IMPACT AND BEHAVIORAL ASSESSMENT OF HIV/AIDS IN ADDIS ABABA POLICE FORCE

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DEDICATION

I would like to dedicate this thesis work to

- All patients whom I have served as physician since they made me who I am today.
- My mother, W/ro Ejigayehu Mengesha, and my father, Ato Emyu Ferrede, who tolerated the neglect of their child while chasing his interest.
- Dr. Yidnekachew W/Meskel, my friend in deed, who sacrificed his privacy for my comfort and success.

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Key Words: HIV/AIDS, Police force/officers, Impact, Behavioral assessment

TABLE OF CONTENTS **PAGE**

List of Tables

PAGE

LIST OF ANNEXES PAGE

LIST OF ABBREVIATIONS

- **AIDS** = Acquired Immunodeficiency Syndrome
- **BSS** = Behavioral Survey & Surveillance
- **CDC** = Centers for Disease Control & prevention
- **CSA** = Central Statistics Authority
- **E.C.** = Ethiopian Calendar
- **EJHD** =Ethiopian Journal of Health Development
- **FDRE** = Federal Democratic Republic of Ethiopia
- **HIV** = Human Immunodeficiency Virus
- **MOH** = Ministry of Health
- **MPH** = Master of Public Health
- **OPD** =Out Patient Department
- **PLWHA =** People Living With HIV/AIDS
- **RVI** = Retro Viral Infection
- **SD** = Standard Deviation
- **SPSS** = Statistical Programme for Social Science
- **STD** = Sexually Transmitted Disease
- **TAH** = Tikur Anbessa Hospital
- **TBC** = Tuberculosis
- **WHO** = World Health Organization

ABSTRACT

HIV infection is the "first wave" of the pandemic and AIDS morbidity and mortality is the "second wave". Economic, social and governance impact is the "third wave". This wave is amenable to a wide range of different responses. Understanding and quantifying the impact of HIV/AIDS is a key component of strategic thinking. The objective of this study is to assess the HIV/AIDS impacts and related behavioral factors in the Addis Ababa police force; and it used a cross sectional survey to achieve the above mentioned objective.

HIV/AIDS related cause of death contributed three quarters of officers' death, and HIV positive or probable HIV infected patients were using the medical service more frequently and at great cost than other officers. Twenty seven percent of officers had multiple sexual partners in the last 12 months, while 107 (33.4%) officers had been engaged in risky sexual intercourse in the last 12 months. Based on the findings it is concluded that HIV/AIDS is a major cause of death and is set to become an expensive health service burden; and still Police Officers are highly vulnerable to the epidemic but feeling falsely safe. Educational activities on risk of HIV/AIDS, STDs and condom use with benefit of voluntary counselling and testing are recommended.

BACKGROUND AND SIGNIFICANCE OF THE STUDY

HIV/AIDS Global Situation

The scale of the AIDS crisis now outstrips even the worst-case scenarios of a decade ago. Dozens of countries are already in the grip of serious HIV/AIDS epidemics, and many more are on the brink. Around the world an estimated 5 million people became infected in 2001. Over the next decade, without effective treatment and care, they will join the ranks of the more than 20 million people who have died of AIDS since the first clinical evidence of HIV/AIDS was reported in 1981 (1).

HIV/AIDS marks a severe development crisis in sub-Saharan Africa, which remains by far the worst affected region in the world. Approximately 3.5 million new infections occurred in 2001, bringing to 28.5 million the total number of people living with HIV/AIDS in sub-Saharan Africa. The estimated number of children orphaned by AIDS living in the region is 11 million. Even if exceptionally effective prevention, treatment and care programs take hold immediately, the scale of the crisis means that the human and socioeconomic toll will remain significant for many generations (1).

Despite well-documented and successful HIV prevention programs in a few countries the HIV/AIDS epidemic continues to spread in Asia and the Pacific. In the recent years the situation has changed rapidly in several parts of the region (2). HIV/AIDS is spreading rapidly through countries of Eastern Europe and Central Asia, which continue to experience the fastest growing

epidemic in the world (3). The epidemic in Latin America and the Caribbean is well established and is in danger of spreading both more quickly and more widely in the absence of effective responses (4). In the countries of the Middle East and North Africa, the visible trend is also towards increasing HIV infection rates, though it is still at very low levels in most countries (5).

Though the rate and absolute numbers of HIV positives are small, HIV/AIDS continues to threaten high-income western countries, where approximately 1.5 million people were living with the virus in these countries (6).

Impacts of HIV/AIDS

HIV infection is the "first wave" of the pandemic and AIDS morbidity and mortality is the "second wave". In much of the Sub-Saharan Africa these waves are with us and can't be stopped, at best they can be slowed. Economic, social and governance impact is the "third wave". This wave is amenable to a wide range of different pre-emptive responses. Unlike the infection and mortality waves, there is nothing inevitable about the impact wave (9).

The sectoral impact of AIDS is best understood in relation to two complementary criteria:

i. The susceptibility of a given sector to high HIV infection levels

ii. The vulnerability of a sector to the impact of AIDS

The most susceptible sectors are generally those in which workers are frequently separated from their spouses and families, in which risk taking is a norm, and in which the bulk of the workforce consists of young to middle aged man. The armed forces, including police and the military in southern, eastern and central Africa are identified as at high risk and included in this group (10).

AIDS is a critical issue for development in Sub-Saharan Africa because of the scale of HIV infection and the number of deaths that will occur in the main productive and reproductive age group, 15-49 year olds. AIDS affects all socio-economic groups and all sectors. The steady decline in human resources impacts profoundly on national capacity as a whole and on certain sectors in particular gradually impeding economic and human development on a scale not witnessed before (11).

In Africa, HIV/AIDS is spreading fastest in the Horn of Africa, where there is already a deep concern about lawlessness and extremism. In both Ethiopia and Kenya, potentially important regional hubs in the violent and volatile East African sub region, adult HIV-prevalence rates are over 10 percent (10).

Across Africa, civil servants, especially security personnel, suffer from higher rates of HIV infection than the general population. In south Africa, as many as one in seven civil servants were thought to be HIV positive in 1998. This has an especially serious impact on the police and judiciary – and thus on law and order. Already weak governments can ill afford further weakening of their judicial institutions – and the growing perception that criminals, guerrillas, and warlords can take advantage of a decaying security situation (36).

HIV/AIDS is directly attacking Africa's institutions of military security as well. Military personnel, peacekeepers, and peace observers rank consistently among the groups most affected by HIV/AIDS, often with infection rates 2 to 3 times that of the local population (9,11).

Good governance can be viewed in many dimensions one of which is the state's monopoly on the legitimate use of force. HIV/AIDS directly affects the state's monopoly on this legitimate use of force. Soldiers and policemen are among the occupational categories with the highest prevalence of HIV. Occupation specific HIV rates are likely to saturate at very high levels for existing cohorts. With this level of attrition, armies' and police forces' level of readiness is reduced. Unit cohesion is undermined as the only way of forming full strength units is by merging different units. They can't perform their functions and individuals at all levels may end up undermining their roles by opportunistic behavior. In the final analysis they may simply cease to be viable as institutions. The state risks losing its monopoly on legitimate use of force. In addition increased crime as numbers of orphaned and street children escalate, and families are improvised make the challenge difficult to weakened state force (9,11).

The epidemic's potential impact on the rule of law is especially important. Although statistics are hard to come by, attrition rates among staff serving in law and order institutions in high-prevalence countries appear to be on par with those in other sectors (such as education and health). In Kenya for example it is estimated that AIDS accounts for up to three quarters of all deaths in the police force (10). The sector also includes judges, prosecutors, court clerks and lawyers – all players in maintaining the rule of law and sociopolitical stability. The attrition rate for Malawi Police Service was 6.1% between 1990-2000 (14).

A peacetime infection rate among military populations is on average 2–5 times higher than among civilians. During conflicts the risk of infection soars dramatically, sometimes by as much as 100 times the civilian average (22). Military and police forces can also be important

vectors in the spread of AIDS within their own countries and, internationally, as members of multinational peacekeeping forces (23).

Within infected security forces, HIV/AIDS may cause serious shortages of qualified and experienced non-commissioned officers, and officers of middle rank who make up the professional core of military and police units. The gap left by seriously ill and incapacitated members encourages the premature promotion of replacements with little command or administrative experience. This in turn further degrades leadership and discipline. Recruitment into the ranks also becomes problematic since 50 per cent of all new AIDS infections occur among 15–25-year-olds, the age group that is the seed-bed for military and police recruitment. As a consequence, the combat-readiness of security forces may be eroded. Similarly, if there is a high prevalence of HIV/AIDS, peacekeeping operations may become complicated and the health of peacekeepers and civilian populations be seriously jeopardized. Under these circumstances, some nations may be reluctant to deploy forces on peacekeeping duties to high-risk areas. Such action could, in turn, undermine UN and regional initiatives and pose problems for foreign policy and international security generally (24).

The epidemic has a profound demographic impact. Since the epidemic began, more than 60 million people have been infected with the virus. HIV/AIDS is now by far the leading cause of death in sub-Saharan Africa, and the fourth biggest global killer. In many countries AIDS is erasing decades of progress made in extending life expectancies. Average life expectancy in sub-Saharan is now 47 years, when it would have been 62 years without AIDS. The impact of AIDS on life expectancy, which signifies a major blow to a society's development, has spread beyond Africa (7).

In the 45 most affected countries, it is projected that, between 2000 and 2020, 68 million people will die earlier than they would have in the absence of AIDS. AIDS has a particularly strong impact on mortality among children between the ages of one and five. In seven countries in sub-Saharan Africa, under five mortality has increased by 20-40 % due to HIV/AIDS (7).

The toll of HIV/AIDS on households can be very severe. In many cases, the presence of AIDS means that the household will dissolve, as parents die and children are sent to relatives for care and upbringing. Loss of income, additional care related expenses, the reduced ability of caregivers to work, and mounting medical fees and funeral expenses collectively push affected households into poverty (7).

HIV/AIDS poses a potentially major threat to food security and nutrition, mainly by diminishing the availability of food (due to falling production, and loss of family labor, land, livestock and other assets) and reducing access to food as households have less money .the prospect of widespread food shortages and hunger is real due to HIV/AIDS (8); some 20 % of rural families in Burkina Faso are estimated to have reduced their agricultural work or even abandoned their farms because of AIDS (12).

In countries where per capita health expenditure is low, extending prevention and care for sexually transmitted infections, counseling and testing, prevention of mother-to-child transmission services, and HIV treatment and care strains health budgets and systems. In sub-Saharan Africa, the annual direct medical costs of AIDS (excluding anti retroviral therapy) have been estimated at about US $ 30 per capita, at a time when overall public health spending is less than US $ 10 for most African countries. Even in high-income countries that appear to be holding

the epidemic at bay, the pressure on health budgets and health insurance schemes is significant (8).

In the early stages, HIV infected persons (often experiencing common bacterial infections) tend to use primary- health care and outpatient services. As HIV infection progresses to AIDS, there is an increase in total hospitalization related to HIV/AIDS (8). In 2001, people living with HIV/AIDS occupied half the beds in Swaziland, Zimbabwe and 33% in one Tanzanian Hospital (13). Without major interventions, the problem will worsen. The World Bank estimates that the number of hospital beds needed for AIDS patients could exceed the total number of beds available in Swaziland by 2004 and in Namibia by 2005 (8).

Several studies have suggested that the epidemic is having a negative impact on the overall quality of care provided. This is manifested by late admission of patients due to staff shortages and staff burnouts (8).

Beyond the increased burden on hospitals and health care facilities, there will be a significant increase in costs for basic health care as the epidemic expands. At the same time, the demand for health services is expanding and more health care personnel are being affected by HIV/AIDS (8). There are very high vacancy levels in Malawi, which are due to high attrition rates, associated with HIV/AIDS-like 47% vacancy rates among registered nurses (14). OAU's special summit on AIDS in April 2001 pledged to allocate 15% of each member country's total annual budget to health care; a reflection of considering the above-mentioned effect (8).

Due to the removal of children from school to care for parents and family members, an inability to afford school fees and other expenses, AIDS- related infertility with a decline in birth rate leading to fewer children and the fact that more children are themselves infected and don't survive through the years of schooling a decline in school enrollment is one of the most visible effects of the epidemic in education sector (15). A 20% decrease in primary school in South Africa and 20-36% in Central African Republic (16,17). AIDS is also hampering the ability of education systems to perform their basic social mandates, as more teachers succumb to the disease. Illness or death of teachers is especially devastating in rural areas, where schools often depend heavily on one or two teachers. In South Africa nation wide AIDS- related deaths among teachers rose by over 40% in 2000-2001 (15).

While the loss of teachers and administrators directly affects the quality of education, there is also the danger that demands on the health and welfare services might divert resources from education to other sectors (15).

For any large or small enterprises productivity and profitability are core concerns. AIDS weakens economic activity by squeezing productivity, adding costs, diverting productive resources, and depleting skills. In addition, as the impact on households grows more severe, market demand for products and services can shrink. A study in several southern African countries has estimated that the combined impact of AIDS related absenteeism, declining productivity and health care expenditure could cut profits by at least 6-8% (15). The impact on informal enterprises can be especially harsh. When the lead entrepreneur is no longer able to work, there is a high risk that the entire enterprise will collapse. High rates of absenteeism, morbidity and mortality trigger increasing disorganization in workforces, as a result of rising staff

turnover, loss of skills, and weakened morale. A study of a company in Zimbabwe showed that AIDS- related absenteeism accounted for 54% of all AIDS related costs, followed by HIV related symptomatic illness at 35% (18). A study of commercial agricultural estate in Kenya showed that AIDS- related medical expenditure surpassed projected expenses by 400% (19).

Though still more research is required to achieve greater precision in the modeling of macroeconomic impact, a range of studies agrees that the net effect of the epidemic on per capita gross domestic product (GDP) growth is negative and possibly substantial. For those countries with national HIV/AIDS prevalence rates of 20%, annual GDP growth has been estimated to drop by an average of 2.6 percentage points. Even recently it is suggested that the rate of economic growth has fallen by 2-4% in sub-Saharan Africa as a result of AIDS (20). The spread of HIV/AIDS seriously erodes human capacity and adversely affects "capacity deepening," which is broadly defined as building upon existing skills in order to increase productivity. Skilled personnel are lost and valuable labor time is consumed when workers become debilitated, and a number of people's work schedules are disrupted when organizations replace workers and managers who are ill or have died. The loss of capacity reduces economic growth (21). A study in Malawi provides sufficient evidence of a high magnitude of human resource capacity erosion in the public service between 1990 and 2000. HIV/AIDS has contributed significantly to this capacity erosion in the public service organizations (14).

HIV/AIDS in Ethiopia

The HIV/AIDS epidemic in Ethiopia is in it's severe and alarming level. The 2001 HIV prevalence estimate in the country derived from sentinel sites based on antenatal clinic attendants

reported that the national adult HIV prevalence rate was 6.6%, urban sites 13.7% and rural areas 3.7%. Bahir Dar, one of the regional states capital cities, showed the highest prevalence of all registered sites in the country at 23.4% (25). It is estimated that about 2.2 million people in Ethiopia are infected with HIV/AIDS, including 2 million adults and 200,000 children in 2001 (26).

In 2001 the Addis Ababa adult HIV prevalence is estimated to be 15.6%. Different sentinel sites in Addis Ababa showed prevalence rates ranging from 12.3% to 17.7%. In the sentinel surveillance study Addis Ababa was the only city for which data were reported for a period of seven years. The data for Addis Ababa show that after a relatively steep increase between 1989 and 1995 (from 4.6% to 21.2%), a period of gradual decline started around 1995. The decline has continued until 2001 (from 21.1% to 15.6%). Other things being equal, the available data showed that the HIV prevalence in Addis Ababa appears to be leveling off and may even improve further if prevention and control efforts are sustained (25).

The prevalence estimate study in 2001 showed that the highest prevalence (12.1%) in the country is among the age group 15-24, representing recent infections. This fact is also reflected by the number of AIDS cases reported in 1996 to 2001 from hospitals around the country. The peak ages for AIDS cases were 25 to 29 for both males and females. Given that the average incubation period between the time of infection and the emergence of full-blown disease is about eight years, the mean age at which people become infected must be 15 to 24 years for females and 25 to 34 years for males (27).

The cumulative number of AIDS deaths by 1999 in Ethiopia since the epidemic struck in the early 80s is consecutively estimated at 1.2 million and expected to increase to 1.7 million by the

year 2002 (28). This is about 6.4% of the total AIDS deaths in the world for a population a little less than 1% of the world population (29). The cumulative number of people that will die of AIDS is projected to be 5.25 million people by 2014. The total population of the country that could have been 92 million by 2014 will only be 85 million because of the disease (28).

In Ethiopia, life expectancy at birth in 1989 was estimated at 45 years and was expected to increase to 53 by 2001 barring major destabilizing events. The increase in HIV related deaths drastically slowed the rate of growth in life expectancy. Estimates taking into account the impact of AIDS resulted in a life expectancy of 46 years instead of 53 years in 2001, and 50 years instead of the expected 59 years in 2014 (30).

In view of the prevailing AIDS related general and age specific death rates, the number of orphans in Ethiopia would increase from 1.2 million in 2001 to 1.8 million by 2007 and to 2.5 million in 2014, other things being equal. Clearly, the increase in the number of orphans is likely to aggravate the already severe problem of homeless children who seek to make a living out of working and living in city streets (31).

