

Addis Ababa University School of Graduate studies

**SURVIVAL STRATEGIES OF STREET CHILDREN AND
HIGH RISK BEHAVIORS TOWARDS HIV/AIDS IN ADAMA
TOWN**

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Declaration

I the undersigned declare that this thesis is my original work and has never been presented in this or any other University, and that all resources and materials used in herein, have been duly acknowledged.

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Table of contents

Acknowledgment	i
Table of contents	ii
List of tables.....	iii
List of figures	Iv
Acronyms.....	IV
Abstract.....	v
Background.....	1
Literature review	4
Objective.....	11
General objective.....	11
Specific objectives.....	11
Methods	12
Study Area	12
Study design.....	12
Source population.....	12
Study population	12
Sample size	13
Sampling procedure.....	14
Data collection procedures.....	15
Data Analysis procedures	16
Variables	177
Ethical consideration	177
Dissemination of results	17
Operational definitions	17
Results	199
Socio demographic characteristics	199
Survival strategies	223
Health problems	288
Sexual behaviours and practices	2930
Knowledge of and attitude towards HIV/AIDS	33
Discussion.....	444
Strengths and limitations of the study	48
Conclusions and recommendations.....	509
References.....	51
Annex 1. Conceptual framework on the effect of street children's survival on the spread of HIV/AIDS.....	52
Annex 2 Focus group discussion guide and Questioner.....	53
Annex 3. English Information sheet.....	660
Annex 4. English Consent form	61
Annex 5. Amharic version information sheet.....	62
Annex 6. Amharic version consent form.....	63
Annex 7. Amharic version FGD guide and questionnaire.....	64

List of tables

Table 1 Distribution of socio demographic characteristics of street children, Adama, 2007	20
Table 2. Original place and reason given by street children to leave home, Adama, 2007	22
Table.3 Survival strategies and related variables of street children, Adama, 2007.....	27
Tab.4 Description of sexual history of street children, Adama, 2007.....	32
Table 5. Knowledge of street children on HIV/AIDS transmission, Adama, 2007	35
Table 6. Socio demographic factors associated with alcohol use among street children, Adama, 2007.....	37
Table 7: Socio demographic factors associated with chat use among street children, Adama, 2007.....	39
Table 8: Socio demographic factors associated with cigarette smoking among street children, Adama, 2007.....	41
Table 9: The association of having multiple sexual partners with specified variables of street children, Adama, 2007.....	42

List of figures

Fig. 1 The major listed health problems of street children Adama, 2007.....	29
Fig.2 Sources of information for street children on HIV/AIDS, Adama, 2007.....	34

Acronyms

AIDS - Acquired Immuno Deficiency Syndrome

CSW- Commercial Sex Work

FGDs- Focus group discussions

FSCE- Forum on street children Ethiopia

FSW- Female Sex Workers

HIV - Human Immuno deficiency Virus

MSP- Multiple Sexual Partner

STI/Ds- Sexually Transmitted Infections/Diseases

Abstract

Background- One of the common features in which the problems of children under difficult circumstances manifest is the problem of “streetism”. There are an estimated 100 million street children worldwide, 150,000 in Ethiopia and 1,326 in Adama.

Objective- To assess survival strategies of street children and their exposure to HIV/AIDS related risk factors in Adama town.

Methods- A cross sectional descriptive study was conducted in Adama town. Both qualitative and quantitative study methods were used and interview using structured questionnaire and four FGDs were used to collect data. The study subjects for the quantitative study were selected by simple random sampling method after registering the street children. FGD participants were selected by using snowball technique.

Result- A total of 998 street children aged above seven and less than eighteen completed years were registered and 441 have participated in the study. 77.1% of the respondents were males. Street children are engaged in different activities like petty trade, begging, theft, daily labor and commercial sex work to earn money. 86.5% of the study participants earn less than 10 ETH birr per day and the mean average daily income of study subjects is 1.19 ETH birr. Street children have admitted that they use alcohol and other substances like chat, cigarette, glue, benzene, shisha, hashish, atsefaris (cannabis), ganija, mixture of local leaves like "shewishewe" and "tikure", orange rind, and tea. 32.2% of the respondents are sexually active. 53.3% had their first sexual experience between the age of 10 and 14. 89.5% of respondents have heard of HIV/AIDS and 30.7% of the respondents consider themselves as having risk of being infected with HIV. 3.5% of respondents have had sexually transmitted diseases in their past history. It was also identified that there are males who are having sex with males and also street boys make sex with a single girl being in-group.

Conclusion- The majorities of street children are living by their own being engaged in different activities. Because of lack of adult supervision and harsh environmental condition risky and unhealthy practices like substance use, early sex, violence and having multiple sexual partners are common. More should be done on child rights at all levels to protect children from joining streets and those who are on the street should be supported financially to decrease their vulnerability. Legislative actions should also be taken on drug traffickers.

Background

Children in developing countries are among the under privileged, in many ways. Most endure enormous problems of survival due to lack of food, family support, health care and other necessities of life. One of the common features in which the problems of children under difficult circumstances manifest is the problem of “streetism” (1). There are an estimated 100 million street children worldwide, including 40 million in Latin America, 30 million in Asia and 10 million in Africa (2).

In Ethiopia the adversely interacting social, economic, and cultural factors such as extreme poverty, rapid urbanization, and poor nutritional status, among others, have lead to enormous increase in the number of children under extremely difficult circumstances. The problem of street children in Ethiopia has become a countrywide epidemic, recent information indicating the number of such children in the country to be 150,000 (of this 66.7% are living in Addis Ababa) (3). In 2003 a total of 1,326 street children were enumerated in Adama town (4).

