there is a high risk of sexual behaviors even before the age of maturity and developing perception on HIV infection. Other studies conducted by shabbier et al. also showed that the average age of sex debut were 16.6 years (+2.3 SD) and concluded that street youths are vulnerable and deserve attention (16, 17). In the present context, those street youths who used condom at first time sexual history and use condom regularly for the last 12 months are more likely to use condom than those who had not use at their first sexual intercourse.

The majority of street youths 98.6% living in mekelle town has information of about HIV/AIDS. Similar studies also indicated that in different towns of Ethiopia, having heard of HIV/AIDS was over 95% (20). The present study has also shown that majority (above 90%) of street youths' sources of information were mass media. Surprisingly, only 108(50.8) of street youths mentioned at least three protective strategies of HIV/AIDS.

Evidences from the in-depth interview reflected that majority of the participants unanimously reported that as street youths have information about HIV/AIDS. Youth centers were the other sources cited by some participants.

Reported by few of the participants during the in-depth interview, although the sample size is small, the findings shown some gender differences regarding the major sources of information. With respect to this, majority of IDI participants agreed on one or more the possibilities to prevent HIV/AIDS by following the rule of ABC strategies. Avoiding sharing sharp items was also mentioned as one method of preventions the disease.

This also evidenced by IDI participants in an attempt to emphasize the problem as well as to provide conclusive remarks on the views of many male about places of they spent time participants said:

"We are young, unemployed and living in a place where there are virtually no recreational facilities. When we are bounded by these problems and left with other alternatives we forcedly spent our time in unnecessary places and turn to sex thereby increasing our chances of infection HIV".

Above 60% youths in Mekelle town have high perceived risk, severity and threat of HIV/AIDS in both female and male. Yet, for specific perception of susceptibility on statement" people like me do not contract HIV infection" the percentage was 56.3%. Even though the street youths still have higher perceived severity compared with 6.5% and 18%, they have low perceived susceptibility. Accordingly they do not felt that as they are at risk or at high risk for HIV infection (11, 20). This is evidenced by optimistic bias theory as it explains that many people think along the lines of "AIDS/STDS etc. can't happen to me" with a consequence that many systematically underestimate their risk in comparison to the real risk (29)

Despite the overall perception of the severity of HIV/AIDS and associated susceptibility, IDI participants disclosed that there were also perceived barriers to protective behavior notably abstinence. In this regard, majority of female IDI participants agreed that there were barriers to abstain from sexual intercourse as explained by different themes such as "males insist us to make sex (coercive or forced sex), poor knowledge and ignorance especially in age group 18-24, due to high sexual derive(feeling), & seeking money and material benefits.

One participant from HAPCO said

"Abstinence is impossible in street youths because girls are often made to engage in sexual intercourse owing to forced which will force the girl later to turn to Promiscuity and there by prostitution if the marriage happens to be unsuccessful" In an attempt to strongly emphasize the difficulty of practicing abstinence and making sex is quite human, a 27 years old man participant also interrogatively put it as "why God created Adam and Eve in this world!"

Virtually the quantitative finding showed that those who had perceived barriers are less likely to abstain than those who had not had perceived barriers implies the strength of perceived barrier to abstain.

The issue of sexual fidelity was the other theme posed to the IDI participants. Most revealed that sexual infidelity is quite common. One Female participant explained it in terms of lack of mutual sexual compatibility and dissatisfaction, quick turning of most males to a female who is more attractive than what they already have and unmet wants and needs of females which would force them to twist their faces to some other men. Absence of true love, dearth of commitment and sacrifice to a partner, misunderstandings, peer pressure, female's action and dressing, money reinforcement for sex, mistake (we are not absolute), dishonesty of females, encountering better girls than already occupied, alcoholism and drunkenness leading to casual sex with female other than a partner were purported by majority of male discussants as barriers for sexual infidelity for their partners.

The most recurrent theme that emerged from all IDI participants conducted with females suggested that there are misconceptions about condom. This included condom created untruth between friends, condom can't prevent HIV, and condom reduces sexual arousal.

Sudden or causal sexual feeling or arousal, fear to buy condom in local area, a strong affection and dependability up on a lover, forced sex and unwillingness on the part of HIV positive males are also some of the reasons attributed for not using condom among female participants.

And also majority of male IDI participant mentioned barriers to practice unprotected sex in the same way still suggestion the prevalence of misconceptions about condom. The reasons for not using condom included: condom reduces sexual urges and pleasure, condom does not give sexual comfort and it is not 100% protective. Long period of friendship and perceived loyalty, to show fidelity and to be believed, excessive alcohol drinking, girl friend have an aversion to condom and to make her pregnant were also cited as barriers for not using condom during sexual practices by male participants. Participants admitted that they don't want to use condom

A 17 year old male participant aggressively expressed that I don't like condom. I Always hear about the benefits of condom but I don't accept it" bandu jorroya semch bandu joroya affesewallow!" I know what happens in those my friends Used condom (A 17 year old male; participant).

Also IDI evidenced that some youth's dislike condom because they believe that "condom itself cause HIV and it's a result of sin God ". Also "condom causes HIV/AIDS and the virus made artificially to destroy humankind". On top of that added New themes saying among youths" there is no HIV/AIDS after night (4.00pm) "it is similar response by in dire Dawa, male street youths were saying, "there is no HIV/AIDS after 2.00 pm (1400 hours) because this time was taking alcohol or chat chewing (BSS

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qualitative). This indicates that this myths dissemination /acculturated to reduce perceived threats of HIV/AIDS and protective behavior of street youths.

However the quantitative finding showed the likely hood of street youth to use condom determined by the individual experience of first sexual debut, condom used, personal perception susceptibility of HIV infection and severity of AIDS. Thus those street youths may be lack this.