HIV has created a major burden on health service of Ethiopia. This is shown by the estimation made on tuberculosis patient numbers. The estimated number of TBC cases obtained by taking into account the compounding effect of AIDS at approximately 50,000 in 1984 increased to nearly 82,680 in 1989 (i.e. 65% increment), and further increased to approximately 126,830 in 1994 (i.e. 154% increment from 1984). By 2014, the number of TBC cases is expected to increase to about 238,820 (i.e. 378% increment from 1984) (31).

In 2000 as much as 42% of all the country's hospital beds are occupied by AIDS patients and this is expected to rise to 54% by the year 2004 leaving only 46% of the beds for all other afflictions in the country (28). According to UNAIDS, if Ethiopia is to adequately care for all the AIDS patients the required health expenditure will rise by 74 to 121 million USD (29).

The study by Abdulhamid estimated the impact of HIV/AIDS in health care by using direct and indirect cost measurement in five hospitals- three public, one NGO and one industrial. It estimated that the income loss due to premature deaths over the 10 years period (1997-2006) stood between US $ 1.5 and 2.7 billion. This is from 32-42% of the national income depending on the discount rate used (45).

A rough estimate of the effect of the epidemic in education is given by the percentage of primary school students that have lost a teacher because of AIDS. This rate for Ethiopia is a significant number- 1.17%. That is 51,000 primary school pupils out of 4.3 million have lost teachers to AIDS in 1999. The highest rate is that of Botswana (3.9%), followed by Kenya and Uganda (1.6%) (29).

UNAIDS projections show that the per capita income growth of Ethiopia will be reduced by 0.6% by the year 2010, which is much lower than the average in sub-Saharan Africa in general. Still this is a significant loss for Ethiopia. Projections based on this amount to a loss of 60 Birr in per capita income by the year 2010 amounting to over 4.8 billion Birr in total income. It is expected that Ethiopia will lose 8.3% of its potential workforce in 2005 and 10.5% in 2020. The loss of workforce could reach 2.45- 2.7 million, with a mean expenditure for treatment of

Birr 1930 and funeral expenses of Birr 327 (several times more than the average income of most households). It is not difficult to imagine the reduced national savings owing to AIDS (29).

In Ethiopia, AIDS affected households were found to spend between 11.6 and 16.4 hours per week performing agricultural work, compared to a mean of 33.6 hours for non-AIDS affected households (8).

By taking incentive earning as a proxy indicator of productivity, Endeshaw quantified differences in productivity between HIV positive and negative workers of a factory in Addis Ababa. Analysis of the baseline data (i.e. in 1997) showed no association between HIV seropositivity and incentive earning (32). Then as of 1998 the incentive earnings of HIV workers were found to be significantly less than those of the HIV negative. In 2000 the days on sick leave of HIV positive subjects were also significantly higher than that of HIV negatives (81% more). The mean number of days on sick leave was 14.62 and 8.06 for HIV positives and negatives respectively (32).

A study by Ahmed extrapolated the demographic impact of HIV/AIDS in Addis Ababa (33). In the absence of AIDS the crude death rate is expected to decline from 7.3 per 1000 in 1984 to 5.3 per 1,000 in 2004. But in the "with AIDS" scenario it is expected to increase from 7.3 to 12.3 per 1,000 in 2004. In the absence of AIDS, life expectancy at birth is expected to rise from 62 years in 1984 to 66.9 years by the year 2004, but in the presence of AIDS it is expected to decline from 62 years to 51.5 years by 2004, i.e. a loss of 15.4 years (33).

A study conducted in the Police Force, in Afar & Addis Ababa regions, to determine the predominant HIV sub type in the areas showed that HIV infection was established in the study subjects (34,35). Among police recruits from Afar Region in the year 2000, 26(6.4%) appeared positive for HIV-1 antibodies. Police recruits from Zone 4 of the region (the principal transportation route connecting Addis Ababa to the harbor of Djibouti pass through this zone), had HIV-1 seroprevalence of 12.7%. This study concluded that even in very remote areas in Ethiopia, such as Afar Region, the HIV-1 epidemic is established.

Despite the overwhelming HIV/AIDS epidemic in the country, attempts to show its impact are minimal. This study tries to reveal the susceptibility and vulnerability of the Addis Ababa Police Force to HIV/AIDS impacts, specially the health impact. Understanding and quantifying the impact of HIV/AIDS is a key component of the strategic thinking about the problem and solution. This is the rationale and the main body of the problem that the paper tries to address.

OBJECTIVE

GENERAL

- To assess the HIV/AIDS impacts and related behavioral factors in the Addis Ababa Police Force

SPECIFIC

1. To determine the contribution of HIV/AIDS in the police force human resource loss.
2. To show the direct financial burden of HIV/AIDS on the police force medical service
3. To determine the knowledge and practice of the police force regarding HIV/AIDS risk behavior
4. To determine the vulnerability extent of the police force to HIV/AIDS

METHODOLOGY

STUDY AREA

Addis Ababa City was the study area. Addis Ababa is a Capital City of the country with a population of 2.65 million projected in 2002, with a total area of 530.14-km^2 and population density of 4,991.1 per km^2 (37). Addis Ababa is a metropolitan city with prestige of being one of the cities in the continent –Africa. This makes Addis Ababa a city sensitive to stability, peace and social welfare. These issues are highly related to the job of the Police Force.

The city was previously divided into six sub-regions (Zones) and 27 districts (Weredas). This administrative structure was changed since early 2003 to ten sub-municipalities (Kifle Ketemas) and 203 districts/Kebeles (the smallest administrative unit).

Addis Ababa Police Force is governed by the City Government and structured as a Commission. The Police Commission had six Zonal police departments, with each of those having Wereda police stations corresponding to the number of districts under the zone.
The structure was changed since the administrative structural change realized in mid 2003. Currently, the Police Force is structured under the police commission, which has 10 sub-municipality police departments, each of those has police stations under it. This study used mainly the previous structure of the Police Force in the city since the administrative change was in transition during the data collection process.

STUDY POPULATION

The Regional Police Force had 5381 officers, of which 541 were working in regional and zonal offices and 4840 in Wereda staions in the end of 2003, during data collection.

Officers in the police force get free medical service as a benefit from four clinics working in different police stations, and one general hospital- Police Force General Hospital. A nurse and three health assistants run the four clinics. The police force hospital has 230 inpatient beds of which 120 are for medical patients, and gives daily service for nearly 400 individuals at OPD of which around 300 are seen by the Medical Department. The hospital also gives service for relatives of officers and other civil citizens with payment for the service.

STUDY DESIGN

The study had two parts, which used a cross sectional study. The first part considered two groups of officers. The first were officers from Addis Ababa Police Force who had died between1993 E.C and 1995 E.C. Those officers' available medical records and related medical information were traced back and the role of HIV/AIDS was assessed in their death. The second group were officers from Addis Ababa Police Force who came to the Police Hospital Medical OPD for treatment in the last month of the Ethiopian fiscal year, June 1995. Here again the medical records were traced back for any HIV/AIDS related information, the frequency of OPD presentation, frequency and stay of admission, and cost incurred for their service.

The second part used randomly selected currently serving officers. A self-administered, pretested anonymous questionnaire adopted from the BSS was used.

SOURCE POPULATION

Part 1-

- All available death dropout officers from Addis Ababa Police Force in the year 1993 to 1995 E.C served as the study population for Questionnaire-1.

- All officers from Addis Ababa Police Force who attended the Police Force Medical OPD in the year 1995 were used as source population for Questionnaire-2. Consecutive officers who were seen in the month of June were included as study population.

Part 2-

- All officers in the Addis Ababa Police Force were the source population, while those randomly selected 406 officers were the study population.

SAMPLE SIZE DETERMINATION

Part 1

All death dropout officers' names during the study period were retrieved from the police commission personnel department with available reported date of death. Checking for additional deaths and/or confirmation of deaths from the commission personnel office was done using the registration book in the police hospital. Medical records were searched for the deaths by name and record number in the hospital record office.

For the second group of part 1, a study conducted in Black Lion Hospital was used as a proxy for determining prevalence of HIV/AIDS among patients coming to police force hospital. The study showed that out of one year (2000) admitted medical patients more than 31.2% were

suspected clinically to be HIV infected and then tested (38). Considering HIV patients prevalence at OPD would be less than those admitted, the proxy prevalence estimator is considered to be 26% i.e. 5% less than the admitted ones.

By using one population proportion sample size determination and taking 5% significance level and precision:

Z= 1.96

D= 0.05

P= 0.26

1-p= 0.74

$$n_o = \frac{Z_{\alpha/2}^2 P(1-P)}{d^2}$$

$$= \frac{1.96^2 \text{ X } 0.26 \text{ X} 0.74}{(0.05)^2}$$

$$= 296$$

Assuming 25% non response rate

$$n_o = 296 + 25\% \ (296)$$

$$= 370$$

Selection of officers from Addis Ababa police force who attend the police hospital OPD was made by taking the registration book used by the medical department.

Part 2

According to the BSS report amongst those who had been sexually active uniformed service men, 63.5% of ground forces and 20.8% of air force respondents reported having more than one sexual partner during the previous 12 months (10). Taking the above character as

determining high-risk sexual behavior and considering similarity between the police force and the air force officers P is assumed to be 0.208.

Taking $Z\alpha_{/2} = 1.96$; $P = 0.208$; $d = 0.04$

$$n_o = \frac{(1.96)^2 (0.208) (0.792)}{(0.04)^2} = 396$$

By considering finite population correction

$$n = n_o/(1+n_o/N)$$

$$= \frac{396}{\left[1 + \frac{396}{5,381}\right]}$$

$$= 368$$

Considering 10% non response rate

$$n = 368 + 10\% (368)$$

$$= \underline{406}$$

Using ID numbers from the commission personnel department a sampling frame of all officers in the force was prepared. With the help of EPI- info generated random numbers, a simple random sampling technique was used to select the study population from the source population. Selected ID numbers were labeled/linked with names of officers, and then the current worksite of each officer was identified, for administering the questionnaire. Officers who were laid off from the force recently were excluded from the selected list.

DATA COLLECTION

Part 1-

Two structured formats (Q-1 and Q-2) were prepared in English for data collection from medical records. A list of diseases that indicate HIV infection or define AIDS was prepared by adopting the 1993 CDC classification of HIV/AIDS and WHO grading of HIV/AIDS (Annex 6). Four general practitioner physicians were trained for half a day on how to fill questionnaire. The relevant information were collected from the medical records.

The Police Force Hospital charges its paying patients by price determined by the Administrating Board of the Hospital. The pricing book lists each medication, investigation and inpatient bed rates with nearly 40- 50 pages. The direct cost of service given to officers in the hospital was estimated by the price list prepared for paying clients.

Part 2-

A structured questionnaire was prepared by adapting from the BSS questionnaire. The questionnaire was prepared in English and then translated to Amharic. The Amharic questionnaire was pretested in the regional police commission with officers who were not included in the study. Minor changes of wording in some questions and modification of titles option was made.

After identifying the officers to be included in the survey, a list of them was prepared grouped by sub-municipality. After contacting the heads of sub-municipality police departments, the structured self-administered questionnaire was distributed with an envelope for each officer.

Two data collectors in the region and other ten for the 10 sub-municipalities were used after training for a day on how to distribute and collect questionnaires. An officer was given the questionnaire with an envelope and orientation how to fill it. After filling, the respondent sealed it without labeling the envelope and returned to the data collectors.

STUDY VARIABLES

Part 1

Independent variables

- Serostatus of HIV
- Clinical diagnosis of HIV/AIDS

Dependant variables

- Cause of death
- Cost of service
- Frequency of OPD visits
- Duration of inpatient stay

Part 2-

Independent variables

- Socio demographic variables

Dependent variables

- Multiple sexual partners
- Risky sexual behavior
- Knowledge, attitude and practice about HIV/AIDS
- Perception of vulnerability to HIV/AIDS

DATA ANALYSIS

Statistical software Epi info version 6 and SPSS Version 10 were used for data entry, cleaning and analysis. Descriptive statistics (proportion, mean and median) and some relevant methods of analysis like odds ratio, Kolmogorov-Smirnov test and Non-parametric tests were performed.

OPERATIONAL DEFINITION

- **Commercial sexual partner** = a partner who was paid money in exchange for sex.
- **Chat/Khat** = locally growing amphetamine-like stimulant plant.
- **Multiple sexual partner =** Having more than one sexual partner in the last 12 months before the survey.
- **No sign of HIV infection =** Patient with no medical record mentioning diagnosis of HIV/RVI/AIDS or any opportunistic disease defining /indicating HIV/AIDS and no documented serology.
- **Non-regular partner =** Sexual partners who had been together for less than 12 months, were not married had never lived together and did not make any payment for sex.
- **Officer** = Uniformed member of the Addis Ababa police force with any level of rank.
- **Probable HIV infection =** Patient medical record mentioned at least one of diagnosis of HIV/RVI/AIDS or HIV/AIDS indicating opportunistic diseases, but no documented serology.
- **Regular sexual partner =** Spouse or co-habiting (live-in) sex partner.
- **Risky sexual intercourse =** Sex without condom with any partner other than regular partner.
- **Shisha =** A mixture that may include tobacco, honey, hashish and spices.

ETHICAL CONSIDERATION

Ethical clearance was requested and obtained for the study from the Addis Ababa University Faculty of Medicine.

Access to medical records in the hospital was secured after discussing and getting permission from the police force medical director. While using the questionnaires for gathering information from medical records names of patients were not used, but patient record numbers.

Regarding the behavioral survey, heads and respective officers in the commission and sub- municipality police departments were informed about the study. Officers are requested for their consent to be included in the study as an introduction verbally and also given written introduction on the questionnaire.

RESULTS

1. Human resource loss of the police force due to HIV/AIDS

According to the Addis Ababa Police Commission Personnel Office there were 170 deaths of officers in the years 1993 – 1995 E.C. Of these the death information of 85 (50%) officers was available in the Police Force Hospital and analyzed for cause of death and HIV status from medical records, hospital registration books and other hospital records. The socio demographic characteristics of these officers are shown in Table 1.

Of the deaths, 27 (31.8%) were in the year 1993, 19 (22.4%) from 1994, and 26 (30.6%) in 1995 E.C, but the rest 13 (15.3%) were not specified. Out of the 85 deaths 51 (60%) were tested for HIV serology and the result was found documented on their medical records. Fifty (98.0% of these) were seropositive while only one (2%) was seronegative. Forty-eight (96%) of HIV positive officers' cause of death was HIV/AIDS or related diseases caused, while 2 (4%) were not specified. The cause of death in the HIV negative patient was a non-HIV/AIDS cause. Table 2 shows the clinical profile of the officers who were not tested for HIV serology. Based on the clinical judgment recorded by physicians on the medical record, officers who were not screened for HIV have been divided into two operationally defined groups – 'probable HIV infection' and 'no sign of HIV infection'. Of the 34 deaths with no HIV serology result 19 (55.9%) patients were labeled as probable HIV infection and 15 (44.1%) patients as no sign of HIV infection.

From these 34 non-screened patients 15 (44.1%) patients cause of death was HIV/AIDS related. All 15 HIV/AIDS related deaths were from the 19 officers in probable HIV infection group.

In total, out of the 85 deaths considered, 63 (74.1%) were regarded as HIV/AIDS or related diseases caused death, 15 (17.6%) as non-HIV/AIDS caused death and 7 (8.2%) were not specified for their cause of death. Figure 1 shows cause of deaths among the officers.

Table 1: Socio demographic characteristics of the death dropout Police Officers in Addis Ababa Police Force, 1993-1995 E.C.

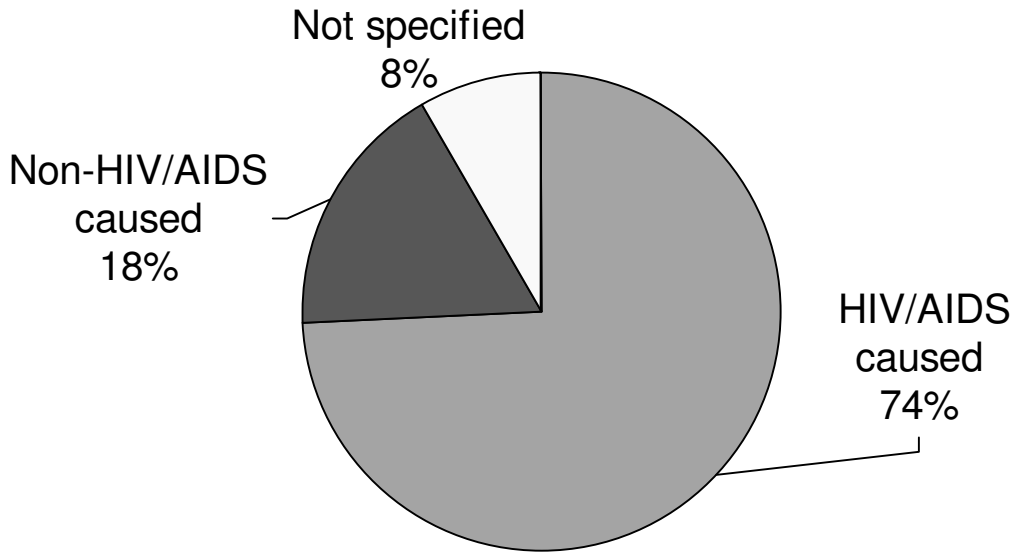
Characteristics	Number	%
Age (years)		
20-25	2	2.4
26-30	23	27.4
31-35	30	35.7
36-40	15	17.9
41-45	3	3.6
46-50	6	7.1
>50	5	6.0
TOTAL	85	100
Mean ± SD = 35.13 ± 7.92		
Median =33 years		
SEX		
Male	74	87.1
Female	11	12.9
TOTAL	85	100
TITLE		
Private	77	90.6
Corporal	2	2.4
Sergeant	1	1.2
Lieutenant	2	2.4
Captain	1	1.2
Major	2	2.4
TOTAL	85	100

Table 2: The clinical profile of the 34 deaths of the Addis Ababa Police Officers who were not tested for HIV serology in Addis Ababa Police Hospital, 1993-95.

Profile documented by physician on card mention	n (%)	HIV/AIDS related cause of death		
		Yes	No	NS*
Clinical diagnosis of HIV/RVI				
- Yes	10 (29.4%)	9 (90.0%)	0	1 (10.0%)
- No	24 (70.6%)	6 (25.0%)	14 (58.3%)	4 (16.7%)
HIV indicating diseases				
- Yes	19 (55.9%)	15 (78.9%)	2 (10.5%)	2 (10.5%)
- No	15 (44.1%)	0	12 (80.0%)	3 (20.0%)
Clinical diagnosis of AIDS				
- Yes	1 (2.9%)	1 (100.0%)	0	0
- No	33 (97.1%)	14 (42.4%)	14 (42.4%)	5 (15.2%)
AIDS defining opportunistic diseases				
-Yes	15 (44.1%)	14 (93.3%)	0	1 (6.7%)
- No	19 (55.9%)	1 (5.3%)	14 (73.7%)	4 (21.1%)
Probable HIV/AIDS infection	19 (55.9%)	15 (78.9%)	2 (10.5%)	2 (10.5%)
No sign of HIV/AIDS	15 (44.1%)	0	12 (80.0%)	3 (20.0%)
-Total	34 (100.0%)	15 (44.1%)	14 (41.2%)	5 (14.7%)

NS*= Not specified

Fig 1: Cause of death among studied officers Addis Ababa Police Force, 1993-95.



2. Financial burden of HIV/AIDS in the police hospital

Three hundred seventy consecutive officers seen at the medical OPD in the month of June 2003 were selected, and their medical record cards were retrieved. Out of the selected 370 records, 355 (95.9%) officers' medical records were retrieved and analyzed for their status of HIV/AIDS, number of OPD visits, number of admissions and cost incurred in their treatment. The socio demographic characteristics of officers included in the study are shown in Table 3.

Table 3: Socio demographic characteristics of 355 Addis Ababa Police Officers who attended Medical OPD of The Police Hospital and included in the study, 2003.

Characteristics	**Number**	**%**
Age (years)		
15-19	2	0.6
20-25	125	34.3
26-30	93	25.5
31-35	58	15.9
36-40	29	8.0
41-45	13	3.6
46-50	13	3.6
>50	8	2.2
Not specified	14	3.8
Total	355	100
Mean ± SD (years) = 29.74 ± 8.1		
Median (years) = 28		
SEX		
Male	285	80.3
Female	70	19.7
Total	355	100
TITLE		
Private	323	91.0
Corporal	6	1.7
Sergeant	6	1.7
Lieutenant	9	2.5
Others	11	3.2
Total	355	100

Of the 355 officers 53 (14.9%) were tested for HIV serology. The results of 18 (34%) officers were available in their medical records, while those of 35 (66%) were retrieved from the counseling and screening record book only. Thirty-nine of those tested (73.6%) were HIV serology positive, and 14 (26.4%) were HIV serology negative. Of the 302 officers not screened 18 (6.0%) were labeled as probable HIV infection patients and 284 (94.0%) officers as no sign of HIV infection patients operationally.

Table 4: The clinical profile regarding HIV/AIDS of 302 Addis Ababa Police Officers who had an OPD visit at The Police Force Hospital and were not tested for HIV infection, 2003.

Profile recorded on card by physician	Yes n (%)	No n (%)	Total n (%)
Clinical diagnosis of HIV	4 (1.3%)	298 (98.7%)	302 (100.0%)
HIV indicating diseases	14 (4.6%)	288 (95.4%)	302 (100.0%)
Clinical diagnosis of AIDS	0	302 (100.0%)	302 (100.0%)
AIDS defining diseases	11 (3.6%)	291 (96.4%)	302 (100.0%)

The mean OPD visits of the officers were 2.78 and median of 2.0 visits in a year with range of no visit (officers registered in registration book but not on their medical records) to 17 visits in a year.

HIV negative officers came to OPD most frequently and officers grouped as no sign of HIV infection presented least frequently- the former came twice as frequently as the latter (this is by taking median of OPD visits i.e. comparing 4 visits by the former and 2 visits by the latter)- Table 5.The distribution of OPD visits in a year in the four groups ascertained by Kolmogorov-Smirnov test as not normal distribution. The difference of attending the OPD frequently was statistically significant (Kruskal Wallis test, p=0.013.)

Table 5: Number of OPD visits at The Police Force Hospital in a year among different groups of Addis Ababa Police Officers, 2003.

Groups of officers	n	Median OPD visits in a year	p-value
HIV positive	39	3.0	0.013
HIV negative	14	4.0	
Probable HIV infection	18	2.5	
No sign of HIV infection	284	2.0	
All officers	355	2.0	

HIV negative officers had the highest cost per visit in comparison to other groups. Except the first visit cost difference, the others including the average cost per visit difference were not statistically significant (Kruskal Wallis test- 1st visit p=0.024, 2nd visit p=0.06, 3rd visit p=0.712 and average visit cost p=0.10). The median cost incurred per visit by the four groups of officers at OPD visits is shown in Table 6.

Table 6: Median cost per OPD visit at The Police Force Hospital of different groups of Addis Ababa Police Officers, 2003.

	1st visit cost (Birr)		2nd visit cost (Birr)		3rd visit cost (Birr)		Average cost (Birr)		p-value
	n	Median	n	Median	n	Median	n	Median	
HIV positives	38	35.00	30	23.09	20	24.19	38	27.93	0.10
HIV negatives	13	37.40	9	30.40	8	25.11	13	35.02	
Probable HIV	18	23.86	16	29.55	9	22.36	18	28.13	
No sign of HIV	257	24.81	182	22.79	113	21.20	257	24.94	
All officers	326	25.00	237	23.60	150	21.76	326	25.51	

Of the 326 officers, 20 (6.1%) were admitted at least once to hospital. Here again HIV negative patients stayed the longest and cost the most expensive per admission. They stayed four times as long as and cost 2.5 times as much as those with no sign of HIV. Officers with HIV infection, proven serologically or suspected clinically stayed inpatient more than two times as many as officers with no sign of infection. These differences were not statistically significant (Kruskal Wallis test- Inpatient stay p=0.138, and inpatient cost p=0.218). The duration of inpatient days and the cost incurred during each stay is assessed according to HIV status- Table 7.

Table 7: Median duration of stay and cost per admission of admitted Addis Ababa Police Officers, 2003.

Groups	N	Median inpatient (Days)	p-value	Median cost (Birr)	p-value
HIV positive	6	14.50	0.14	548.65	0.22
HIV negative	3	24.00		664.20	
Probable HIV	3	14.00		460.17	
No sign of HIV	8	6.00		261.48	
All admitted officers	20	8.50		355.00	

3. Knowledge, attitude, practice and vulnerability of officers towards HIV/AIDS

3.1 Socio demographic characteristics

Of the planned 407 officers to be surveyed by self-administered questionnaire, 364 (89.4%) currently working officers were included. The socio demographic profile is shown in Table 8.

Regarding alcohol consumption in the last 4 weeks, 198 (54.4%) had no alcohol intake, 81 (22.3%) consumed less than once a week, 58 (15.9%) consumed around once a week, and 3 (0.8%) consumed daily in the last four weeks. Twenty four (6.6%) did not give a response regarding their alcohol consumption. Chat was the drug used most frequently by officers – 79 (21.7%) officers had taken it at least once a month. Thirty five (9.6%) officers had used Shisha as drug, while 308 (84.6%) hadn't used it at any time. No officer had used Hashish, Benzene or Cocaine as a drug even once. Only one officer claimed to use an IV drug.

3.2 Sexual practice

More than a quarter of officers – 100 (27.5%) had multiple sexual partners in the last 12 months. This and other sexual practices are shown in table 9.

Table 8: The socio demographic characteristics of the Addis Ababa police officers involved in the self-administered questionnaire reply **(n=364),** 2003

Characteristics	n	%
Age -years		
20-25	86	25.4
26-30	128	37.8
31-35	61	18.0
36-40	49	14.5
41-45	10	2.9
46-50	3	0.9
>50	2	0.6
Mean = 29.85 yrs		
Sex		
Male	290	79.7
Female	73	20.1
Marital status		
Single	171	47.0
Married	176	48.4
Others	13	3.5
Title		
Private	356	97.8
Others	8	2.2
Working site		
Regional commission	14	3.8
Zonal department	30	8.2
Wereda stations	313	86.0
Traffic		
Yes	47	12.9
No	281	77.2
Unknown	36	9.9
Educational status		
Not completed 12^{th} grade	56	15.4
Completed 12^{th} grade	275	75.5
Diploma & other	33	9.0
Monthly income –Birr		
200 – 299	34	9.3
300 – 399	13	3.6
400 – 499	201	55.2
500 – 599	15	4.1
≥600	5	1.4
Not specified	96	26.4
Religion		
Chirstian	348	95.5
Muslims	14	3.8
Ethnicity		
Amhara	179	49.2
Oromo	103	28.3
Gurage	39	10.7
Tigre	18	4.9
Other	20	5.5

Table 9: The sexual history profile of the Addis Ababa Police Officers, 2003.

Sexual profile	n	%
*** Ever had heterosexual intercourse (n=364)**		
Yes	317	87.1
No	44	12.1
*** Sexual debut was (n=320)**		
Before being an officer	221	69.1
After being an officer	94	29.4
*** Sexually active in the last 12 months (n=320)**		
Yes	263	82.2
No	52	16.3
*** Number of regular sexual partners in the last 12 months (n=320)**		
0	43	13.4
1	225	70.3
≥ 2	13	4.0
Unknown	39	12.2
*** Number of commercial sexual partners in the last 12 months (n=320)**		
0	254	79.4
1	14	4.4
≥ 2	9	2.8
Unknown	43	13.5
*** Number of non-regular sexual partners in the last 12 months (n=320)**		
0	164	51.3
1	53	16.6
≥ 2	38	11.8
Unknown	65	20.4
*** Had multiple sexual partners in the last 12 months (n=364)**		
Yes	100	27.5
No	201	55.2
Unknown	63	17.3

Homosexual activity was nearly non-existent –only 4 (1.5%) males had had homosexual intercourse.

Consistent condom use and its use during the last sex was highest in sexual intercourse committed with commercial sexual workers. Never use of condoms in the last 12 months sexual intercourse was highest among officers with one regular sexual partner. Inconsistent use of condoms in the last 12 months was highest in officers with one non-regular sexual partner. The condom use pattern among the officers in relation to their sexual partner is shown in Table 10.

Table 10: Condom use pattern among different groups of Addis Ababa Police Officers, 2003.

Groups	Condom used in the last sex	Condom use in the last 12 months			
		Always	Usually	Sometimes	Never
Number of regular sexual partner					
1 (n=225)	53 (23.6%)	30 (13.3%)	8 (3.6%)	19 (8.4%)	157 (69.8%)
≥ 2 (n=13)	7 (53.8%)	1 (7.7%)	2 (15.4%)	3 (23.1%)	5 (38.5%)
Had commercial sexual partner (n=23)	18 (78.3%)	13 (56.5%)	6 (26.1%)	2 (8.7%)	1 (4.3%)
Number of non-regular sexual partners					
1 (n=53)	21 (39.6%)	7 (13.2%)	13 (24.5%)	18 (34.0%)	13 (24.5%)
≥2 (n=38)	24 (63.2%)	15 (39.5%)	8 (21.1%)	11 (28.9%)	2 (5.3%)

The common reasons for not using a condom during the last sexual intercourse among officers with regular and non-regular partners varied, and are shown in Table 11. Out of 32 officers who had had sex with commercial sexual workers in the last 12 months, only 4 had not used a condom during their last intercourse; and the reasons were: 'forget in a hurry to have sex', 'don't consider condom as necessary', 'trust my partner', 'don't know how to use condom', and 'condom reduces pleasure'.

Table 11: Common reasons for not using condom in the last sex among Addis Ababa Police Officers who had regular and non-regular sexual partners, 2003.

Reasons for not using condoms among	**n**	**%**
Officers with regular partners, **(n=187)**		
- I trust my partner	143	76.5
- We want to have a baby	41	21.9
- We use other contraceptives	32	17.1
- We consider condom unnecessary	16	8.6
Officers with non-regular sexual partners, **(n=53)**		
- I trust my partner	24	45.3
- It reduces pleasure	8	15.1
- Condom was not available	8	15.1
- Worried to buy condom	6	11.3

Of those who used a condom during their last sexual intercourse, officers were nearly always involved in the decision to use a condom either by themselves or as a couple with their partners – Table 12.

Table 12: Initiation /decision of condom use during the last sex among Addis Ababa Police Officers with their sexual partners, 2003.

Groups	**Condom use suggested by**		
	Officer **n (%)**	**Partner** **n (%)**	**Both** **n (%)**
Regular sexual partner	23 (30.3%)	4 (5.3%)	46 (60.5%)
Commercial sexual partner	12 (44.4%)	0	14 (51.9%)
Non- regular sexual partner	25 (41.7%)	2 (3.3%)	32 (53.3%)

3.3 Knowledge, attitude and practice about male condoms

Of all officers who had sexual intercourse 184 (57.5%) had ever used a condom during intercourse, while 119 (37.2%) had never used it. Nearly a quarter, 73 (20.1%) of officers did not know from where to get a male condom if they needed, while 279 (76.6%) claimed to know. Regarding the availability of condoms in their work site; 303 (83.2%) stated it was not available and 20 (5.5%) that it was available and 32 (8.8%) did not know. Despite the unavailability of condoms at the work site, 226 (62.1%) officers agreed with making condoms available at the worksite, 72 (19.8%) did not agree with the idea, while 55 (15.1%) were indifferent.

One hundred seven (33.4%) officers admitted to having been engaged in risky sexual intercourse in the last 12 months, while 186 (58.1%) had not been involved. Risky sexual intercourse was defined as intercourse in the last 12 months without a condom, with a non-regular and/or commercial sexual partner. No factor is shown to be associated with risky sexual intercourse (Table 13).

Table 13: Characteristics of Addis Ababa Police Officers involved in risky sexual intercourse, 2003.

Characteristics	RISKY SEX		Crude OR (95% CI)	Adjusted OR (95% CI)
	Yes	No		
SEX				
- Male	91	155	1.10	0.16
- Female	16	30	(0.54,2.24)	(0.01,5.13)
MARITAL STATUS				
- Single	49	80	1.07	2.78
- Married	55	96	(0.64,1.79)	(0.05,149.7)
ALCOHOL CONSUMPTION				
- Yes	55	69	**1.81**	0.00
- No alcohol in a month	45	102	**(1.06,3.07)**	(0.00, >999)
CHAT CONSUMPTION				
- Yes	32	41	1.49	2.28
- No	72	137	(0.83,2.65)	(0.05,103.6)
SHISHA CONSUMPTION				
- Yes	15	19	1.40	0.00
- No	87	154	(0.64,3.06)	(0.00, >999)

3.4 Knowledge and practice about STDs

Almost all officers 360 (98.9%) knew about the existence of diseases that can be contracted through sexual intercourse. The commonest symptom known in both sexes as STD indicative was burning micturation or dysuria (Table14).

Table 14: Symptoms acknowledged by Addis Ababa Police Officers as indicative of STD in males and females, 2003.

Symptoms acknowledged as indicative of STD	**Number**	**%**
In females, **(n=361)**		
- Burning micturation	212	58.7
- Foul smelling vaginal discharge	207	57.3
- Genital ulcers	171	47.4
- Itching genitals	165	45.7
- Genital lymphadenopathy	61	16.9
In males, **(n=361)**		
- Burning micturation	262	72.6
- Genital ulcers	227	62.9
- Urethral discharge	206	57.1
- Genital lymphadenopathy	91	25.2

Eighty four (23.3%) officers and 64 (17.7%) officers mentioned that they did not know any of the symptoms associated with STDs in females and males, respectively.

Only 17 (4.7%) officers had genital discharge and /or ulcer in the last 12 months. Of those who had STD symptoms 6 (35%) were treated in the police clinics or hospitals, none of them discussed with their sexual partner, only 3 (17.6%) of them ceased sex during the symptoms, and none of them started to use a condom during the symptoms. Seven of the officers with STD symptoms (41.2%) took medications prescribed by medical personnel from health institution, but

5 (29.4%) did not take any medication, 1 (5.9%) from pharmacy and 1 (5.9%) drug available at home.

3.5 Knowledge and attitude about HIV/AIDS

Almost all officers 360 (98.9%) had heard about HIV and/or the disease AIDS, and 308 (85.1%) knew someone who had HIV/AIDS or died of it, 88 (28.4%) had a close friend with the disease, and 71 (22.9%) had a close relative with the disease.

Table 15: Knowledge of Addis Ababa Police Officers about the transmission and prevention of HIV/AIDS and attitude of officers in support/care of HIV positive individuals, 2003.