Some of the IDI participants declared during the interview that there are barriers for VCT. Among the barriers purported included fright in terms of positive result, lack of confidence owing to past sexual life and experience, may I missed my friend if I am HIV positive, fear of societal discrimination, not to be considered as promiscuous, fear of being hopeless after having tested positive and also same female participants said that VCT services are not free of cost and often they don't know where the services are provided.

Also IDI evidenced that some higher stakeholders undermine the crisis of HIV and said "it's no more a problem of mekelle youths this theme rationalize by from our observation there is no youth death like before from HIV/AIDS" then he stressed that "youths problem is acute case like malaria rather than chronic disease HIV/AIDS and its prevalence in mekelle town estimated around 11.4%". This kind of outlook may one of determinates for perceived barrier for intervention program integrate with other sectors.

Above 85% street youths in mekelle have higher perceived barrier to over all protective behavior (except to abstain) to avoid HIV infection. Thus, this contradicts with risk

reduction strategy argument that people take preventive action (or ABC and VCT) if they think the costs of the potential illness outweigh the costs of people take preventive measure, and of overcoming reluctance to take preventive. Other studies used HBM show that perceived barrier is the strongest predictor of overall dimensions of protective behavior (19). Thus, action is needed to reduce perceived barrier to outweigh the costs (perceived benefit) to take preventive behavior (ABC and VCT). Of this 64.7% have been both perceived risk and protective behavior.

Also theme of the IDI participants was the issue of; preventing HIV/AIDS. With respect to this, majority of the participants agreed on the possibilities to prevent HIV/AIDS by following the rule of ABC strategies. Avoiding sharing sharp items was also mentioned as one method of preventing the disease in mekelle town, the percentages of street youth who are abstained, use condom, and use VCT were 26.3%, 33.3% and 23.4% respectively taken as a protective behavior in the last 12 months. When it compared with BSS finding (26%, 56%, and 29% were abstain, condom use, and tested respectively) on mekelle, street youths have poor protective behavior than others town. This may be due to absence and Un involvement of youth SRH center and peer education. This also indicates as when street youths have lower perceived susceptibility of HIV infection proportionally they will have less protective behavior (AC/VCT) against HIV infection (19, 20).

In addition most male participants emphasized on the need of adequate condom supply in accessible places and recreational area for youths which according to the participants would play significant roles in the; prevention of the HIV/AIDS.

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According to the finding of this study, those who are working in mekelle town in HIV/AIDS prevention intervention program such as youth centers and other related programs have poor success of overall dimensions of perception and protective behaviors of street youth. But, street youths have higher perceived barrier and lack of intersect oral integration that impeded the likelihood of to take protective behavior against HIV/AIDS.

Limitation of the Study

Some limitations should be noted

1. Some cultural factors such as shame and stigma on admitting homosexuality may have affect the recruitment of study subjects to disclose their sexual behaviors so that nonparticipation and non-response may have influenced the validity of the study.

2. Information bias may limit subjects to provide accurate information on certain sensitive issues such as sexual behaviors.

3. chicken-egg dilemma between perception and behavior.

CHPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

6.1Conclusion

Even if this study did not include local a socio-cultural condition, the results showed that different protective behaviors (AC and VCT) have different level of perception and predictors (determinants). And also each protective behavioral change need different massages and targeted perception formation communication to bring intended protective behavior change against HIV/AIDS.

Majority street youths have poor compressive knowledge of HIV/AIDS prevention and due to misconception of HIV transmission and curability.

Majority street youths started sexual debut in age group of 10-19 years at the mean age of 17 (SD+3 years) and they do not practice safe sex.

In mekelle there are poor integration services among different sectors to stop HIV/AIDS due to under estimation of street youths HIV infection currently.

From street youths who are eligible for protective behavior, few street youth practices protective measures especially for condom use.

There is high level of perceived barrier for all protective behaviors, perceived barrier to abstain and preserved susceptibility to HIV infection and perceived benefit of abstain of abstain are predictors of current street youth abstain.

Street Youth's perceived susceptibility and severities are the strongest predictors (determinants) of use condom. And also street youths who use condom at first time sexual intercourse predicted current use condom. This finding had found age predicts strongly condom usage.

A place where street youth spending their time was the stronger determinant of voluntary counseling and testing.

6.2 Recommendations

This study identified predictors (determinants) of perception and protective behavior. In the light of the findings of the study, the following recommendations were made.

Street Youth need to have information/counseling how to avoid individual perceived barriers to abstain by strengthen assertiveness training and sexuality education. This helps to develop self confidence especially before 15 years of age and identifying other local enabling factors. Moreover, it is helpful to promote primary abstains to prevent sex before marriage and at early age HIV infection by prior individual perception formation on susceptibility to HIV/AIDS and facilitating others local enabling factors like abstained youth club formation.

Health educator /promoter expertise and other concerned bodies doing on street youth HIV/AIDS prevention intervention program have to give due attention in health information on HIV/AIDS message tailored to bring perception formation of individual street youths perception formation on severity of AIDS using credible educational method and media obliging to promote abstinences.

Street Youths have to get health information on having perception of susceptibility and severity of HIV/AIDS. Strengthen the accessibility of condom that are vulnerable age group(10years of age and above) and promote early age condom use initiation by integrated with school clubs, girls club and peer promoters should be done.

Street Youths need mobile VCT service and health information communication about VCT services at the places they spent their time for making VCT services accessible. To avoid misconception and create good comprehensive knowledge of HIV preventive behaviors, it demands street youths and health education providers to have comprehensive level of knowledge about HIV/AIDS and skill to transfer their knowledge based on training.