	Yes	No	IDK*
	n (%)	n (%)	n (%)
KNOWLEDGE ABOUT HIV/AIDS TRANSMISSION			
- Mosquito transmits HIV	38 (10.5%)	274 (75.7%)	48 (13.3%)
- Raw meat prepared by HIV positive can transmit HIV	32 (8.8%)	273 (75.7%)	52 (14.4%)
- Sharing needles can transmit HIV	346 (95.6%)	8 (2.2%)	6 (1.7%)
- Pregnant mother transmit HIV to her fetus	302 (83.4%)	25 (6.9%)	32 (8.8%)
- Breastfeeding transmits HIV	251 (69.3%)	43 (11.9%)	64 (17.7%)
KNOWLEDGE AND ATTITUDE ABOUT PREVENTION			
- Sexual abstinence prevents	276 (76.2%)	79 (21.8%)	6 (1.7%)
- Faithful sexual relationship prevents	219 (60.5%)	96 (26.5%)	37 (10.2%)
- Condom prevents	229 (63.3%)	88 (24.3%)	36 (9.9%)
ATTITUDE TOWARDS SUPPORT & CARE OF PLWHA			
- I am willing to care a sick HIV positive relative in my house	317 (87.6%)	7 (1.9%)	31 (8.6%)
- An HIV positive officer should be allowed to continue work in the police force	335 (92.5%)	11 (3.0%)	14 (3.9%)

IDK= I don't know.

3.6 Perception and practice regarding vulnerability

Ninety (24.7%) officers had had HIV serology screening, of which 60 (65.9%) of them had been tested within one-year period of the survey. The majority of screened–80 (87.9%) – were tested by their own will, while 8 (8.8%) were requested to have the test. Of those tested 16 (17.6%) had not received their results. Nearly half of the officers who had not been screened – 151 (55.3%) –had a plan to be tested within a year, 96 (35.2%) had no plan and 22 (8.1%) were not sure.

Of all officers 296 (81.3%) thought that they would volunteer to be tested for HIV if requested by their physician while being treated. One hundred and thirty three (36.5%) officers perceived their work as a risky job to predispose them to HIV infection, while 186 (51.1%) did not and 41 (11.3%) responded as indifferent in the issue. To work as an officer was considered difficult for an HIV positive officer by 155 (42.6%), but not difficult by 159 (43.7%). Two hundred four (56%) officers felt that being an officer made them more knowledgeable about HIV, while 145 (39.8%) felt they had gained no additional knowledge due to being an officer.

The majority of officers felt that the death of officers and absenteeism due to illness were increasing over time- 222 (61%) and 208 (57.1%) respectively; decreasing [9 (2.5%), 15 (4.1%)], no change – [31 (8.5%), 51 (14%)] and difficult to comment [99 (27.2%), 84 (23.1%)] respectively. Of those who felt there was an increasing rate of death and/or absenteeism in the force, 139 (56.5%) thought HIV was a major cause, 67 (27.2%) a moderate contributor, 11 (4.5%) no contributor and 27 (11%) considered the issue difficult to comment on.

In general 114 (31.3%) officers considered their force to suffer worse than society because of the epidemic, while 173 (47.5%) that it was not suffering differently from society, and 74 (20.3%) found the issue difficult to comment on. Specifically 61 (16.8%) officers perceived themselves to have no chance of being HIV infected, 128 (35.2%) to have a low chance, 29 (8.0%) to have a moderate chance, 21 (5.8%) to have a high chance/risk and 118 (32.4%) found the issue difficult to comment on. Different characteristics of officers with low and other perceptions of self-risk/vulnerability are shown in Table 16.

Table 16: Characteristics of Addis Ababa Police Officers with different risk perception, 2003.

Characteristics	Self risk perception				
	No risk n (%)	Low risk n (%)	Moderate n (%)	High risk n (%)	Total n (%)
Sex					
Male	45 (22.8)	106 (53.8)	28 (14.2)	18 (9.1)	197 (100)
Female	16 (38.1)	22 (52.4)	1 (2.4)	3 (7.1)	42 (100)
Marital status					
Single	19 (17.3)	65 (59.1)	15(13.6)	11 (10.0)	110 (100)
Married	18 (18.4)	56 (57.1)	14 (14.2)	10 (10.2)	98 (100)
Alcohol consumption					
Once a week	6 (17.1)	19 (54.3)	5 (14.3)	5 (14.3)	35 (100)
Less than once a week	8 (13.8)	39 (67.2)	5 (8.6)	6 (10.3)	58 (100)
No alcohol in last 4 wks	45 (34.1)	62 (47.0)	15 (11.4)	10 (7.6)	132 (100)
Risky sex					
Yes	13 (18.8)	44 (63.8)	8 (11.6)	4 (5.8)	69 (100)
No	26 (21.8)	59 (50.0)	19 (16.0)	15 (12.6)	119 (100)
Know someone with HIV					
Yes	52 (25.4)	109 (53.2)	27 (13.2)	17 (8.3)	205 (100)
No	6 (19.4)	19 (6.1)	2 (6.4)	4 (12.9)	31 (100)
Know a close friend or relative with HIV/AIDS					
Yes a friend	14 (24.1)	32 (55.2)	5 (8.6)	7 (12.1)	58 (100)
Yes a relative	13 (25.5)	29 (56.9)	7 (13.7)	2 (3.9)	51 (100)
No	25 (26.6)	46 (48.9)	15 (16.0)	8 (8.5)	104 (100)
Age group					
20-25	9 (15.5)	31 (53.4)	11 (19.0)	7 (12.1)	58 (100)
26-30	2 (3.2)	43 (6.8)	10 (15.9)	8 (12.6)	63 (100)
31-35	14 (3.3)	23 (53.5)	3 (7.0)	3 (7.0)	43 (100)
36-40	6 (18.1)	19 (57.6)	5 (15.2)	3 (9.0)	33 (100)
≥41	11 (47.8)	12 (52.2)	0	0	23 (100)

DISCUSSION

The peak age for AIDS cases is 25 to 29 years for both males and females in Ethiopia according to reports from MOH. More than three quarters of reported AIDS cases were in the age group of 20-39 years in the general population (27). In this study 81% of the deaths of officers occurred in the age range of 26-40 years and the peak age of the deaths in the officers was 26-30 years.

The hospital death analysis of officers relied on half of all deaths in the three years. With this analysis 3/4th of the deaths were related/caused by HIV/AIDS, which is a significant proportion. Taking consideration of those deaths not analyzed, different situations can be assumed: first in the best scenario, where all officer deaths not analyzed are totally not related to HIV, out of the 170 deaths 63 (37%) would be related to HIV- still a considerable proportion. If the worst scenario is considered, where all deaths not considered were HIV/AIDS caused, out of 170 deaths 148 (87%) would be HIV/AIDS caused, no need of mentioning the severity of the problem. A study conducted in Addis Ababa by using verbal autopsy on causes of death among adults in the community showed that 48% of deaths were caused by TBC/HIV/AIDS (40). Taking this as a third situation, and in fact the average scenario, out of 170 deaths 104 (61.2%) would be related/caused due to HIV/AIDS.

In all possible scenarios, HIV/AIDS related/caused deaths contribute greatly to human resource loss of the Addis Ababa police force ranging from 37% to 87%.

Considering both serologically proven and clinically considered infection (probable HIV infection) 57/355 (16.1 %) of OPD attendants were HIV infected. This is in close proximity with pregnant women testing HIV positive in the four sentinel surveillance sites of Addis Ababa – 12.3%, 15.8%, 16.6%, 17.7% (25).

Taking OPD visit frequency per year, OPD service cost per visit, duration of inpatient days per admission and inpatient service cost per admission as criteria or indicative of the burden of HIV/AIDS on the police force medical service the group labeled as HIV negatives are the most expensive, followed by HIV positives, probable HIV infection and no sign of infection consecutively and consistently.

This might be due to either small sample sizes in the different strata mainly in the HIV groups which failed to detect all the differences or due to officers tested for HIV serology and turned out negative might be patients with chronic problems which are vague and difficult to diagnose and manage correctly and appropriately, i.e. they might need repeated follow-ups and thorough investigations and empirical treatment options. Otherwise HIV positives and probable HIV infected individuals are the next most expensive/ heavy burden in all aspects, though not statistically confirmed. The other explanation, which can be given as a possibility, is that when patients' HIV status is known they might neglect their problem by themselves or by health professionals, so that they presented to health institution less frequently, investigated and treated not thoroughly.

As in most other studies different aspects of officers' knowledge about HIV/AIDS is high (41). Almost all had heard about the disease HIV/AIDS, the majority knew some one with the

problem, but only a few (nearly a quarter) know a close friend or relative. Considering the extent of the epidemic this shows that the problem hasn't been discussed openly yet. Only very few had misconceptions about transmission of HIV, but a significant amount (nearly 1/3rd) still were not clear about the transmission possibility via breast-feeding. Regarding this point officers knowledge seemed to be a bit better than the general population with secondary and higher education, of whom 57% knew that breastfeeding transmits HIV (41). But they were not as knowledgeable as the city high school teachers of whom 72% knew the possibility of transmission (42).

Regarding the prevention mechanisms, this study showed that nearly a quarter of the officers did not consider faithfulness and condom use as helpful in prevention of HIV infection. This issue might need further elaboration on the reasons. Taking the three ways i.e. abstinence, faithfulness, and condom use to prevent HIV/AIDS officers and teachers seem to differ in their attitude and perception. Seventy six percent of the former accepted abstinence as preventive, 60% faithfulness, and 63% condom use, but 87%, 95% and 45% accepted by the latter respectively.

The study showed that officers are ready and had encouraging attitudes towards individuals with HIV/AIDS. Eighty seven percent were willing to care for a relative sick with HIV/AIDS while this was shown to be 80% among secondary or more educated individuals in the country (41).

Extending the assessment of the depth of knowledge of officers'on STDs, officers seem to be inadequately knowledgeable. Nearly half of those who knew about STDs could identify genital discharge in both males and females. But soldiers in ground force who are less educated

than officers, genital discharge was known by 88% as symptoms of STD (43). Though few officers admitted to having STD symptoms in the last 12 months, poor knowledge about STDs was also associated with poor practice while having an STD- i.e. no communication of the problem with sexual partner, ceasing sex or using condom.

It is shown that there is unmet need for condoms at the work site of officers, evidenced by the fact that 83% officers admitted that condoms were not available at the work sites, and 62% officers agreed with making condom available at worksites. This issue met a similar reaction in high schools, where 62% of students, 60% of the parents and 62% of the teachers approved distribution of condoms in schools to students (44).

The pattern of condom use measured by its use in the last sexual intercourse and by consistent use in the last 12 months, especially among multiple sexual partners was distressing. The commonest reason why officers avoid condom use in multiple sexual relationships (especially with non-regular sexual partners) was 'I trust my sexual partner' which capitalizes the risk of HIV infection. Seeing condoms as not effective in HIV prevention, a low level of condom use and trusting someone while engaged in multiple sexual relationships cumulatively can be taken as bad signs of the problem.

There seems to be a good opportunity for officers to get education about sexual practice and related issues, while being trained as an officer. More than a quarter of officers sexual debut was after becoming an officer and 12% of officers still had not started practicing sexual intercourse.

The sexual practice of officers can be described as half of them married and other single, with more than a quarter engaged in multiple sexual relationships, risky sex and avoiding condoms in risky sexual relationship. The figure from this study is in sharp contrast with a similar study conducted among high school teachers. Sexual intercourse with commercial sexual workers occurred in 7.2% in the former, but 26.4% in the latter; having one or more non-regular sexual partner occurred in 28.4% of officers but 40% of teachers. This might be due to considerable non-response to these sensitive questions and social desirability bias in the officers' study (42).

According to the national BSS study, 63.5% of ground forces and 20.8% of air force respondents reported having more than one sexual partner during the previous 12 months (39). The multiple sexual partner engagement in Addis Ababa officers was 27.5%, with a considerable amount (17%) not responding. This put officers in a higher risk than air force uniformed service men.

Officers have an accurate needed perception of themselves and the force as highly vulnerable to the epidemic. This is evidenced by the increase in death and absenteeism in the force sensed by most officers over time, which they associated with HIV/AIDS. Also more than a quarter considered being an officer to be an HIV/AIDS risky job. But despite these perceptions they considered neither themselves nor their force as highly vulnerable. This paradoxical self-perception is reflected in those involved with risky sexual intercourse, of which more than three quarters rated themselves as at low risk of contracting HIV/AIDS.

In Ethiopia it is shown that 8.4% of secondary or more educated men were tested for HIV serology in 2001 (41). With this contrast 24.7% of officers in this study had HIV serology test. This might be due to the accessibility of the health service in the police force. This fact and the fact that 55.3% of those not tested have a plan to be tested in the near future, and 81% claim to be willing to be tested if requested by a physician could be taken as positive ground on which to build a voluntary counseling and testing service.

LIMITATIONS AND STRENGTH

This study can be considered strong in that it has tried to see different dimensions and from different angles on the body of the theme i.e. impacts of HIV/AIDS have been illustrated by the human resource loss effect, by the cost burden effect and behavioral assessment and vulnerability aspects.

The main limitation of this study is social desirability bias for the behavioral survey. As the issue of sexuality is sensitive and officers were requested to fill the questionnaire at their working institution the introduction of social desirability bias should be considered. The other is that the use of secondary data and in fact with retrospective assessment.

CONCLUSIONS

- In the Addis Ababa Police Force HIV/AIDS is more than a major cause of officers death.
- Patients/officers with HIV/AIDS are using the medical service of the police force frequently.
- HIV/AIDS predisposing risky sexual activity among officers is still high.
- Poor knowledge about STDs and probably poor practice about STDs is revealed among officers.
- Addis Ababa police officers are in the center of the HIV/AIDS problem i.e. suffering from it and being highly vulnerable, but a significant amount of them feel falsely safe.

RECOMMENDATIONS

Facts seen in this study and conclusions indicate the following recommendations as necessary

- As officers are currently significantly involved in high-risk sexual activity but feel falsely safe about themselves, measures that make them perceive the situation they are really in seem necessary. This can be done by educating about the issue especially about the extent of HIV/AIDS risk, condom use and STDs. I feel it can be done when officers are candidates by integrating the above issues in their training. This will have the benefit of reaching a significant proportion of officers before their sexual debut. For currently working officers arranging educational sessions is also necessary.
- Initiating condom provisions at the work site will help/encourage officers to practice safe sex or avoid high-risk sex. So better to make condoms available at the work site after assessing practical situations like where to put it, who is going to distribute and such issues.
- For currently working officers there is a high potential need for being tested for HIV which can be boosted by education about voluntary counseling and testing. I think making officers aware about the counseling and testing service in their hospital and its benefit will be rewarded by many officers volunteering to be tested.
- The extent of HIV/AIDS in the Addis Ababa police force and in fact its impacts /consequences necessitates to consider it as a major threat strategically. Recruitment, health budget allocation and such decisions need considering HIV/AIDS as an issue.

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Annex 1

QUESTIONNAIRE 1- QUESTIONNAIRE PREPARED TO DETERMINE THE CONTRIBUTION OF HIV/AIDS IN THE AA POLICE FORCE HUMAN RESOURCE LOSS.

1. Card number_____

2. Age (in years) _____

3. Sex

1-Male 2-Female

4. Title of patient (underlined and italic fonts are amharic terms/

1.Private /*wetader* / 2.Deputy corporal /*miktil asir aleka* /

3.Corporal /*asir aleka* / 4.Sergeant /*hamisa aleka* /

5 1st level c/sergeant /1st *basha /* 6. 2nd level c/sergeant /2nd *basha /*

7. 3rd level c/sergeant /3rd *basha/* 8. 4th level c/sergeant /4th *basha /*

9.Deputy Lieutenant /*mikitil meto aleka*/ 10. Lieutenant /*meto aleka*/

11.Captain /*shambel* / 12. Major /*shaleka* /

5. Department of patient

1-Regional Police Commission

2-Zonal Police Department

3-Wereda Police Stations

4- No Information

6. Was patient traffic?

1-Yes 2- No 3- Not specified

7. Date of death 1- ---- ---- /---- ---- /---- ---- E.C.

2- Not specified.

8. Was patient tested for HIV infection serology?

1- Yes 2- No information-----Go to Q-10

9. If tested, result was

1-Positive---------- Go to Q-13

2-Negative---------- Go to Q-13

3-Inconclusive------- Go to Q-13

4- Not specified

10. Was patient requested for HIV serology test/

1- Yes 2- No information -------- Go to Q-12

11. If patient was requested, did he agree?

1-Yes 2- No 3- No information.

12. Was any Physician made a clinical diagnosis of HIV infection or RVI or AIDS or AIDS defining opportunistic diseases?

1-Yes 2- No

13. According to the physician who confirmed death cause of death was

1- HIV/AIDS or opportunistic diseases related
2- NON HIV/AIDS causes
3- Not specified

THANK YOU!

ANNEX 2

QUESTIONNAIRE 2- QUESTIONNAIRE PREPARED FOR ESTIMATING DIRECT FINANCIAL BURDEN OF THE HIV/AIDS ON THE POLICE FORCE MEDICAL SERVICE.