Street Youths need urgent intervention of appropriate alternative protective behavioral and health education strategies before the age of 15 year for high risk perception formation, to reduce high risk sexual behavior and early age infection of HIV. Those responsible bodies need to have work hard to reduce perceived barriers of AC/VCT to be able street youths prevent them self against HIV/AIDS and sustains protective behavior. The responsible body has to give attention for recreational facilities as priority in youth policy and HIV/AIDS prevention intervention program.

Finally this research lacked cultural aspects of the society that perhaps strongly predict (determine) the perception and protective behavior of street youth thus it is better in the future to incorporate this so as to strengthen the findings.

References

- **1.** FDRE, Ministry of health guideline for implementation of antiretroviral therapy in Ethiopia January 2005.
- 2. Federal ministry of health AIDS in Ethiopia. MOH Addis abeba, Ethiopa, 2002
- 3. Bisrat KAP study in Harare town among high school students on family planning thesis, AAU, 1992;1-8.
- Kassahun Abate, MD, Mph forum on street children- Ethiopia (FSCE) a study on violation of property rights of HIV/AIDS orphans in Bahirdar and Nazareth Ethiopia April 2004.
- Gurung Ga Knowledge and Attitude on HIV/ AIDS and Sexual Behavior of Street Teenagers in Katmandu Valley, Journal of Nepal Health Research Council Vol. 2 No. 2 October 2004.
- 6. FDRE, National health policy; ministry of youth, sport and culture. Addis Abeba, Ethiopia, 12, march 2004.
- Coon. D,(1988),introduction to psychology (5 edition)New York; west publishing company.
- 8. UNAIDS, AIDS epidemic update, UNAIDS, Geneva, 2002.
- National AIDS Council. Strategic framework and guideline from HIV/AIDS in Ethiopia. Addis Ababa, Ethiopia, 2000.
- Federal Democratic Republic of Ethiopia, policy on HIV/AIDS of federal democratic Rep. of Ethiopia, A.A, 1988.
- FSCE and USAID. The situation of street children in eight major towns of Ethiopia. August, 2003. Addis Ababa.
- 12. FORUM ON STREET CHILDREN (FSCE) Baseline survey on street youth, final report for Mekelle town, august. 2003.
- UNAIDS/WHO. 2008 Report on the Global AIDS Epidemic; 2008The Global HIV/AIDS Epidemic, April 2009.
- 14. Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO) Global summary of the AIDS epidemic update December 2007.

- Kissin, Dmitry M , HIV seroprevalence in street youth, St Petersburg, Russia November 2007 - Volume 21 - Issue 17 - p 2333-2340.
- 16. Janz N and M Becker 1984 The Health Belief Model: A decade later. Health Education Quarterly 11 (1) 1-47.Jessor, R. (1998). New Perspectives on adolescent risk behavior. United Kingdom: Cambridge University Press.
- 17. Maswanya, E.S., Moji, K., Horiguchi, I., Nagata, K., Aoyagi, K., Honda, S., and Takemoto, T. (1999). Knowledge, risk perception of AIDS and reported sexual behavior among students in secondary schools and colleges in Tanzania. Health Education Research, 14(2), 185-96.
- Maswanya, E.S., Moji, K., Horiguchi, I., Nagata, K., Aoyagi, K., Honda, S., and Takemoto, T. (1999). Knowledge, risk perception of AIDS and reported sexual behavior among students in secondary schools and colleges in Tanzania. Health Education Research, 14(2), 185-96.
- MacPhail, C., and Campbell, C. (2001). 'Think Condoms Are Good but, aai, I Hate ThoseThings': Condom Use among Adolescents and Young People in a Southern African Township, June, 52(11), 1613-27.
- 20. Sweat, M.D., Nopkesorn, T., Mastro, T.D., Sangkharomya, S., Mac Queen, K., Pokapanichwong, W., Sawaengdee, Y., and Weniger, B.G. (1995). Aids awareness among a cohort of young Thai men: exposure to information, level of knowledge and perception of risk. Aids Care, 7(5), 573-91.
- 21. Macintyre, K., Brown, L., and Sosler, S. (2001a). It is not what you know, but who you knew: AIDS Mortality and Behavior Change in Africa. Aids Prevention and Education, 13(2), 160-174.
- 22. Yamane Beyene. Health and social problems of street children in Nazareth town. May 1995, Addis Ababa.
- 23. Solomon Sorsa, Tesifaye Kidanemariam, Lopiso Erosie. Health problems of street children and women in Awassa, Southern Ethiopia. Ethiopian journal of health development, 2002; 16 (2): 129-137.
- 24. Getachew, etal. Health and psychological aspects of children involved in prostitution in Merkato area. August 1997, Addis Ababa.

- 25. DiClemente, R. (2000). Expanding the scope of HIV prevention of adolescents: beyond individual level interventions. Journal of Adolescent Health, 26, 377-378.
- Resnick MD, P Bearman, RW Blum, 1997, protecting adolescents from hard, JAMA 1997; 278:823-32.
- Sampson, R., Raudenbush, S., and Earls, F. (1997). Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. Science, 277(5328), 918-924.
- 28. Poppen, P., and Reisen, C.A. (1997). Perception of Risk and sexual self-protective behavior: A methodological critique. AIDS Education and Prevention, 9, 373-90.
- 29. Sobo, E.J. (1995). Choosing Unsafe Sex, Aids-risk denial among disadvantaged women. Univ. of Philadelphia.
- 30. Rutenberg, N., Kaufman, C., Macintyre, K., Brown, L., Karim, A., and Kehus-Alons, C. (2000). Pregnant or positive: Adolescent childbearing and HIV risk in South Africa. Paper presented at the annual meeting of the Population Association of America, Los Angeles, CA. Month.
- Mitike Mola, Shabbir Ismail, Abera Kumie, Fikreab Kebede. Sexual violence among female street adolescents in Addis Ababa. Ethiopian Journal of health development 2002; 16(2):119-128.
- Mekonnin Tesfamariam. Factors predisposing street children to HIV/AIDS in Addis Ababa Ethiopia. July 2005, Addis Ababa.
- 33. Solomon Sorsa, Tesifaye Kidanemariam, Lopiso Erosie. Health problems of street Children and women in Awassa, Southern Ethiopia. Ethiopian journal of health development, 2002; 16 (2): 129-137.
- Abeje Berehanu. The situation and survival strategies of female street children in Addis Ababa. 1998, Addis Ababa.
- 35. Janz N and M Becker 1984 The Health Belief Model: A decade later. Health Education Quarterly 11 (1) 1-47.Jessor, R. (1998). New Perspectives on adolescent risk behavior. United Kingdom: Cambridge University Press.