1. Card number_____

2. Age (in years) _____

3. Sex

1-Male 2-Female

4. Title of patient

1.Private /*wetader* / 2.Deputy corporal /*miktil asir aleka* /

3.Corporal /*asir aleka* / 4.Sergeant /*hamisa aleka* /

5 1st level c/sergeant /1st *basha /* 6. 2nd level c/sergeant /2nd *basha /*

7. 3rd level c/sergeant /3rd *basha/* 8. 4th level c/sergeant /4th *basha /*

9.Deputy Lieutenant /*mikitil meto aleka*/ 10. Lieutenant /*meto aleka*/

11.Captain /*shambel* / 12. Major /*shaleka* /

5. Department of patient

1-Regional Police Commission
2-Zonal Police Department
3-Wereda Police Stations
4- No Information

6. Was patient traffic?

1-Yes 2- No 3- Not specified

7. Was patient tested for HIV infection serology?

1- Yes 2-No information-----Go to Q-9

8. If tested, result was

1-Positive---------- Go to Q-11
2-Negative---------- Go to Q-11
3-Inconclusive------- Go to Q-11
4- Not specified

9. Was any Physician made a clinical diagnosis of HIV infection or RVI or AIDS or AIDS defining opportunistic diseases?

1-Yes 2- No

10. Was patient requested to have HIV serology test?

1-Yes 2-No information

11. In 1995 E.C fiscal year (i.e. Hamle 1/1994 to Sene 30/1995 or July 8/02 to July 7/03) how many times patient seen at OPD?

_____Times.

12. During the last three OPD visits the services he got:(Visit 1 is the recent visit)

A-Visit 1: Date ---- ---- / ---- ----- / ---- -----

S.N	Services	Total amount of services	Unit cost	Total cost
1.				
2.				
3.				
4.				
5.				
TOTAL				

B-VISIT 2: DATE ---- ---- / ---- ---- / ---- -----

S.N	Services	Total amount of services	Unit cost	Total cost
1.				
2.				
3.				
4.				
5.				
			TOTAL	

C-VISIT 3: DATE ---- ---- / ----- ---- / ---- ----

S.N	Services	Total amount of services	Unit cost	Total cost
1.				
2.				
3.				
4.				
5.				
TOTAL				

13. In 1995 E.C. fiscal year, how many times patient was admitted?
_____ Times.

14. During the last admission he stayed in ward

Date of admission ---- ----/ ---- ---- / ---- ---- E.C

Date of discharge ---- ---- / ---- ---- / ---- ---- E.C.

Totally for ----- ----- days.

15. During the last admission the services patient got

S.N	Services	Total amount	Unit cost	Total cost
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
TOTAL				

THANK YOU!

ANNEX 3

ADDIS ABABA UNIVERSITY, MEDICAL FACULTY

DEPARTMENT OF COMMUNITY HEALTH

Survey Questionnaire on impact and behavioral assessment of HIV/AIDS in the Addis Ababa Police Force

INTRODUCTION

This Questionnaire is prepared for a thesis research project done in collaboration with the Addis Ababa University (AAU) and Ethiopian Public Health Association (EPHA). The questionnaire asks response of police officers in Addis Ababa in order to find out the impact and behavior related to HIV/AIDS in the police force.

The main aim of this study is to understand well, and so then support the prevention activities, the behaviors and impacts related to HIV/AIDS in the Addis Ababa Police Force.

In the questionnaire you'll be asked some very personal questions that some people find it difficult to answer. Your name will not be written on this questionnaire, and will never be used in connection with any of the information you tell me. You are selected for this survey merely by chance, not done intentionally.

You don't have to answer any questions that you don't want to answer, and you may end to participate in the study at any time you want to. However, your honest answers to these questions will help us better understand what impacts and behaviors are related to HIV/AIDS in the police force. We would greatly appreciate your help in responding to this survey. The questionnaire will take about 20-30 minutes to answer.

Would you be willing to participate?

(Indicate by circling the appropriate response)

1. Yes ⟶ Continue and fill the questionnaire.
2. No ⟶ Please return the questionnaire as you told.

NOTE HOW TO FILL THE QUESTIONNAIRE

1. The questionnaire has nine sections.
2. Each question has serial number, question and the coding category/reply/. These items are put in a table.
3. After reading the questions, respond by circling the number of your option from the replies. There are reminders below the questions about the possibility of giving multiple replies for some questions.
4. For some question replies, there will be a phrase in front saying, "Go to serial number (Q) ____". This indicates that you are going to leave some questions, that follow and to go directly to the mentioned number question.
5. You are not expected to write any thing in the column "Code".
6. After filling the questionnaire return the questionnaire as you are told by the one you are given.

Thank you,

PART ONE

BACKGROUND CHARACTERSTICS

No.	Questions	Coding Categories/REPLIES/	Code
101	What is your sex?	1. Male 2. Female	
102	How old were you at your last birthday?	1. _____ Years. 88. Don't know 99. No response	
103	What is your religion?	1. Orthodox 2. Catholic 3. Protestant 4. Muslim 5. No religion 6. Other (specify) _____ 99. No response	
104	To which ethnic group do you belong	1. Amhara 2. Tigrean 3. Oromo 4. Others, specify _____ 99. No response	
105	What is your title?		
106	How many years have you served as an officer	1. _____ Years 88. I don't know 99. No response	
107	Where are you currently working?	1. Regional Commission Office 2. Zonal head office 3. Woreda station office 99. No response	
108	Your monthly income in Birr	1. _____ Birr 99. No response	
109	Your Educational level is	1. Don't complete secondary high school 2. Completed secondary high school 3. Diploma graduate 4. Degree graduate 5. Other _____ 99. No Response	
110	During the last 4 wks how often have you had drinks containing alcohol? Would you say ---------	1. Every day 2. At least once a week 3. Less than once a week or never 99. No response.	
111	Some people have tried a range of different types of drugs. Which of the following if any, have you tried? **(PLEASE RESPOND FOR ALL)**	Yes / No / No Response	
		Chat 1 2 99	
		Shisha/Gaya 1 2 99	
		Hashish 1 2 99	
		Benzene 1 2 99	
		Cocaine 1 2 99	
112	Some people have tried injecting drugs using a syringe. Have you injected drugs in the last 12 months	1. Yes 2. No 99. No response	

113	Your marital status is	1. Single 2. Married 3. Divorced 4. Widowed 99. No response	
114	Are you currently married or living with a man/woman with whom you have sexual relationship	1. Currently married, living with spouse 2. Currently married, living with other sexual partner 3. Currently married, not living with Spouse or any other sexual partner 4. Not married, living with sexual partner 5. Not married, not living with sexual partner 99. No response	
115	If married **MEN:** Do you have more than one wife? **WOMEN:** Does your husband have other wives?	1. Yes 2. No 99. No response	

PART TWO: SEXUAL HISTORY: NUMBER AND TYPES OF PARTNERS:

No.	Questions	Coding Categories/REPLIES/	Code
201	Have you ever had sexual intercourse? (For the purpose of this survey, "sexual intercourse" is defined as vaginal or anal sex)	1. Yes 2. No → Go to Q 602 99. No response	
202	At what age did you first have sexual intercourse?	1. _____ Years 88. Don't know 99. No response	
203	Your first sexual intercourse is before/after joining the police force as a candidate officer?	1. Before I joined 2. After I joined 88. Don't know 99. No response	
204	Have you had sexual intercourse in the last 12 months?	1. Yes 2. No 99. No response	

205	**For WOMEN:** Think about the male sexual partner's you've had in the last 12 months **For MEN:** Think about the female sexual partners you've had in the last 12 months:	If you have no regular, commercial, non-regular or other sexual partners, write 0 0	
	a. "Regular" Partners? (i.e. Your spouse(s) or live in sexual partners)	1. ____ ____ Regular 88. Don't know 99. No response	
	b. "Commercial" Partners? (Partners with whom you had sex in exchange for money)	1. ____ ____ Commercial 88. Don't know 99. No response	
	c. "Non Regular" Partners? (i.e. Sexual Partners that you are not married to and have never lived with and didn't pay – DO NOT INCLUDE CURRENT SPOUSE(S) OR LIVE-IN SEXUAL PARTNERS)	1. ___ ____ Non-Regulars 88. Don't Know 99. No response	
206	**FOR MEN ONLY:**		
	a. We've just talked about your female sexual partners. Have you had any male sexual partners?	1. Yes 2. No ⟶ Go to Q. 301 99. No Response	
	b. Have you had sexual intercourse with any of your male partners in the past 12 months? (sexual intercourse defined as penetrative anal sex)	1. Yes 2. No ⟶ Go to Q. 301 99. No Response	
	c. How many male partners have you had anal intercourse with in the last 12 months?	1. ___ ___ male partners 88. Don't know 99. No Response	

PART THREE: SEXUAL HISTORY – REGULAR PARTNERS

No.	Questions and Filters	Coding Categories/REPLIES/	Code
301	Filter: Go to Q. 205 Did you have sex with **Regular partner** during past 12 months?	1. Yes 2. No ⟶ Go to Q. 401	
302	The last time you had sex with a regular partner, did you and your partner use a condom?	1. Yes 2. No ⟶ Go to Q. 304 88. Don't know ⟶ Go to Q. 305 99. No Response	

303	Who suggested condom use that time? **(ONLY ONE ANSWER)**	1. Myself ⟶ Go to Q. 305 2. My Partner ⟶ Go to Q. 305 3. Joint decision ⟶ Go to Q. 305 88. Don't know ⟶ Go to Q. 305 99. No Response ⟶ Go to Q. 305	
304	Why didn't you and your partner use a condom that time? **(MULTIPLE REPLIES ARE POSSIBLE)**	1. Not available 2. Too expensive 3. Not comfortable initiating 4. Partner objected 5. In a hurry 6. Embarrassed to buy or ask for 7. Used other contraceptive 8. Didn't think it was necessary 9. Allergy/Itching 10. I don't like it 11. I trust my partner 12. I was drunk 13. Don't trust condom to prevent HIV 14. Don't know how to apply condom 15. Due to frequent condom breakage 16. It reduces my sexual pleasure 17. Desire to conceive 18. Other _____ 88. Don't know 99. No Response	
305	With what frequency did you and all of your regular partner(s) use a condom during the past 12 months?	1. Every time 2. Almost every time 3. Some times 4. Never 88. Don't know 99. No Response	

PART FOUR: SEXUAL HISTORY: COMMERCIAL PARTNER

No.	Questions and Filters	Coding Categories/REPLIES/	Code
401	Filter go to Q. 205 Did you have sexual intercourse with a Commercial Partner in the last 12 months?	1. Yes ⟶ Go to Q. 402 2. No ⟶ Go to Q. 501	
402	The last time you had sex with a Commercial Partner, did you and your partner use a condom?	1. Yes 2. No ⟶ Go to Q. 404 88. Don't know ⟶ Go to Q.405 99. No Response	
403	Who suggested condom use that	1. Myself ⟶ Go to Q. 405	

	time? **(ONLY ONE ANSWER)**	2. My Partner → Go to Q. 405 3. Joint decision → Go to Q. 405 88. Don't know → Go to Q. 405 99. No Response → Go to Q. 405	
404	Why didn't you and your partner use a condom that time?	1. Not available 2. Too expensive 3. Not comfortable initiating 4. Partner objected 5. In a hurry 6. Embarrassed to buy or ask for 7. Used other contraceptive 8. Didn't think it was necessary 9. Allergy/Itching 10. I don't like it 11. I trust my partner 12. I was drunk 13. Don't trust condom to prevent HIV 14. Don't know how to apply condom 15. Due to frequent condom breakage 16. It reduces my sexual pleasure 17. Desire to conceive 18. Other _____ 88. Don't know 99. No Response	
405	With what frequency did you and all of your commercial partner(s) use a condom during the past 12 months?	1. Every time 2. Almost every time 3. Some times 4. Never 88. Don't know 99. No Response	

PART FIVE: SEXUAL HISTORY: NON-REGULAR SEXUAL PARTNERS

No.	Questions and Filters	Coding Categories/REPLIES/	Code
501	Filter: Go to Q. 205 Did you have sexual intercourse with non-regular sexual partner during the last 12 months?	1. Yes → Go to Q. 502 2. No → Go to Q. 601	
502	The last time you had sex with non-regular, non-commercial partners, did you and your partner use a condom?	1. Yes 2. No → Go to Q. 504 88. Don't know → Go to Q. 505 99. No Response	
503	Who suggested condom use that	1. Myself → Go to Q. 505	

	time?	2. My partner → Go to Q. 505 3. Joint Decision → Go to Q. 505 88. Don't know → Go to Q. 505 99. No Response → Go to Q. 505	
504	Why didn't you and your partner use a condom that time? **(MULTIPLE REPLIES ARE POSSIBLE)**	1. Not available 2. Too expensive 3. Not comfortable initiating 4. Partner objected 5. In a hurry 6. Embarrassed to buy or ask or 7. Used other contraceptive 8. Didn't think it was necessary 9. Allergy/Itching 10. I don't like it 11. I trust my partner 12. I was drunk 13. Don't trust condoms to prevent HIV 14. Don't know how to apply condom 15. Due to frequent condom breakage 16. It reduces my sexual pleasure 17 Desire to conceive 19. Other _____ 88. Don't know 99. No Response	
505	With what frequency did you and all of your non-regular, non-commercial partner(s) use a condom during the past 12 months?	1. Every time 2. Almost every time 3. Some times 4. Never 88. Don't know 99. No Response	

SECTION SIX: MALE CONDOMS

No.	Questions and Filters	Coding Categories/REPLIES/	Code
601	Have you and a sexual partner ever used a male condom?	1. Yes 2. No 88. Don't know 99. No Response	
602	Do you know any place or person from which you can obtain male condoms?	1. Yes 2. No 99. No Response	
603	Is that possible to get male condom from your worksite, if you need?	1. Yes 2. No 88. Don't know 99. No Response	
604	Do you like if your working institution provide condoms at the work site?	1. Yes 2. No 88. I am indifferent 99. No Response	
605	**FOR SEXUALLY ACTIVE RESPONDENTS ONLY:**	1. Yes	

	During the past 12 months, did you ever have sexual intercourse without using a condom with any commercial sexual partner or any other sexual partner who you have never lived with and are not married to?	2. No 88. Don't Know 99. No Response	

SECTION SEVEN: SEXUALLY TRANSMITTED DISEASES

No.	Questions and Filters	Coding Categories/REPLIES/	Code
701	Have you ever heard of diseases that can be transmitted through sexual intercourse?	1. Yes 2. No ⟶ Go to Q. 704 99. No Response	
702	Which of the following do you know as symptoms of STDs in women? **(- READ ALL THE REPLY OPTIONS - MULTIPLE ANSWERS ARE POSSIBLE)**	1. Abdominal pain 2. Genital Itching 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers/sores 6. Swelling in groin area 88. Don't know 99. No Response	
703	Which of the following do you know as symptoms of STDs in men? **(- READ ALL THE REPLY OPTIONS - MULTIPLE ANSWERS ARE POSSIBLE)**	1. Genital discharge 2. Burning pain on urination 3. Abdominal pain 4. Genital ulcers/sores 5. Swelling in groin area 88. Don't know 99. No Response	
704	Have you had a genital discharge during the past 12 months?	1. Yes 2. No 88. Don't know 99. No Response	
705	Have you had a genital ulcer/sore during the past 12 months?	1. Yes 2. No 88. Don't know 99. No Response	
706	Filter – check Q 704 and 705. Had you genital discharge and/or genital ulcer in last 12 months	1. Yes 2. No ⟶ Go to Q. 801	

707	Did you do any of the following the last time you had a genital ulcer/sore or genital discharge? **(- READ ALL THE REPLY OPTIONS** **- MORE THAN ONE ANSWER IS POSSIBLE)**	1. Seek advice/medicine from the police clinic/hospital 2. Seek advice/medicine from other government clinic/hospital 3. Seek advice/medicine from a church or charity run clinic/hospital 4. Seek advice/medicine from a private clinic/hospital 5. Seek advice/medicine from a private pharmacy 6. Seek advice/medicine from a traditional Healer 7. Took medicine you had at home 8. Tell your sexual partner about the discharge/STD 9. Stop having sex when you had the symptoms 10. Use a condom when having sex during the time you had the symptoms 88. Don't know 99. No Response	
708	For the last episode of symptoms, from where did you obtain the medicine? **(CIRCLE ALL THAT APPLY)**	1. Didn't take any medicine 2. Health worker in clinic/hospital 3. Pharmacy 4. Traditional Healer 5. Friend or relative 6. Took medicine I had at home 88. Don't Remember 99. No Response	
Note	Q.709, Q.710, Q.711, Q.712 are for those who sought advice from a health worker in clinic or hospital.	If not ⟶ Go to Q. 801	
709	How long after first experiencing symptoms did you seek advice from a health worker in a clinic or hospital	1. 1 wk or less 2. Less than l month but more than 1 week 3. One month or more 88. Don't know 99. No Response	
710	Did you receive a prescription for medicine?	1. Yes 2. No ⟶ Go to Q. 801	
711	Did you obtain the medicine prescribed?	1. Yes, I obtained all of it 2. I obtained some but not all ⟶ Go to Q.801 3. I didn't obtain the medicine ⟶ Go to Q.801 88. Don't Remember 99. No Response	
712	Did you take all of the medicine prescribed?	1. Yes 2. No 88. Don't know 99. No Response	