Prohaska TR, G Albrecht, A Levy, N Sugrue, JH Kim, 1990, Determinants of selfperceived risk for AIDS. Journal of Health and Social Behavior, 31(4) 384-94.

APPENDIX

QUESTIONNIRE

JIMMA UNIVERSITY

School of graduate studies department of health education and behavioral sciences FORMAT FOR COLLECTION OF INFORMATION ABOUT STREET YOUTHS PREDICTORES AND PROTECTIVE BEHAVIORS RISKY TO HIV/AIDS A HEALTH BELIEF MODEL APPROACH IN MEKELLE TOWN, ETHIOPIA.

Good morning/good afternoon my name is.....and am working with a researcher from Jimma university to assess predictors and protective behaviors risky to HIV/AIDS a health belief model approach in Mekelle town in the last 6 months. The study will help us to seek solutions for the problem that makes youth vulnerable to HIV/AIDS. Your genuine response will help us to find out the real causes of youths vulnerability to risky sexual behaviors in relation to HIV /AIDS. so that possible intervention will be conducted by responsible bodies including the community and its effectiveness .you have a right to refuse to answer my questions or with draw any time if you feel .I would be grateful if you could spare few minutes of your time to answer some questions .please, note that all the information you will give us will be used for research purpose only and kept confidential. Confidentiality will be assured using code numbers instead of names, personal identifiers will not be recorded on the study questionnaire. And will be maintained throughout the research process.

Do you agree to participate...?

ΡΔRTΙ	Socio-d	emogran	hic ch	aracteristi	rs and	nersonal	informatio	nn
1 AN 1.1	90010-0	iemogi ap	me en	ai acter 1511	ts anu	personal	monau	JII

Q.	QUESTIONS	RESPONSE CODE
No		
100	SEX	Male 1
		Female2
101	Age	
102	Kebelle	1
103	ethnicity	Oromo 1
		Amhara2
		Gurage3
		Tigre4
		Others5
104	Religion	Muslim 1
		orthodox2
		protestant3
		Other (specify)4
105	Educational status	Illiterate1
		Read and write2
		Primary school (Grades 1-4)3
		secondary (Grades 5-8) 4
		secondary (Grades 9-10) 5
		preparatory (Grades 11-12)6
		technical (Grades 11-12)7

Part II. Questions related street youth knowledge on HIV, misconception, ART, VCT and condom in mekelle town, 2011.

Knowledge Of street youths HIV,	Correct (%)	Incorrect (%)	Total (%)	
ART, VCT and condom				
106. Have you ever heard about HIV	/AIDS?	1	2	
107. Do you think that HIV/ADIS is	preventable?	1	2	
108. What are ways of transmit ion?		1	2	
109.Know three prevention	Abstinence	1		
methods of transmission of	Be faithful	2		
HIV/AIDS.	Condom use	3		
Misconception		L		
110.Amosquito bite can transmit HIV	/	1	2	
111.sharing a meal with someone	who is HIV	1	2	
positive can transmit HIV				
112. healthy looking person cannot h	ave HIV/AIDS	1	2	
113 sitting together in school with ch	ildren who have	1	2	
		I		
Knowledge about condom2				
114 Have you ever heard about cond	om?	1	2	
115 Do you know where you can ge	et condom if you	1	2	
want?				
116.mention the places where you ca	n get condom	1	2	
117.have you use condom in this the	1	2		
Antiretroviral therapy				
118. Have you heard about antiretrov	viral therapy?	1	2	

119. Antiretroviral therapy prolong	1	2		
person who is infected with HIV/A				
120.a person who started antiretrov	viral therapy can	1	2	
work/learn in school in any person				
121.antiretroviral therapy cures fro	m HIV *	1	2	
Knowledge about VCT		1	1	I
122. Have you ever heard about Vo	CT?	1	2	
123 Do you know where you can to	est for HIV if you	1	2	
want to have blood test?				
124.can you mention the place of V	/CT	1	2	
125. Have you under gone VCT?		1	2	
Sexual history of street youths in	mekelle town			
126. Have you ever had penetr	rative sex (sexual	1		
intercourse)?				
127.Age of at first penetrative	10-14year	1		
Sex (sexual intercourse) by year?	15-19year	2		
	20-24year	3		
	Total			
128.During your first penetra	ative sex (sexual	1		
intercourse) are used condom				
129Number of sexual partners	One	1		
in the last 12 months	More than two	2		
	Total			
130.type of sexual partner	Peer	1		
	CSW	2		
	Coincidental	3		

I do not know	4	
Total		

Street youths response to cues act (education, place of time spent and seen/supported HIV/AIDS cases)

Cues to act variables	Measurement	code
131.Education status of the	Illiterate	1
respondents	Read and write	2
	Primary school(1-8)	3
	Second. school(9-10)	4
	Preparatory(11-12)	5
132.Have you been in the	Yes	1
school since the last 12 months	No	2
133.places youths spent time	Youth center	1
	School	2
	Video/film	3
	Market/street	4

	Characteristics	Strong	Disagree	undecide	Agree	strongly
		ly		d		agree
		Disagr				
		ee				
301	People like me do not contract HIV AIDS	1	2	3	4	5
	infection.					
302	I am very healthy so my body can resist	1	2	3	4	5
	disease.					
303	I am too young to contract HIV infection.	1	2	3	4	5
304	I am worried that I might contract infection	1	2	3	4	5
	HIV.					
305	People at my age are too young to infect by	1	2	3	4	5
	HIV /AIDS.					
306	People in my age may be infected HIV.	1	2	3	4	5
307	People can contract HIV/AIDS due to their	1	2	3	4	5
	behaviors.					

Part. III Questions to assess perceived susceptibility of street youths towards HIV/AIDS.

	Characteristics	strongly	Disagree	undecid	Agree	strongly
		Disagree		ed		agree
401	People with HIV /AIDS will die after	1	2	3	4	5
	a protracted period of suffering.					
402	HIV/AIDS causes immediate death.	1	2	3	4	5
403	If I got AIDS,I already eventually die	1	2	3	4	5
	of it.					
404	I might suffer from the stigma and	1	2	3	4	5
	discrimination from other people, if I					
	contract HIV /AIDS.					
405	I might suffer from the discrimination	1	2	3	4	5
	from other people, if I practice HIV					
	risky sexual behaviors					

Part. IV Questions to assess perceived severity of street youths towards HIV/AIDS.

V. Questions to assess perception of benefit, and barrier, of using condom.

	Characteristics	strongly	Disagree	undecid	Agree	strongly
		Disagree		ed		agree
501	condom helps me for early avoiding of	1	2	3	4	5
	HIV/AIDS infection					
502	condom doesn't help me to alleviate my	1	2	3	4	5
	anxiety from HIV infection					
503	condom helps me not to infect with	1	2	3	4	5
	HIV/AIDS during sexual intercourse					
504	The cost of condom is not expensive.	1	2	3	4	5
505	I don't use condom because I have belief	1	2	3	4	5
	in my boy/girl friend.					
506	I don't use condom because I fear to buy	1	2	3	4	5
	of being labeled and stigmatized by the					
	community.					
507	I am sure to use condom in the future.	1	2	3	4	5
508	I can use condom consistently.	1	2	3	4	5
509	if my partner doesn't want to use condom	1	2	3	4	5
	,I will not try to convince					
510	I have the information where to be get	1	2	3	4	5
	condom					
VI. Questions to assess Perceived benefits and barriers on preventive measure of abstinence.

	Characteristics	strongly	Disagree	undecid	Agree	strongly
		Disagree		ed		agree
601	Abstinence helps me for early prevention	1	2	3	4	5
	of HIV infection					
602	Abstinence doesn't help me to alleviate	1	2	3	4	5
	my anxiety of infection.					
603	Abstinence helps boys /girls not to infect	1	2	3	4	5
	before marriage					
604	Abstinence is not difficult for boys /girls	1	2	3	4	5
	until marriage.					
605	I can't abstain because it is not a	1	2	3	4	5
	acceptable in our culture.					
606	I don't use abstinence because my peers	1	2	3	4	5
	may label me and stigmatized me.					
607	I am sure to use abstinence even I have	1	2	3	4	5
	boy /girl friend in future.					
608	If my boy /girls friend doesn't want to me	1	2	3	4	5
	abstain, I will not try to convince her/him					
	to do so.					
609	Abstinence as best measure for youth	1	2	3	4	5
	prevents HIV /AIDS.					

VII Questions to assess perception of benefit and barrier of implementing VCT.

	Characteristics	strongly	Disagree	undecid	Agree	strongly
		Disagree		ed		agree
701	VCT helps me for early referral to ART	1	2	3	4	5
	treatment and support if I have the					
	infection					
702	VCT doesn't help me to alleviate my	1	2	3	4	5
	anxiety on HIV /AIDS status					
703	I am too young to contract HIV infection	1	2	3	4	5
704	The cost of VCT is expensive.	1	2	3	4	5
705	I don't use VCT because I fear that the	1	2	3	4	5
	result would be shared with parents or					
	partner (s) without my consent.					
706	I don't use VCT because I fear of being	1	2	3	4	5
	labeled HIV positive and stigmatized by					
	the community /my peer					
707	I am sure to use VCT in the future.	1	2	3	4	5
708	if my partner doesn't want to e screened,	1	2	3	4	5
	I will not try to convince her/him to do so					
709	I have the information where to be tested	1	2	3	4	5

V *III* Questions to describe street youth's self-efficacy on implementing protective behaviors (VCT, Abstinence and condom use).

	Characteristics	Strongly	Disagree	undecide	Agree	strongly
		Disagree		d		agree
801	I am sure to use VCT in the future.	1	2	3	4	5
802	I have the information where to be tested	1	2	3	4	5
803	I am sure to use abstinence even I have boy /girl friend in future.	1	2	3	4	5
804	I am sure to use condom in the future.	1	2	3	4	5
805	I don't use condom because I fear to buy of being labeled and stigmatized by the community.	1	2	3	4	5
806	I can use condom appropriately.	1	2	3	4	5
807	Abstinence is not difficult for boys /girls until marriage.	1	2	3	4	5
808	Abstinence as best measure for youth prevents HIV /AIDS.	1	2	3	4	5
809	I can't use condom consistently	1	2	3	4	5

 Name of interviewer: - _______ signature ______ Date: - ______

 Supervisor Name: - ______ signature ______ Date:-______

QUESTIONNAIRE FOR QUALITATIVE STUDY

IN-DEPTH INTERVIEW

Date:	 	
Time:	 	

Place: _____

_____•

_.