SECTION EIGHT: KNOWLEDGE, OPIONIONS AND ATTITUDES

No.	Questions and Filters	Coding Categories/REPLIES/	Code
801	Have you ever heard of HIV or the disease called AIDS?	1. Yes 2. No ⟶ Go to Q. 901 99. No Response	
802	Do you know anyone who is infected with HIV or who has died of AIDS?	1. Yes 1. No ⟶ Go to Q. 804 99. No Response	
803	Do you have a close relative or close friend who is infected with HIV or has died of AIDS	1. Yes, a close relative 2. Yes, a close friend 3. No 99. NO Response	
804	Can people protect themselves from HIV/AIDS, by using a condom correctly every time they have sex? (Excluding other transmission routes)	1. Yes 2. No 88. Don't know 99. No Response	
805	Can a person get the HIV from mosquito bites?	1. Yes 2. No 88. Don't know 99. No Response	
806	Can a person get the HIV from eating raw meat prepared by a person infected by HIV?	1. Yes 2. No 88. Don't know 99. No Response	
807	Can a person get the HIV by getting injections with a needle that was already used by someone else?	1. Yes 2. No 88. Don't know 99. No Response	
808	Can people protect themselves from the HIV by having one uninfected faithful sex partner? (Excluding other transmission routes)	1. Yes 2. No 88. Don't know 99. No Response	
809	Can people protect themselves from the HIV by abstaining from sexual intercourse?	1. Yes 2. No 88. Don't know 99. No Response	
810	If a relative of yours became ill with HIV, would you be willing to care for him/her in your household?	1. Yes 2. No 88. Don't know 99. No Response	
811	If an officer in the police force has HIV but is not sick, should he or she be allowed to continue working in the force?	1. Yes 2. No 88. Don't know 99. No Response	
812	Can a pregnant woman infected with HIV or AIDS transmit the virus to her unborn child?	1. Yes 2. No 88. Don't Know 99. No Response	
813	Can a woman with HIV or AIDS transmit the virus to her newborn child through breast-feeding?	1. Yes 2. No 88. Don't know 99. No Response	

SECTION 9: EXPOSURE TO INTERVENTIONS PERSONAL RISK PERCEPTION AND IMPACTS OF HIV/AIDS

No.	Questions and Filter	Coding Criteria/REPLIES/	Code
901	Have you ever had an HIV test?	1. Yes 2. No → Go to Q. 905 88. Don't know → Go to Q. 905 99. No Response	
902	When did you have your most recent HIV test?	1. Within the past year 2. Between 1-2 year 3. Between 2-4 year 4. More than 4 years ago 88. Don't know 99. No Response	
903	Did you voluntarily under go the HIV test, or were you required to have the test?	1. Voluntarily 2. Required 99. No Response	
904	Did you find out the result of your test?	1. Yes 2. No 99. No Response	
905	Do you have the plan to have an HIV test in this or next year voluntarily?	1. Yes 2. No 88. Don't know 99. No Response	
906	If a physician treating you told to have an HIV test, do you accept it and be tested?	1. Yes 2. No 88. Don't know 99. No Response	
907	Do your profession (i.e. being an officer) give you more chance to know about HIV?	1. Yes 2. No 88. Don't Know 99. No Response	
908	What are your chances of getting infected with HIV?	1. No Chance 2. Low 3. Moderate 4. High 88. Don't know 99. No Response	

909	Do you consider your profession (i.e. being an officer) to increase your risk for HIV infection?	1. Yes 2. No 88. Don't know 99. No Response	
910	Do an HIV positive Officer get difficult to serve/work as Police Officer	1. Yes 2. No 88. I don't know 99. No Response	
911	How do you rate Police Officers terminating service due to death	1. Time to time increasing 2. Time to time decreasing 3. No change 88. I don't know 99. No Response	
912	How do you rate Police Officers absenteeism from work or terminating totally service due to illness	1. Time to time increasing 2. Time to time decreasing 3. No change 88. I don't know 99. No Response	
913	FOR THOSE WHO SAY "1" – FOR Q. 911 AND/OR 912 ONLY - Do you think HIV/AIDS has a contribution for the problems mentioned in Q. 911 and/or 912?	1. Yes, contributes a lot 2. Yes, contribute moderately 3. No contribution 88. Don't know 99. No Response	
914	Do you think Police Officers are attacked worse by HIV/AIDS than other society members?	1. Yes 2. No 88. I don't know 99. No Response	

That is the end of our questionnaire.

- Thank you very much for taking time to answer these questions
- We appreciate your help, and wish you the best.

ANNEX 4

በአዲስ አበባ ዩኒቨርስቲ የሕክምና ፋኩሊቲ የሕብረተሰብ ጤና አጠባበቅ ትምህርት ክፍል

በአዲስ አበባ የፖሊስ ሠራዊት ያሉ የኤች.አይ.ቪ/ኤድስ ተዛማጅ ፀባያት እና ተጽዕኖውን ለማጥናት የተዘጋጀ መጠይቅ

መግቢያ:- ይህ ከአዲስ አበባ ዩኒቨርሲቲ /አአዩ/ እና ከኢትዮጵያ ጤና አጠባበቅ ማኅበር/ኢጤአማ/ ጋር በመተባበር ለሚሠራ የመመረቂያ ጥናት ወረቀት /ፕሮጀክት/ የተዘጋጀ መጠይቅ ነው። መጠይቁ የአዲስ አበባ ፖሊስ ሠራዊት አባላትን ስለ ኤች.አይ.ቪ/ኤድስ ተዛማጅ ፀባያት እና በሽታው በሠራዊቱ ላይ ያስከተለውን ተጽዕኖ ምን እንደሚመስል ይጠይቃል። የጥናቱ ዋና ዓላማ የኤች.አይ.ቪ/ኤድስ በአዲስ አበባ የፖሊስ ሠራዊት ላይ እያስከተለ ያለውን ተጽዕኖ እና ከበሽታው ጋር ተዛማጅ የሆኑ ፀባያትን በመገንዘብ በሽታውን ለመከላከል የሚደረገውን ጥረት ማገዝ ነው።

በመጠይቁ ላይ የግል ባህሪዎን የተመለከቱ ጥያቄዎች ይቀርብሎታል። በመጠይቁ ላይ ስምዎ ወይም የእርስዎን ማንነት የሚገልጽ ማንኛውም ዓይነት ነገር አይጠቀስም ወይም አይያያዝም። የሚሰጡትም መረጃ ከዚህ ጥናት ውጪ ለሆነ ከእርስዎ ጋር ለተገናኘ ሌላ ጥቅም በፍጹም አይውልም። እርስዎ ለዚህ መጠይቅ መላሽነት የተመረጡት በእጣና በአጋጣሚ እንጂ ሆን ተብሎ ታስቦበት አይደለም።

በመጠይቁ ወቅት መመለስ የማይፈልጉትን ማንኛውንም ዓይነት ጥያቄ መተው ወይም መጠይቁን መመለስ ማቋረጥ ይችላሉ። ሆኖም ግን የሚሰጡት እውነተኛ መረጃ በፖሊስ ሠራዊቱ ውስጥ ያለውን የኤች.አይ.ቪ/ኤድስ ሁኔታ የበለጠ መረዳት እንዲቻል ለማድረግ ትልቅ አስተዋጽኦ ይኖረዋል። በቅንነት ይህን መጠይቅ በመመለስ ስለሚሰጡት ትልቅ እርዳታ በቅድሚያ ላመሰግኖት እፈልጋለሁ። ይህን መጠይቅ ለመሙላት 20 ደቂቃዎች ያህል ይፈጅብዎታል።

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት /ሃሳብዎን ከምርጫዎቹ አንዱን በማክበብ ይግለጹ/

1. **አዎን ⟶ ወደሚቀጥለው ገጽ በመሄድ መጠይቁን ይሙሉ**
2. **አይደለሁም ⟶ እባክዎትን መጠይቁን ለሰጠዎት ሰው በነገረዎት መንገድ ይመልሱ።**

የመጠይቅ ተ.ቁ _____

ስለመጠይቁ አዘገጃጀትና አሞላል

1. **ይህ መጠይቅ ዘጠኝ ክፍሎች አሉት::**
2. **እያንዳንዱ ጥያቄ፡ ተራ ቁጥር፣ ጥያቄ እና መልስ ይኖሩታል**
3. **ጥያቄውን ካነበቡ በኋላ ከተሰጡት የመልስ ምርጫዎች ውስጥ የእርስዎን ሃሳብ የመልሱን ተራ ቁጥር በመክበብ ይገልጻሉ::**
4. **ለአንዳንድ ጥያቄዎች በሰጡት መልስ ፊት ለፊት በቀስት የተጠቆመ "ወደ ተ.ቁ ___ሂድ" የሚል ሐረግ ያገኛሉ:: ይህ የሚያሳየው በመቀጠል የማይመልሷቸውና የሚዘሏቸው ጥያቄዎች እንዳሉ ነው:: ቀጥሎም ወደ ተጠቀሰው ጥያቄ ተራ ቁጥር በመሄድ መጠይቁን ይሙሉ::**

5. **'ኮድ' በሚለው የሠንጠረዥ ክፍል የሚሞሉት ምንም ነገር የለም::**
6. **መጠይቁን ከሞሉ በኋላ መጠይቁን የሰጠዎት ሰው በነገሮት መሠረት እንዲመልሱ ይሁን::**

አመሰግናለሁ::

ክፍል አንድ አጠቃቃላይ መረጃ

ተ.ቁ	ጥያቄ	መልስ	ኮድ
101	ያታዎ ምንድን ነው?	1. ወንድ 2. ሴት	
102	ዕድሜዎ ስንት ነው?	1. _____ ዓመት 88 . አላውቀውም 99. መልስ አልሰጥም	
103	ሃይማኖትዎ ምንድን ነው? • ምርጫዎቹን አንብበው አንድ መልስ ብቻ ያክብቡ	1. ኦርቶዶክስ ተዋህዶ 2. ካቶሊክ 3. ፕሮቴስታንት 4. እስልምና 5. ሃይማኖት የለኝም 6. ሌላ /ይገለጽ/_____ 99. መልስ አልሰጥም	
104	ብሔረሰብዎ ምንድን ነው?	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 99. መልስ አልሰጥም 5. ሌላ /ይገለጽ/_____	
105	ፖሊሳዊ መዐረግዎ ምንድን ነው?	1. ወታደር 2. ም/ አሥር አለቃ 3. አሥር አለቃ 4. ሃምሳ አለቃ 5. 1ኛ ደ/ባሻ 6. 2ኛ ደ/ባሻ 7. 3ኛ ደ/ባሻ 8. 4ኛ ደ/ባሻ 9. ም/መቶ አለቃ 10. መቶ አለቃ 11. ሻምበል 12. ሻለቃ 13. ሌላ_____ 99. መልስ አልሰጥም	
106	ፖሊስ ሆነው ስንት ዓመት ሰሩ?	1. ____ ____ ዓመት 99. መልስ አልሰጥም	
107	አሁን ከተሠራው አዲስ አወቃቀር በፊት የሥራ ቦታዎ የት ነበር?	1. በክልሉ ፖሊስ ኮሚሽን 2. በዞን ፖሊስ መምሪያ 3. በወረዳ ፖሊስ ጣቢያ 99. መልስ አልሰጥም	
108	በወረዳ ፖሊስ ጣቢያ ከሆነ የሠሩት/የሚሠሩት ትራፊክ ፖሊስ ነበሩ?	1. አዎን 2. አልነበርኩም/አይደለሁም 99. መልስ አልሰጥም	
109	የግል ገቢዎ ምን ያህል ነው?	1. ____ ____ ____ ብር 2. አላውቀውም 3. መልስ አልሰጥም	
110	የትምህርት ደረጃዎ ምን ያህል ነው?	1. 12ኛ ክፍል አልደረስኩም/ አልጨረስኩም 2. 12ኛ ክፍል ጨርሻለሁ 3. የዲፕሎማ ምሩቅ ነኝ 4. የዲግሪ ምሩቅ ነኝ 5. ሌላ _____ 99. መልስ አልሰጥም	
111	ባለፉት 4 ሳምንታት /አንድ ወር/ የአልኮል መጠጥ አወሳሰድዎ እንዴት ነበር? /ጠላ፣ጠጅ፣ ቢራ እና የመሳሰሉትንም ይጨምራል/	1. በየቀኑ እጠጣ ነበር 2. በሳምንት አንዴ 3. በሳምንት ከአንድ ጊዜ ያነሰ 4. ምንም አልጠጣሁም 88. አላስታውስም 99. መልስ አልሠጥም	

112	አንዳንድ ሰዎች የተለያየ ዕፅ ይወስዳሉ እርስዎ ከእነዚህ የትኛውን ዓይነት ዕፅ ወስደው ያውቃሉ? /እባክዎን ለሁሉም ዓይነት ዕፆች መልስ ይስጡ/		ወስጃለሁ	አልወሰድኩም	መልስ አልሠጥም	
		ሀ. ጫት	1	2	99	
		ለ. ሺሻ/ጋያ	1	2	99	
		ሐ. ሀሺሽ	1	2	99	
		መ. ቤንዚን	1	2	99	
		ሠ. ኮኬይን	1	2	99	
113	አንዳንድ ሰዎች በመርፌ አደንዛዥ ዕፅ ይወስዳሉ ባለፉት 12 ወራት /አንድ ዓመት/ እርስዎ በዚህ ተጠቅመው ያውቃሉ? /ለሕክምና በመርፌ የሚሠጥ መድኃኒትን አይጨምርም/	1. ወስጃለሁ 2. አልወሰድኩም 99. መልስ አልሠጥም				
114	የጋብቻዎ ሁኔታ ምንድን ነው?	1. አላገባሁም /ላጤ ነኝ/ 2. ባለትዳር ነኝ 3. ፈት ነኝ 4. ባለቤቴ ሞቷል /ሞታለች/ 99. መልስ አልሠጥም				
115	አሁን በትዳር ወይም ከግብረ ሥጋ ጓደኛዎ ጋር እየኖሩ ነው?	1. ትዳር አለኝ ከባለቤቴ ጋር አብረን እንኖራለን 2. ትዳር አለኝ ግን አሁን ከባለቤቴ ሌላ የግብረ ስጋ ጓደኛዬ ጋር እኖራለሁ 3. ትዳር አለኝ ግን ለብቻዬ እኖራለሁ 4. አላገባሁም ግን ከግብረ ስጋ ጓደኛዬ ጋር እኖራለሁ 5. አላገባሁም ለብቻዬ ነው የምኖረው 99. መልስ አልሠጥም				
116	ባለ ትዳር ከሆኑ ብቻ ይመልሱ፤ ትዳር ከሌለዎት ጥያቄውን ይዝለሉት **ለወንዶች፡-** ከአንድ በላይ ሚስት አለዎት? **ለሴቶች፡-** ባለቤትዎ ከእርስዎ ሌላ ሚስት አላቸው?	1. አዎን 2. የለውም 99. መልስ አልሰጥም				

ክፍል 2: የግብረ ሥጋ ግንኙነት ታሪክ፣ የግብረ ሥጋ ግንኙነት ጓደኛ ዓይነትና ብዛት

ተ.ቁ	ጥያቄ	መልስ	ኮድ
201	የግብረ ሥጋ ግንኙነት አድርገው ያውቃሉ? /በዚህ ጥናት የግብረ ሥጋ ግንኙነት ማለት በሴት ብልት ወይም ፊንጢጣ በኩል የሚፈጸም ግንኙነት ነው/	1. አዎን አውቃለሁ 2 አላውቅም ⟶ ወደ ጥያቄ 602 ሂድ 99. መልስ አልሠጥም	
202	ለመጀመሪያ ጊዜ የግብረ ሥጋ ግንኙነት በስንት ዓመትዎ ፈጸሙ/ጀመሩ/?	1. ____ ____ ዓመቴ 88. አላስታውስም 99. መልስ አልሰጥም	
203	የመጀመሪያ የግብረ ሥጋ ግንኙነት ያደረጉት ፖሊስ ከመሆንዎ በፊት ወይስ ፖሊስ ከሆኑ በኋላ ነው?	1. ፖሊስ ከመሆኔ በፊት 2. ፖሊስ ከሆንኩ በኋላ 88. አላስታውሰውም 99. መልስ አልሰጥም	
204	ባለፉት 12 ወራት ውስጥ የግብረ ሥጋ ግንኙነት አድርገው ነበርን?	1. አዎን 2. አላደረኩም 99. መልስ አልሰጥም	