_____•

Topic/ in- depth interview: perception and sexual behavior of the street youths on HI V/AIDS $\,$

1. Does HIV/AIDS are the problem of street youths?

2. Do youth have access health information for HIV/AIDS?

3. What is the Interplay of factors leading to HIV/AIDS among street youths?

4. How and why street youths are vulnerable to HIV infection?

5. Level of sexual behaviors risky to HIV/AIDS among the street youths.

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6. What is the Perceived severity of street youths toward HIV/AIDS?

7. What are the Perceived benefits of street youths on taking preventive measures (ABC and VCT).

ጅማ ዩንቨርስቲ

ፓብሊክ ሄልዝ ድሕሪ ምረቓ ትምህርቲ ክፍሊ

ብዛሪባ ኣብ ጎዳና ዝመሓደሩ መንእስይት ኣብ ኢችኣይቪ ዘለዎም ኣረኣእየን ኣተሓሳስባን ከምኡ ድማ ዝንብርዎ ምክልካልን መንስኤ ምክልካልን ዝምልከት ቃለ ምጠይቅ ዝሓዘ ቅጥዒ

ከመይ ኣርፊድኩም/ውዒልኩም/፣ስመይ.....፡፡ምስ ካብ ጅማ ዩንቨርሲቲ ዝመስአ ተማራማሪ እየ ዝሰርሕ ዓላምኡ ድማ ብዛሪባ ኣብ ንዳና ዝመሓደሩ መንእስይት ኣብ ኤችኣይቪ/ኤድስ ዘለሥም ኣረኣእየን ኣተሓሳስባንን ዝንብርሥ ምክልካልን መንስኤ ምክልካልን ዝምልክት ሓበሬታ ንምእካብ ጠቅም ፡፡ከምኡ ድማ ኣብ ንዳና ዝመሓደሩ መንእስይት ን ኤችኣይቪ ዘለሥም ተጋሳሲነት ፍታሕ ንምትእልሳሰን ይጠቅም፡፡ፍታትኩም ትክክለኛ መልሲ ትክክለኛ መንስኤ ኤችኣይቪ/ኤድስን ኣብ ንዳና ዝመሓደሩ መንእስይት ንኤችኣይቪ/ኤድስ ዘለሥም ተጋሳሲነት ንምፍላጥ ይጠቅም፡፡ማንም ስብ ኣይምልስንማስት ወይ ከዓ ኣብ ሞንጎ ምቁራስ የክእል እዩ፡፡ኩሉ ትህብሥ ሓበሬታ ንምርምር ጥራሕ ዝውዕል እዩ ፡፤

ተ.ቁ	ሕቶታት	መልሲ	hÉ
100	『ナ・	ደቂ ተባይተዮ	1
		ደቀንስትዮ	2
101	'nÉ ơn		
102	ቀበሌ		
103	ዓሌት	አሮሞ	1
		አማዛራ	2
		ትግራዋይ	3
		ካሲኢ	
104	<i>፞</i> ታሐይ ማ ኖት	አስሳም	1
		ኦርቶዶክስ	2
		ý ረቴስታንተ ካሊአ	3
105	ትምርት ደረጃ	² Åተማህረ	1
		መጽሐፍን ምንባብን	2
		h1-4 ឆ h5-10 ឆ h10-12	3

¡ õ ሊ Ι ሕቶታት ብዛሪባ Όላዊ ሓበሬታ ዝምልክት ቅጥዒ

_፤ õ ሲ II ሕቶታት አብ ጎዳና ዝመሐደሩ መንእስደት ስለ ኤፑ አይቪ ኤድስ ዘለዎም አፍልጦ ዝምልክት

ተ.ቁ	ሕቶታት	መልሲ	hÉ
106	ርክብ ፈዒምካ ዶ ትፈልጥ ?	• ኪ.	1
		አይፈልጥን	2
107	ኮንዶም ከይተጠቀምካ ርክብ	አብ <i>መ</i> ጨረሻ • ር _i ብ	1
	ሬጺምካ ዶ ትሬልጥ?	አብ <i>መ</i> ጨረሻ • ር _i ብ	2
		መÉ <i>ኃ</i> ኒት ተጠቀምቲ አብ	
		መፊ ረሻ ር _i ብ ምስ	3
		ባሪስታ•	4
		አይፈፀምኩም	
108	በሐÃሊ መስተ ር¡ ብ ð ፲ምካ	UAN2₃	1
	ዶ ትፈልጥ?	UÅ UŠѲ₃	2
		አይፈልጥን	3
109	በሐይሲ መድኒት ርክብ	ኩሎጊዜ	1
	ፈ ፂምካ ትፈልጥ ዶ?	UÅ UÅ Ñ₂₃	2
		አይፈልጥን	3
110	ኮንዶም አበይ ትሪክብ ?	አብ መድኒት መ <i>ጋ</i> ዚን	1
		አብ ክሊንክ/ ሆስፒታል	2
		አብ <i>መምሪ</i> ሂ ቤተሰብ	3
		አብ ባር/ሆቴል	4
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		5
111	ኮንዶምን ንምን• À ኢካ	ፅንሲ ንምስሳክል	1
	ትጠቀም?	ህማማተ ለመከሳከል	2
		ኤት አይ ቢን ንመከሳከል	3
112	እንድሕር 206፣ኣይጥቀምን	ድሴተ ጥንሲ	1
	ኢሉ <i>፣ን</i> ምንታÃ ኢካ ኮንዶም	አብ ኢዳይ ዝስዘይህዝ	2
	ዘይ ተጠቀም?	በቀሊሉ ስስዘይርከብ	3
		ከቢድ ስስዝኮነ	4
		አርክይ ስለዘይትደልይ	5
		አድሳይ ኢስአያምን	6
		አይሐስቦን	