205	**ለወንዶች፡-** ባለፉት 12 ወራት ስለ ነበሮት ሴት የግብረ ሥጋ ጓደኞችዎ አስታውሰው ጥያቄዎቹን ይመልሱ **ለሴቶች፡-** ባለፉት 12 ወራት ስለ ነበሮት ወንድ የግብረ ስጋ ጓደኞችዎ አስታውሰው ጥያቄዎቹን ይመልሱ	* ምንም ጓደኛ የለኝም ካሉ ለየጥያቄዎቹ 0 0 ይሙሉ	
	ሀ. ስንት የትዳር ጓደኛ ወይም አብረዎት የኖሩ የግብረ ሥጋ ጓደኞች ባለፉት 12 ወራት ነበሮት? /መደበኛ የግብረ ስጋ ጓደኛ/	1. ____ ____ ጓደኞች ነበሩኝ 88. አላስታውስም 99. መልስ አልሰጥም	
	ለ. በገንዘብ ክፍያ ግንኙነት የፈጸሙባቸው የግብረ ሥጋ ግንኙነት ጓደኛ ብዛት ስንት ነበሩ? /የገንዘብ ክፍያ ጓደኛ/	1.____ ____ ጓደኞች ነበሩ 88. አላስታውስም 99. መልስ አልሠጥም	
	ሐ. ከመደበኛ ወይም ከገንዘብ ክፍያ ውጭ የፈጸሙት የግብረ ሥጋ ግንኙነት ጓደኛ ብዛት ስንት ነው? /ጊዜያዊ ጓደኛ/ /ጊዜያዊ ጓደኛ የትዳር ጓደኛን ወይም አብረው የሚኖሩትን የግብረ ስጋ ጓደኛ አይጨምርም/	1. ____ ____ ጓደኞች ነበሩ 88. አላስታውስም 99. መልስ አልሰጥም	
206	**ለወንዶች ብቻ፡** **ሀ**. የወንድ የግብረ ሥጋ ግንኙነት ጓደኛ ኖሮት ያውቃል?	1. አዎን 2. አልነበረኝም ⟶ ወደ ተ.ቁ 301 ይሂዱ 99. መልስ አልሠጥም	
	ለ. የወንድ የግብረ ሥጋ ግንኙነት ጓደኛ ከነበሮት ባለፉት 12 ወራት ውስጥ በፊንጢጣ በኩል የሚደረግ የግብረ ሥጋ ግንኙነት ፈጽመው ያውቃሉ?	1. አዎን 2. አልፈጸምኩም ⟶ ወደ ተ.ቁ 301 ይሂዱ 99. መልስ አልሰጥም	
	ሐ. ባለፉት 12 ወራት ከስንት ወንዶች ጋር በፊንጢጣ በኩል የሚደረግ የግብረ ሥጋ ግንኙነት ፈጸሙ?	1. ከ ____ ____ ወንዶች ጋር 2. አላስታውስም 99. መልስ አልሰጥም	

ክፍል ሦስት የትዳር ጓደኛን ወይም እንደ ባልና ሚስት አብረው የሚኖሩትን ጓደኛ /ማለትም መደበኛ ጓደኛን/ የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
301	ከተ.ቁ 302 - 305 ያሉት ጥያቄዎች እርስዎን ይመለከቱ እንደሆነ ለማረጋገጥ እባክዎትን ጥያቄ ‘205 - ሀ’ ን ምን ብለው እንደመለሱ ይመልከቱ	1. አዎን መደበኛ ጓደኛ ነበረኝ ⟶ ወደ ተ. ቁ 302 ይቀጥሉ 2. ምንም መደበኛ ጓደኛ አልነበረኝም ⟶ ወደ ተ.ቁ 401 ይሂዱ	
302	በመጨረሻ ጊዜ ከመደበኛ የግብረ ሥጋ ጓደኛዎ ጋር ግንኙነት ሲፈጽሙ ኮንዶም ተጠቅመዋል?	1. አዎን ተጠቅሜአለሁ 2. አልተጠቀምኩም ⟶ ወደ ተ.ቁ 304 ይሂዱ 88. አላስታውስም ⟶ ወደ ተ.ቁ 305 ይሂዱ 99. መልስ አልሰጥም	
303	በዛን ወቅት ኮንዶም ለመጠቀም ሃሳቡን ያመጣው ማን ነው? /አንድ መልስ ላይ ብቻ ያክብቡ/	1. እኔ ነኝ ⟶ ወደ ተ.ቁ 305 2. ጓደኛዬ ⟶ ወደ ተ.ቁ 305 3. የሁለታችንም ሃሳብ ነበር ⟶ ወደ ተ.ቁ 305 88. አላስታውስም ⟶ ወደ ተ.ቁ 305 99. መልስ አልሰጥም	

304	በዛን ወቅት ኮንዶም ያልተጠቀማችሁበት ምክንያት ምን ነበር /ነበሩ? **/ከአንድ በላይ መልስ መስጠት ይችላሉ/**	1. ስለማይገኝ/ስላልነበረ 2. ውድ ስለሆነ 3. እንጠቀም ማለት ስላሳፈረኝ/ስላልደፈልኩ 4. ጓደኛዬ ስለተቃቃወመ/ች 5. በጥድፊያ ረስተነው 6. ለመግዛት ስላፈርኩ 7. ሌላ የወሊድ መቆጣጠሪያ ስለተጠቀምን 8. አስፈላጊ መስሎ ስላልታየኝ 9. አለርጂ/ማሳከክ ስለሚያመጣብኝ 10. ስለማልወድ 11. ጓደኛዬን ስለማምናት/ነው/ 12. አልኮል ጠጥቼ ስለነበር 13. ኮንዶም ኤች.አይ.ቪ አይከላከልም ብዬ ስለማምን 14. የኮንዶም አጠቃቀም ስለማላውቅ 15. ኮንዶም በየጊዜው እየተቀደደ ስላስቸገረኝ 16. እርካታ ስለሚቀንስብን 17. ልጅ መውለድ ስለፈለግን 18. ሌላ /ይገለጽ/_____ 88 አላስታውስም 99 መልስ አልሰጥም	
305	ባለፉት 12 ወራት ከመደበኛ ጓደኛዎ ጋር ምን ያህል ጊዜ ኮንዶም ይጠቀሙ ነበር	1. ሁል ጊዜ ተጠቅመናል 2. ብዙ ጊዜ ተጠቅመናል 3. አልፎ አልፎ ተጠቅመናል 4. በጭራሽ አልተጠቀምንም 88. አላስታውስም 99. መልስ አልሰጥም	

ክፍል አራት፡ የገንዘብ ክፍያ የግብረ ሥጋ ግንኙነት ጓደኛን የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
401	ከተቁ 402 - 405 ያሉት ጥያቄዎች እርስዎን ይመለከቱ እንደሆነ ለማረጋገጥ እባክዎትን ጥያቄ ‘205 - ለ’ን ምን ብለው እንደመለሱ ይመልከቱ	1. አዎን የገንዘብ ክፍያ ጓደኛ ነበረኝ ⟶ ወደ ተ.ቁ 402 ይቀጥሉ 2. የገንዘብ ክፍያ ጓደኛ አልነበረኝም ⟶ ወደ ተ.ቁ 501 ይሂዱ	
402	በመጨረሻ ጊዜ በገንዘብ ክፍያ ባደረጉት የግብረ ሥጋ ግንኙነት ወቅት ኮንዶም ተጠቅመው ነበር?	1. አዎን 2. አልተጠቀምኩም ⟶ ወደ ተ.ቁ 404 88. አላስታውሰውም ⟶ ወደ ተ.ቁ 405 99. መልስ አልሰጥም	
403	በዛን ወቅት ኮንዶም ለመጠቀም ሃሳቡን ያመጣው ማን ነበር?	1. እኔ ⟶ ወደ ተ.ቁ 405 2. ጓደኛዬ ⟶ ወደ ተቁ 405 3. የሁለታችንም ሃሳብ ⟶ ወደ ተ.ቁ 405 88. አላስታውስም ⟶ ወደ ተ.ቁ 405 99. መልስ አልሰጥም	

404	በዛን ወቅት ኮንዶም ያልተጠቀማችሁበት ምክንያት/ቶች/ ምን ነበር/ሩ? /ከአንድ በላይ መልስ መስጠት ይችላሉ/	1. ስለማይገኝ/ስላልነበረ 2. ውድ ስለሆነ 3. እንጠቀም ማለት ስላሳፈረኝ/ስላልደፈልኩ 4. ጓደኛዬ ስለተቃቃወመ/ች 5. በጥድፊያ ረስተነው 6. ለመግዛት ስላፈርኩ 7. ሌላ የወሊድ መቆጣጠሪያ ስለተጠቀምን 8. አስፈላጊ መስሎ ስላልታየኝ 9. አለርጂ/ማሳከክ ስለሚያመጣብኝ 10. ስለማልወድ 11. ጓደኛዬን ስለማምናት/ነው/ 12. አልኮል ጠጥቼ ስለነበር 13. ኮንዶም ኤች.አይ.ቪ አይከላከልም ብዬ ስለማምን 14. የኮንዶም አጠቃቀም ስለማላውቅ 15. ኮንዶም በየጊዜው እየተቀደደ ስላስቸገረኝ 16. እርካታ ስለሚቀንስብን 17. ልጅ መውለድ ስለፈለግን 18. ሌላ /ይገለጽ/ _____ 88. አላስታውስም 99. መልስ አልሰጥም	
405	ባለፉት 12 ወራት ከገንዘብ ክፍያ የግብረ ሥጋ ጓደኛ ግንኙነት ሲፈጽሙ ምን ያህል ጊዜ ኮንዶም ይጠቀሙ ነበር?	1. ሁል ጊዜ ተጠቅሜአለሁ 2. ብዙ ጊዜ ተጠቅሜአለሁ 3. አልፎ አልፎ ተጠቅሜአለሁ 4. በጭራሽ አልተጠቀምኩም 88. አላስታውስም 99. መልስ አልሰጥም	

ክፍል አምስት: የጊዜያዊ የግብረ ሥጋ ግንኙነት ጓደኛን የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
501	ከተቁ 502 - 505 ያሉት ጥያቄዎች እርስዎን ይመለከቱ እንደሆነ ለማረጋገጥ እባክዎትን ጥያቄ ‘205-ሐ’ን ምን ብለው እንደመለሱ ይመልከቱ	1. አዎን ከጊዜያዊ ጓደኛ ጋር ግንኙነት ነበረኝ ⟶ ወደ ተቁ 502 ይቀጥሉ 2. ግንኙነት አልነበረኝም ⟶ ወደ ተ.ቁ 601 ይሂዱ	
502	በመጨረሻ ጊዜ ከጊዜያዊ ጓደኛዎ ጋር የግብረ ሥጋ ግንኙነት ባደረጉበት ወቅት ኮንዶም ተጠቅመው ነበር?	1. አዎን 2. አልተጠቀምኩም ⟶ ወደ ተ.ቁ 504 88. አላስታውስም ⟶ ወደ ተ.ቁ 505 99. መልስ አልሰጥም	
503	በዛን ወቅት ኮንዶም ለመጠቀም ሃሳቡን ያመጣው ማን ነበር?	1. እኔ ነኝ ⟶ ወደ ተ.ቁ 505 2. ጓደኛዬ ⟶ ወደ ተ.ቁ 505 3. የሁለታችንም ሃሳብ ⟶ ወደ ተ.ቁ 505 88. አላስታውሰውም ⟶ ወደ ተ.ቁ 505 99. መልስ አልሰጥም	

504	በዛን ወቅት ኮንዶም ያልተጠቀማችሁበት ምክንያት/ቶች/ ምን ነበር/ሩ? /ከአንድ በላይ መልስ መስጠት ይችላሉ/	1. ስለማይገኝ/ስላልነበረ 2. ውድ ስለሆነ 3. እንጠቀም ማለት ስላሳፈረኝ/ስላልደፈልኩ 4. ጓደኛዬ ስለተቃወመ/ች 5. በጥድፊያ ረስተነው 6. ለመግዛት ስላፈርኩ 7. ሌላ የወሊድ መቆጣጠሪያ ስለተጠቀምን 8. አስፈላጊ መስሎ ስላልታየኝ 9. አለርጂ/ማሳከክ ስለሚያመጣብኝ 10. ስለማልወድ 11. ጓደኛዬን ስለማምናት/ነው/ 12. አልኮል ጠጥቼ ስለነበር 13. ኮንዶም ኤች.አይ.ቪ አይከላከልም ብዬ ስለማምን 14. የኮንዶም አጠቃቀም ስለማላውቅ 15. ኮንዶም በየጊዜው እየተቀደደ ስላስቸገረኝ 16. እርካታ ስለሚቀንስብን 17. ልጅ መውለድ ስለፈለግን 18. ሌላ /ይገለጽ/ _____ 88. አላስታውስም 99. መልስ አልሰጥም	
505	ባለፉት 12 ወራት ከጊዜያዊ የግብረ ሥጋ ጓደኛ ጋር ግንኙነት ሲፈጽሙ ምን ያህል ጊዜ ኮንዶም ይጠቀሙ ነበር?	1. ሁል ጊዜ ተጠቅሜአለሁ 2. ብዙ ጊዜ ተጠቅሜአለሁ 3. አልፎ አልፎ ተጠቅሜአለሁ 4. በጭራሽ አልተጠቀምኩም 88. አላስታውስም 99. መልስ አልሰጥም	

ክፍል ስድስት: የወንድ ኮንዶምን የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
601	ከዚህ በፊት በማናቸውም ጊዜ የወንድ ኮንዶም በግንኙነት ወቅት ተጠቅመው ያውቃሉ?	1. አዎን 2. አልተጠቀምኩም 88. አላስታውስም 99. መልስ አልሰጥም	
602	የወንድ ኮንዶም ከየት ወይም ከማን እንደሚያገኙ ያውቃሉ?	1. አዎን 2. አላውቅም 99. መልስ አልሰጥም	
603	በእርስዎ የሥራ ቦታ የወንድ ኮንዶም ከመስሪያ ቤትዎ ማግኘት ይችላሉ?	1. አዎን 2. አይገኝም 88. አላውቅም 99. መልስ አልሰጥም	
604	መሥሪያ ቤትዎ በሥራ ቦታ የወንድ ኮንዶም ለሠራተኛ ቢያቀርብ እርስዎ እንዴት ያዩታል? ይስማማሉ?	1. አዎን እስማማለሁ 2. አልስማማም 88. ምንም አይመስለኝም 99. መልስ አልሰጥም	
605	የግብረ ሥጋ ግንኙነት ፈጽመው ለሚያውቁ ብቻ:- • ባለፉት 12 ወራት በገንዘብ ክፍያ የግብረ ሥጋ ግንኙነት ከሚፈጽሙት ወይም ካላገቧትና/ካላገቡትና/ አብራዎት/አብሮት/ ከማትኖር/ከማይኖር/ ሰው ጋር ካለ ኮንዶም የግብረ ሥጋ ግንኙነት ፈጽመዋል?	1. አዎን 2. አልፈጸምኩም 88. አላስታውስም 99. መልስ አልሰጥም	

ክፍል ሰባት፡ በግብረ ሥጋ ግንኙነት ስለሚተላለፉ የአባላዘር በሽታዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
701	በግብረ ሥጋ የሚተላለፉ በሽታዎች መኖራቸውን ሰምተው ያውቃሉ?	1. አዎን 2. አልሰማሁም ⟶ ወደ ተ.ቁ 704 99. መልስ አልሰጥም	
702	በግብረ ሥጋ የሚተላለፉ የአባላዘር በሽታዎች በሴቶች ላይ የሚያሳዩት የትኞቹን ምልክቶች ነው? /- ምርጫዎቹን ሁሉ ያንብቡ - የሚያውቋቸውን ብቻ ያክብቡ፡ - ከአንድ በላይ መልስ መስጠት ይችላሉ/	1. የሆድ ህመም 2. የብልት ማሳከክ 3. መጥፎ ሽታ ያለው የብልት ፈሳሽ 4. ሽንት ሲሸኑ የማቃጠል ስሜት 5. የብልት ቁስል/መላጥ 6. ንፍፊት/የብሽሽት አብጠት 88. ምልክቶቹን አላውቃቸውም 99. መልስ አልሰጥም	
703	በግብረ ሥጋ የሚተላለፉ የአባላዘር በሽታዎች በወንዶች ላይ የሚያሳዩት የትኞቹን ምልክቶች ነው? /- ምርጫዎቹን ሁሉ ያንብቡ - የሚያውቋቸውን ብቻ ያክብቡ - ከአንድ በላይ መልስ መስጠት የችላሉ/	1. የብልት ፈሳሽ 2. የሽንት መለብለብ/ማቃጠል 3. የሆድ ሕመም 4. የብልት መቁሰል/መላጥ 5. ንፍፊት/የብሽሽት እብጠት 88. ምልክቶቹን አላውቃቸውም 99. መልስ አልሰጥም	
704	ባለፉት 12 ወራት ውስጥ ከብልትዎ ፈሳሽ ይወጣዎት ነበር?	1. አዎን 2. አልነበረም 88. አላስታውስም 99. መልስ አልሰጥም	
705	ባለፉት 12 ወራት ውስጥ ብልትዎ ላይ ቁስል ወይም መላጥ ነበረዎት?	1. አዎን 2. አልነበረኝም 88. አላስታውስም 99. መልስ አልሰጥም	
706	ከተቁ 707 -712 ያሉት ጥያቄዎች እርስዎን ይመልከቱ እንደሆነ ለማረጋገጥ፣ እባክዎትን ከጥያቄ 704 እና 705 አንዱን ወይም ሁለቱንም አዎን ብለው መልሰዋል	1. አዎን ብዬ መልሻለሁ ⟶ ወደ ተ.ቁ 707 ይቀጥሉ 2. አንዱንም ጥያቄ አዎን ብዬ አልመለስኩም ወደ ተ.ቁ 801 ይሂዱ	
707	በብልትዎ ላይ ቁስል/መላጥ ወይም ፈሳሽ በነበርዎት የቅርብ/የመጨረሻ/ ጊዜ ከተዘረዘሩት ውስጥ ምን ፈጸሙ? /- ምርጫዎቹን ሁሉ ያንብቧቸው - ከአንድ በላይ መልሶች በማክበብ መስጠት ይችላሉ/	1. ወደ ፖሊስ ክሊኒክ/ሆስፒታል ሄጄ ታከምኩ 2. ወደ መንግሥት ጤና ጣቢያ/ሆስፒታል ሄጄ ታከምኩ 3. ወደ የእርዳታ ድርጅት ክሊኒክ/ሆስፒታል ሄጄ ታከምኩ 4. ወደ ግል ክሊኒክ/ሆስፒታል ሄጄ ታከምኩ 5. ወደ ግል ፋርማሲ ሄጄ ታከምኩ 6. ወደ ባህል መድኃኒት አዋቂ ሄጄ ታከምኩ 7. ቤቴ ውስጥ የነበረኝን መድኃኒት ወሰድኩበት 8. ስለ ሕመሜ ለግብረ ስጋ ጓደኛዬ አዋየሁ/ነገርኩ 9. ሕመሙ በነበረኝ ወቅት የግብረ ስጋ ግንኙነት ማድረግ አቆምኩ 10. ሕመሙ በነበረኝ ወቅት ግንኙነት ለማድረግ ኮንዶም ተጠቀምኩ 88. ስላደረኩት ነገር አላስታውስም 99. መልስ አልሰጥም	