			7
113	ክንደይ ናይ ፆታዊ ር _i በ	υÅ	1
	መሐዙት አብዘሓለð 6	_i ልተ	2
	" ርዛሔ ነይረናክን	ሰልስተ	3
		ሃርባክተ	4
114	አብ መጨረሻ ርክብ ክትፍጽም	<b>እ</b> አወ	1
	ከለካ መስተ ስቲካ ኔርካ ዶ?	አይፌልጥን	2
115	ኤች አይቪ ኤድስ በሓÅÑና	• "	1
	፲ ታዊ ርክብ ከምዝመሓሳሰፍ	አይፈልጥን	2
	ት73ዘብዶ?		
116	ሕቶ 210 እወ/ አይናይ	ስሪንጅ ሀብሪካ መጥቀም	1
	ተÓባር እዩ ኤች አይቪ ኤድስ	ኮንዶም ሁልÓ²₅	2
	i መሓሳልዕሉ ´ ክሕል?	²ÃơɒØቀም	
	1	ï ታዊ• ር¡ ብ ምስ ÉራÓ	3
		ተÖቀምቲ	4
		ስርዓት ዘይብሉ ርክብ	
		<b>ም</b> õ ç <b>ም</b>	
117	ኤች አይቪ ኤድስ መከልካል	• "	1
	ዝከአል ይመስልካዶ?	አይፈልጥን	2
118	ሕቶ 212 •	ምክቃብ	1
	መንገዲ መከልካል	ኮንዶም ምጥ <i>ቃ</i> ም	2
	ኤችአይቪ/ኤድስ አመልክት ?	ምትእምጣን	3
		በõ <i>ቃ</i> Éካ ምመርመር	4
		አይፈልጥን	5

<u>j õሊ III ሕቶታት አብ ጎዳና ዝመሐደሩ መንአስያት ብዛሪባ ምግላጽ ኤቶ አይቪ ኤድስ</u> <u>²ስ- ም አ</u>ትሓሳስባ

<b>ተ</b> . 束	ሕቶታት	ብጣሪ ሚ ይስማ ማሪ	ይስማማ ዕ	ማእከሳ ይ	አይስ ማማሪ ን	ብጣዕ ሚ አይስ ማማሪ ን
30 1	ከመይ ዝበሉ ሰባት ኤች አይ ቪ አይህዞምም	1	2	3	4	5
30 2	Öእናይ ሙሉ ስለዝሆነ ሰውነተይ አይጠቃእን	1	2	3	4	5
30 3	መንእሰይ ስለዝሆንኩ ኤች አይቪ ኤድስ አይእዘንን	1	2	3	4	5
30 4	ኤች አይቪ ከህዘኒ ስለዝህል በጣም ይጨነቅ• Â	1	2	3	4	5
30 5	አብ ናተይ •Éመ ¡ልል ²ለ- ሰባት ንጾታዎ ርክብ አይበጽህን	1	2	3	4	5
30 6	አብ ናተይ • É መ _ା ልል ² ለ- ሰባት ንጾ• - ር _ነ ብ ´ በê ሁ Äም	1	2	3	4	5
30 7	በምክንያት ሀደንኛ ፣ • - ር _i ብ ን ኤች አይቪ ኤድስ ዝተ <i>ጋ</i> ለፁ እÄም	1	2	3	4	5

## <u>j õ ል IV ሕቶታ ት ብዘሪባ ሓዳለኛንት ኤች አይቪ /ኤድስ ዘለዎም ግንዛቤ ዝመልከት</u>

イ. 来	ሕቶታት	ብጣዕ ሚ ይስማ ማዕ	ይስማማ ዕ	ማእከላ ይ	አይስ ማማ ዕን	ብጣዕሚ አይስማማ ዕን
40	ኤች አይቪ ኤድስ ተሸክምቲ	1	2	3	4	5
1	Éህሪ ብ²∿ህÃ ስቃÃ Ãሞቱ					

40	ስርዓት ዘይብሉ ፆ• ዊ ር _i ብ	1	2	3	4	5
2	ቀØታ መንስኤ ኤች አይቪ					
	ኤድስ • ¿					
40	እንደሀር ኤች አይ ቪ ተሸካሚ	1	2	3	4	5
3	ኮይነ በ <i>ቃ ዳርጋ</i> ዝሞትኩ¿					
40	እንደመ ኤች አይቪ ተሸካሚ	1	2	3	4	5
4	ኮይነ ሰባታ ከግልሱኒዮ					
40	እንደሀር ስርዓት ዘይብሉ ፆታዊ	1	2	3	4	5
5	ርክብ ጌረ ሰባት ከማልሱኒ					

# <u>¡ Õ ል V ህቶታ ት ብዘአባ ምዋቃም ኮንዶም ዘለዎ ጥቅሚን ማሕልካታትን 2ለ- ም</u> <u>ግንዛቤ ዝመልከት</u>

501	ስምዶም ካብ ኤች አይ ቪ ይከሳከል• ¿	1	2	3	4	5
502	ኮንዶም ኤች አይ ቪ በመከልካል ረንድ	1	2	3	4	5
	ካብ					
503	ኮንዶም አብ ፆታዊ ርክብ ካብ ኤች	1	2	3	4	5
	አይቪ አይከሳከልን					
504	ዋጋ ኮንዶም ከባር • ¿	1	2	3	4	5
505	ሠዓርከይ እምነት ስለዘለኒ ኮንዶም	1	2	3	4	5
	አይጠቀምን					
506	ኮንዶም አይጠቀምን ምክንያቱም	1	2	3	4	5
	<i>ን</i> ምግዛ <b>እ ስ</b> ለ´ ð ርሕ					
507	ንቀፃሊ ኮንዶም ከምዝጥቀም ርግፀኛ • የ	1	2	3	4	5
508	ዓርክይ እንደሀር ዘይደልሀ አይጥቀምን	1	2	3	4	5
509	<i>ኮንዶም ንመ</i> ጥ <i>ቃ</i> ም አርከይ	1	2	3	4	5
	አይስማምዓን					
510	ኮንዶም አበይ ከምዝር _i ብ <i>ሙ</i> ሱእ	1	2	3	4	5
	<u> </u>					