708	በመጨረሻ ጊዜ የብልት ፈሳሽ ወይም ቁስል በነበረዎት ወቅት መድኃኒት ከየት ወሰዱ?	1. ምንም መድኃኒት አልወሰድኩም 2. ከክሊኒክ/ሆስፒታል ያለ ጤና ባለሙያ አዞልኝ 3. ከፋርማሲ 4. ከባህል መድኃኒት አዋቂ 5. ከጓደኛዬ/ከዘመዴ አግኝቼ 6. ከቤት የነበረኝን መድኃኒት 88. አላስታውስም 99. መልስ አልሰጥም	
ጥያቄ 709-712 የሚመለከቱት የብልት ፈሳሽ ወይም ቁስል ሕመም በነበራቸው ወቅት ለሕክምና ወደ ጤና ባለሙያ /ክሊኒክ/ሆስፒታል/ የሄዱትን ብቻ ነው:: እርስዎ ሕክምና ለማግኘት ወደ ጤና ባለሙያ /ክሊኒክ፣ ሆስፒታል/ ከሄዱ ጥያቄ '709' ን ይቀጥሉ ካልሄዱ ግን ወደ ጥያቄ '801' ይሂዱ::			
709	ሕመሙ ከጀመረዎት ከምን ያህል ጊዜ በኋላ ነው ወደ ሕክምና የሄዱት?	1. ከአንድ ሳምንት ባነሰ ጊዜ 2. ከአንድ ሳምንት እስከ ወር ከሆነው በኋላ 3. ከወር በላይ ቆይቶ 88. አላስታውሰውም 99. መልስ አልሰጥም	
710	ለሕክምና በሄዱበት ወቅት የመድኃኒት ማዘዣ ተሰጥቶት ነበር?	1. አዎን 2. አልተሰጠኝም ⟶ ወደ ተ.ቁ 801 ይሂዱ 88. አላስታውስም ⟶ ወደ ተ.ቁ 801 ይሂዱ 99. መልስ አልሰጥም	
711	የታዘዘሎትን መድኃኒት በወቅቱ አግኝተው ነበር?	1. አዎን ሁሉንም አግኝቼአለሁ 2. የተወሰኑትን ብቻ ነው ያገኘሁት ⟶ ወደ ተ.ቁ 801 3. የትኛውንም መድኃኒት አላገኘሁም ⟶ ወደ ተ.ቁ 801 88. አላስታውስም 99. መልስ አልሰጥም	
712	የታዘዘሎትን መድኃኒት ጨርሰው ወስደው ነበር?	1. አዎን ጨርሻለሁ 2. ጨርሼ አልወሰድኩም 88. አላስታውስም 99. መልስ አልሰጥም	

ክፍል ስምንት:- ስለ ኤች.አይ.ቪ ያሉትን ግንዛቤ እና አመለካከት የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
801	ስለ ኤች.አይ.ቪ ወይም ስለ ኤድስ በሽታ ሰምተው ያውቃሉ?	1. አዎን 2. ሰምቼ አላውቅም ⟶ ወደ ተቁ 901 99. መልስ አልሰጥም	
802	ኤች.አይ.ቪ ያለበት ወይም የኤድስ በሽተኛ የሆነ ሰው ወይም በኤድስ የሞተ ሰው ያውቃሉ?	1. አዎን አውቃለሁ 2. አላውቅም ⟶ ወደ ተቁ 804 99. መልስ አልሰጥም	
803	ኤች.አይ.ቪ ያለበት ወይም የኤድስ በሽተኛ የሆነ ወይም በኤድስ የሞተ የቅርብ ጓደኛ ወይም ዘመድ ነበርዎት?	1. አዎን ቅርብ ጓደኛ ነበረኝ/አለኝ 2. አዎን ቅርብ ዘመድ ነበር/አለኝ 3. አልነበረኝም 99. መልስ አልሰጥም	
804	ከግብረ ሥጋ ግንኙነት ውጪ ባለ መንገድ	1. አዎን ይከላከላሉ	

	ባይተላለፍባቸውና በግብረ ሥጋ ግንኙነት ወቅት ኮንዶም ሁል ጊዜ በአግባቡ በመጠቀም ሰዎች ራሳቸውን ከኤች.አይ.ቪ መከላከል ይችላሉ?	2. አይከላከሉም/አይችሉም/ 88. አላውቅም 99. መልስ አልሰጥም	
805	አንድ ሰው በወባ ትንኝ/ቢንቢ/ ንክሻ ኤች.አይ.ቪ ሊይዘው ይችላል?	1. አዎን 2. አይችልም 88. አላውቅም 99. መልስ አልሰጥም	
806	አንድ ሰው ኤች.አይ.ቪ ያለበት ሰው እየቆረጠ ያዘጋጀውን ጥሬ ሥጋ ቢመገብ ኤች.አይ.ቪ ሊይዘው ይችላል?	1. አዎን ይችላል 2. አይችልም/አይዘውም 88. አላውቅም 99. መልስ አልሰጥም	
807	ሌላ ሰው በተወጋበት መርፌ በመጠቀም አንድ ሰው ኤች.አይ.ቪ ሊይዘው ይችላል?	1. አዎን ይችላል 2. አይችልም/አይዘውም 88. አላውቅም 99. መልስ አልሰጥም	
808	ከግብረ ሥጋ ግንኙነት ውጪ አንድ ሰው ኤች.አይ.ቪ ባይተላለፍበትና አንድ ታማኝ ኤች.አይ.ቪ የሌለባት/በት የግብረ ሥጋ ጓደኛ ቢኖረው /ቢኖራት/ ራሱን ከኤች.አይ.ቪ መከላከል ይችላል?	1. አዎን ይከላከላል 2. አይችልም/አይከላከልም 88. አላውቅም 99. መልስ አልሰጥም	
809	ከግብረ ሥጋ ግንኙነት ውጪ አንድ ሰው ኤች.አይ.ቪ ባይተላለፍበትና ራሱን ከግብረ ሥጋ ግንኙነት ተአቅቦ በማድረግ ከኤች.አይ.ቪ መከላከል ይችላል?	1. አዎን ይችላል 2. አይችልም/አይከላከልም 88. አላውቅም 99. መልስ አልሰጥም	
810	አንድ ዘመድዎ በኤች.አይ.ቪ የተነሳ ሕመምተኛ ቢሆን በቤትዎ ውስጥ ለማስታመም ፈቃደኛ ይሆናሉ?	1. አዎን አስታምመዋለሁ 2. አላስታምመውም 88. አላውቅም 99. መልስ አልሰጥም	
811	አንድ የፖሊስ ባልደረባ ኤች.አይ.ቪ በደሙ ቢኖር ነገር ግን ጤነኛ ቢሆን በፖሊስ ኃይል ውስጥ እንዲሠራ ሊፈቀድለት ይገባልን?	1. አዎን 2. ሊፈቀድለት አይገባም 88. አላውቅም 99. መልስ አልሰጥም	
812	ኤች.አይ.ቪ ያባባት ነፍሰጡር እናት ጥየረሱን ወደ ጽኑሱ/ልጇ/ ታስተላልፋለች?	1. አዎን 2. አታስተላልፍም 88. አላውቅም 99. መልስ አልሰጥም	
813	ኤች.አይ.ቪ/ኤድስ ያለባት እናት ጡት ለልጇ በማጥባት በሽታውን ለሚጠባው ልጇ ታስተላልፋለች?	1. አዎን 2. አታስተላልፍም 88. አላውቅም 99. መልስ አልሰጥም	

ክፍል ዘጠኝ፦ ከኤች.አይ.ቪ መከላከያ ግንዛቤዎን እና የኤች.አይ.ቪ ተጽዕኖን የራስን ተጋላጭነት የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	መልስ	ኮድ
901	የኤች.አይ.ቪ የደም ምርመራ አድርገው ያውቃሉ?	1. አዎን 2. አላደረኩም⟶ ወደ ተቁ 905 99. መልስ አልሰጥም	
902	በቅርብ ጊዜ የኤች.አይ.ቪ የደም ምርመራ ያደረጉት መቼ ነው?	1. ባለፈው ዓመት 2. ከአንድ - ሁለት ዓመት በፊት 3. ከሁለት - አራት ዓመት በፊት 4. አራት ዓመት አልፎታል 88. አላስታውስም 99. መልስ አልሰጥም	
903	በመጨረሻ የደም ምርመራ ሲያደርጉ በራስዎት ፈቃድ ለመመርመር አስበው ነው ወይንስ እንዲመረመሩ ተገደው ነው?	1. በፈቃዴ ተመርምሬ ነው 2. እንድመረመር ተጠይቄ/ተገድጄ 99. መልስ አልሰጥም	
904	የደም ምርመራ ውጤትዎን ተቀብለው/ወስደው ነበር?	1. አዎን ወስጃለሁ 2. አልወሰድኩም 99. መልስ አልሰጥም	
905	በዚህ ወይም በሚቀጥለው ዓመት በፈቃድዎ የኤች.አይ.ቪ የደም ምርመራ የማድረግ ዕቅድ/ሃሳብ አለዎት?	1. አዎን አለኝ 2. የለኝም 88. አላውቅም 99. መልስ አልሰጥም	
906	እርስዎ ሲታከሙ ሃኪምዎ የኤች.አይ.ቪ የደም ምርመራ ያስፈልጐታል ቢሎት ለመመርመር ይፈቅዳሉ?	1. አዎን እመረመራለሁ 2. አልመረመርም 88. አላውቅም 99. መልስ አልሰጥም	
907	የፖሊስነት ሥራዎ ስለ ኤች.አይ.ቪ ኤድስ የበለጠ እንዲያውቁ አድርጐዎታል?	1. አዎን 2. አላደረገኝም 88. አላውቅም 99. መልስ አልሰጥም	
908	በኤች.አይ.ቪ የመያዝ ዕድልዎ ምን ያህል ነው ይላሉ?	1. በፍጹም አልያዝም/አልተያዝኩም 2. ዝቅተኛ ነው 3. መካከለኛ ነው 4. ከፍተኛ ነው 88. አላውቅም 99. መልስ አልሰጥም	
909	የፖሊስነት ሥራዎ የእርስዎን በኤች.አይ. ቪ/ኤድስ ለመያዝ የሚያጋልጥዎት አድርገው ያስባሉ?	1. አዎን 2. አያጋልጠኝም 88. አላውቅም 99. መልስ አልሰጥም	
910	አንድ የፖሊስ አባል ኤች.አይ.ቪ ቢኖርበት ሥራውን ለማከናወን/ለመፈጸም ይከብደዋል?	1. አዎን 2. አይከብደውም 88. አላውቅም 99. መልስ አልሰጥም	

911	በእርስዎ ዕይታ ከፖሊስ ሠራዊቱ በሞት የሚለዩ አባላት ቁጥር ምን ያህል ነው ይላሉ?	1. ከጊዜ ወደ ጊዜ እየጨመረ ነው 2. ከጊዜ ወደ ጊዜ እየቀነሰ ነው 3. ምንም ልዩ ነገር የለውም 88. አላውቅም 99. መልስ አልሰጥም	
912	በእርስዎ ዕይታ ከፖሊስ ሠራዊቱ አባላት በሕመም/በበሽታ ምክንያት ከሥራ ገበታ ላይ መቅረት/መለየት ምን ያህል ነው ይላሉ?	1. ከጊዜ ወደ ጊዜ እየጨመረ ነው 2. ከጊዜ ወደ ጊዜ እየቀነሰ ነው 3. ምንም ልዩ ነገር የለውም 88. አላውቅም 99. መልስ አልሰጥም	
913	በተቁ 911 እና 912 ለተጠቀሱት ችግሮች ኤች. አይ. ቪ/ኤድስ ድርሻ/አስተዋጽኦ አለው ብለው ያስባሉ?	1. አዎን ትልቅ ድርሻ አለው 2. አዎን መለስተኛ ድርሻ አለው 3. አይመስለኝም/ድርሻ የለውም 88. አላውቅም 99. መልስ አልሰጥም	
914	የፖሊስ ሠራዊት አባላት ከሌላው የኅብረተሰብ ክፍል በተለየ በኤች. አይ. ቪ የተጠቃ ይመስሎታል?	1. አዎን 2. አይመስለኝም 88. አላውቅም 99. መልስ አልሰጥም	

ይህ የመጠይቁ ማጠቃለያ ነው ጊዜዎትን ሰውተው መጠይቁን ስለመለሱልኝ በጣም አመሰግናለሁ ያደረጉትን ትብብር አደንቃለሁ፤ መልካሙን ሁሉ እመኝሎታለሁ::

ANNEX 5

GUIDELINES FOR DATA COLLECTORS OF QUESTIONNAIRE-1 & QUESTIONNAIRE-2

A-Points to be considered in filling Questionnaire-1:

1.Information about questions 1-6 is found at the top of the first page of medical card.

2.Use Ethiopian date for Q-7; if available date on card is European indicate it as G.C. by striking the E.C.

3. In Q-8 & 9 patients are considered tested for HIV and labeled as positive if one of the following is documented on the card any time;

-HIV serology documented as positive

-Patient is labeled by his physician as "a known HIV/RVI/AIDS patient …" or any such used acronyms or terms on his cards

-Patient is on anti retroviral therapy/ART/ any time

-Patient had CD4 cell count done and/or viral load laboratory investigation done or requested

4-If patient is tested for HIV serology and result is documented, escape questions 10, 11 & 12 and go to Q-13 directly.

5- For Q-12 & 13, to decide a diagnosis as AIDS defining opportunistic diseases use the appendix attached which is adapted from the 1993 CDC AIDS surveillance definition.

B-Points to be considered in filling Questionnaire-2

1- For Q-1 to 6, see A-1

2- For Q-7 &8, see A-3 and A-4

3- For Q-9, see A-5

4- For Q-12 and 13;

-Use the cost determination manual of the hospital

-Determine the amount and the total cost of all laboratories/investigations done, drugs prescribed and services patient got

-For new visits and recording done on new cards don't forget to cost 'for card'

-For admissions be cautious in labeling of bed costs for different classes.

ANNEX 6

APPENDIX-1: conditions listed as HIV infection indicating diseases

- Candidiasis, oropharyngial
- Candidiasis, vulvovaginal; persistent, frequent, or poorly responsive to therapy
- Cervical dysplasia (moderate/sever) / cervical carcinoma insitu
- Constitutional symptoms, such as fever (38.50c) or diarrhea lasting >1 month
- Hairy leukoplakia, oral
- Herpes zoster (shingles), involving at least two distinct episodes or more than one dermatome
- Idiopathic thrombocytic purpura (ITP)
- Listeriosis
- Minor mucocutaneous manifestation (fungal nail infection)
- Pelvic inflammatory disease, particularly if complicated by tubo-ovarian abscess
- Peripheral neuropathy
- Persistent generalized lymphadenopathy
- Pulmonary TBC
- Unintentional weight loss (>10% of body weight)

APPENDIX-2: CONDITOIONS LISTED IN THE AIDS SURVEILLANCE CASE DEFINITION (CATEGORY C)

-Candidiasis of bronchi, trachea, or lungs

-Candidiasis, esophageal

-Cervical cancer, invasive

-Coccidiomycosis, disseminated or extra pulmonary

-Cryptococcosis, extra pulmonary

-Cryptosporidiosis, chronic intestinal (>1 month's duration)

-Cytomegalovirus disease (other than liver, spleen, or nodes)

-Cytomegalovirus retinits (with loss of vision)

-Encephalopathy, HIV related

-Herpes simplex: chronic ulcers (>1 month's duration); or bronchitis, pneumonia, or esophagitis

-Histoplasmosis, disseminated or extra pulmonary

-Isosporiasis, chronic intestinal (>1 month's duration)

-Kaposi's sarcoma

-Lymphoma, Burkitt's (or equivalent term)

-Lymphoma, primary, of brain

-*Mycobacterium avium* complex or *M.kansasii*, disseminated or extra pulmonary

-*Mycobacterium tuberculosis*, any site (pulmonary or extra pulmonary)

-*Mycobacterium*, other species or unidentified species, disseminated or extra pulmonary

-*Pneumocystis carinaii* pneumonia

-Pneumonia, recurrent

-Progressive multifocal leukoencephalopathy

-*Salmonella* septicemia, recurrent

-Toxoplasmosis of brain

-Wasting syndrome due to HIV

Annex 7:

DECLARATION

I, the undersigned, declared that this is my original work, and has not been presented for a degree in this or any other University. All sources of materials used for this thesis has been fully acknowledged.

Name: Solomon Emyu /MD/

Signature: _____

Place: Addis Ababa, Ethiopia

This thesis has been submitted for examination with my approval as University advisor.

Name: Dr. Gail Davey

Signature: _____