## jõa VI ሕቶታት ብዘዕባ ኣብ ምዕቃብ ²Λ- ወቅሚን ማሕልካታትን ²Λ- ም

## ግንዛቤ ዝመልከት

ተ.ቁ	ሕቶታት	ብጣሪሚ ይስማማ ሪ	ይስማ ማሪ	ማእከላይ	አይስ ማማሪ ን	ብጣ <b>ሪሚ</b> አይስማማዕ ን
601	ምዕቃብ ንዓይ ቅድመ ምክልካል ኤችአይቪ ይሕግዘኒ	1	2	3	4	5
602	ምዕቃብ ካብ ምንቂ ምዋቃዕኤችአይቪ ኣየድሕንኒን	1	2	3	4	5
603	ምዕቀብ ስባት ካብ ምャቃዕ ቅድሚ መርዓ ይሕንዞም	1	2	3	4	5
604	ምእቃብክሳብ መርዓ ንአውዳት ና አጋላት ከቢድ አይኮንን	1	2	3	4	5
605	ብምክንት ባሀልና ክዕቀብ አይካእልን	1	2	3	4	5
606	ምእታን ኣዕርኩተይ ክየግልሉኒ ኣይዕቀብን	1	2	3	4	5
607	ንቀሳሊ ዋላካ ዓርኪ ትሃልወኒ ክሪቀብየ	1	2	3	4	5
608	ኣዕርኩትይ እንድሕር ዝይተዓቂቦም፣ንክዕቀቡ ኣየባድዶምን	1	2	3	4	5
609	ንመንእስይት ቀንዲ መማርሲ ምክልካል ኤችአይቪ ምዕቃብ እዩ	1	2	3	4	5

_i õ ል VII ሕቶታ*ት ብዘዕባ* ኣብ ጎዳና ዝሙሂደሩ መንእሰይት ዘለዎም ኣብ *ምምርማር* ²ለ- ወቅሚን ማሕልካታትን ዘለዎም ግንዛቤ ዝመልከት

イ. ま	ሕቶታት	ብ. ይስ ማማ ዕ	ይስማ ማሪ	ማእከላ ይ	አይስማማዕ ን	ብጣሪሚ አይስማ ማሪን
701	ምምርማርዓርሰይ ንክፌልዋ ይጠቅመኒ	1	2	3	4	5
702	ምምርማር ካብ	1	2	3	4	5
703	መንእሰይ ስለ ዝኮንኩ ብኤችአይቨ አይኖቃዕን	1	2	3	4	5
704	ዋ <i>ጋ</i> ምምርማር ኤችአይቨ ክባር እዩ	1	2	3	4	5
705	ውሲኢት ምምርማር ኡችአይቨ.ወለደይ ክይሰምው ስለ	1	2	3	4	5

	ዝፌርሕ ኣይምርመርን					
706	ውሲሊት ምምርማር ኤችአይቨ.	1	2	3	4	5
	ኣውንታዊ ከይኮን ስስ ዝፌርሕ					
	አይምር <i>መርን</i>					
707	ንቀሳሊ ክምርመር እየ	1	2	3	4	5
708	ዓርክይ ንምምርማር ፍቃደኛ	1	2	3	4	5
	ተዘይኮይና፣አየንድዳን					
709	አበይ ከምዝምርመር ሙሉእ	1	2	3	4	5
	ሓብሬታ ኣለኒ					

### *¡ ፩ ል* ∇ *III ሕቶታት ብዘዕባ* ኣብ *ጎ*ዳና ዝመ<mark>ሃ</mark>ደሩ መንእሰያት ዘለዎም ዓርሰ-እምነት ንምምርማር፣ኮንድም ንምዋቃም እና ንምዕቃብ ዝገልድ፡፡

イ. 来	ህቶታት	ብጣሪሚ ይስማማሪ	ይስማማ ዕ	ማእከሳ ይ	አይስማ ማሪን	ብጣሪሚ አይስማ ማሪን
801	ልውድፊቱ ክምረመር የ።	1	2	3	4	5
802	ኣብይ ክምዝምርመር ዛብሪታ አልኒ።	1	2	3	4	5
803	ዋላካርኪ ተሃልውኒ ክቀብ የ፡፡	1	2	3	4	5
804	ልወደፊቱ ኮንደም ክትቀም እየ፡፡	1	2	3	4	5
805	ኮንድም አይትቀምን፣ንምግዛእ ስለ ዝፍርሀ፡፤	1	2	3	4	5
806	ብትክክል ኮንደም ክትቀም ይክእል የ፡፤	1	2	3	4	5
807	ምእቃብ ንውዳት ና አ.ጋላት ከቢድ አይኮንን ክሳብ መርአ፡፤	1	2	3	4	5
808	ምእቃብ ንወታት ቀንዲ ምማርሲ ዩ፡፡	1	2	3	4	5
809	ኩሉ ግዚ ኮንደም ክትቀም ኣይክእልን	1	2	3	4	5

ሥም	ናይ	ጠያቂ	 ð <i>ሪๆ</i> -	 ዕለት	
ሥም	ናይ	ዛላፊ	 <i>ბ ሪጣ</i>	 ዕስት	