Adama is one of the rapidly growing cities, which is located on the center of the country. Majority of street children are migrants from areas like Southern Region and other cities of Oromiya in search of job. When things are not like they expect they will join street life (4).

Most of the children who are living on the streets do not have access to proper health care including reproductive health services like adequate information on HIV/AIDS. As a result while struggling to survive they are frequently exposed to adverse health conditions like STIs including

HIV. Education is also believed to be one tool for developing awareness and self care, but very little of street children in Nazareth have joined either formal or non formal education that shows high level of illiteracy rate among street children (3).

Street children are vulnerable to HIV because many of them receive health information from unreliable sources. Most of these children have wrong perception about the causes and mode of transmission of sexually transmitted diseases including HIV/AIDS. Due to this reason they use materials like blades, seizers and clothes even under wears in common which may increase their risk to acquire HIV and other STDs. They also tend to use condom inconsistently and females have minimal power in relationships to negotiate safe sexual practices (3).

Psychological support and adult or family supervision is also required through the child's developmental stage. But most children have lost either both or one parent and others do not have contact with their family for various reasons. In this way they are obviously prone to many unhealthy and risky practices like prostitution, violence, drug addiction, unsafe sex and juvenile crimes (3, 5). The effects of losing family and cultural values are reflected by the observation of higher rates of substance use, arrest by police, and STDs among street children.

Even though they are not willing to have partners female street children are forced to have at least one to be protected from others. Female street children commonly start sexual intercourse between the age of 10 and 13 (5). Different types of sexual practices like anal intercourse, vaginal intercourse, oral sex, self-masturbation, and mutual masturbation are practiced among street children (6).

Given that the problems of street children are very complicated, studies conducted on street children mainly focus on specific health issues like reproductive health and health related behaviors. But to alleviate the problem of street children and to minimize their risk of acquiring HIV/AIDS and other health problems, their strategies to survive on streets and their needs should be clearly identified. There should be an evidence based data for better planning and implementation of programs targeted street children.

This study has tried to assess the survival strategies of street children in Nazareth town and their effect on the spread of HIV/AIDS. It is believed that the results will help to produce information that can be used by program managers and stakeholders in the planning and implementation of interventions for improving activities in rehabilitation of street children and also to protect children from going out of home.

Literature review

Homelessness (streetism) affects more than 100 million people in the world. The vast majorities are concentrated in urban centers in the poorer, developing countries of Asia, Africa, and Latin America (7). For the purpose of studying the situation of street children in Nazareth census was conducted in 2003 and a total of 1326 street children were registered (2).

Street children are perhaps the most vulnerable group in any society. They have few advocates, can wield no political strength, and regardless of official views, are generally regarded as nuisances to be tolerated, and at the worst as little more than vermin. The general public is also likely to have a low opinion of street children due to the latter's perceived laziness and involvement in crime. Children in general are regarded as being in need of protection from abuse, but the nature of the lives of street children exposes them to an almost unimaginable potential for exploitation, often by agents of the state who are in positions of authority (8).

Their vulnerability to the HIV is also higher than other groups of the society because of their sexuality, promiscuity and a high number of potential partners, limited access to condoms and exposure to unprotected sexual relations, namely in exchange for food, shelter or money, high prevalence of untreated or poorly treated sexually transmitted disease, the consumption of drugs that decrease inhibitions and therefore increase risks, low educational level, lack of information on sexuality and false beliefs about HIV/AIDS, low self-esteem with a strong devaluation of their bodies and lives, the impossibility of seeing themselves in the future: they are not worried about a hypothetical future illness because they are not even sure where they will be the next day (9).

Why children runaway from their homes?

The dramatic increase in the number of street children has also been linked to societal stress associated with rapid industrialization and urbanization (10). Studies of streetism in developing countries relate it most fundamentally to poverty. Poor families put their children to work much more than do families that are better off (11). Children of illiterate families are among the poorest and at high risk of joining street life. According to a study conducted in Pakistan 58% of fathers and 97% of mothers were not engaged in any money earning activities. Those working were either in street trading or engaged in unskilled professions (12). Concerning street children in Nazareth, 55.1% of fathers and 59% of mothers of street children were illiterates (8).

Poverty and death of parents were also identified as the main causes for almost 85% of street children in Dire Dawa town (5). The places these children use for selling small items, shoe shining; car washing and other activities are the streets of major towns.

In agricultural societies, drought and famine may be to blame. Family disruption, in the form of death, separation, and divorce, has shrunk family size still further, often resulting in poor, single parent, mother-headed households. This leaves children vulnerable, and with the general absence of community and governmental support, they have few options in times of crisis other than life on the street (10).

A comparative study conducted in Awassa revealed that higher number of street children than non-street children reported that they have far large number of siblings (6+). On the contrary 42.8% of the non-street children reported that they have 0-3 siblings as opposed to the street

children group, which are only 29.6% (9). 51.8% of street children in Nazareth had also reported that they have 4-7 siblings (8).

Migration from rural areas to urban is also one of the factors that increase the problem of streetism in towns. According to a study conducted in Addis Ababa by Abeje Berehanu 32% of respondents were of rural origin (6). Another study in Awassa also showed that about 61.1% of street children are migrants from other rural or urban areas (9).

Socioeconomic status and survival strategies of street children

These children live on the streets under very poor social, economic and health conditions. Being far away from families or any adult supervision is believed to worsen the situation there. Most children in Nazareth live far away from their families with no one to decide for them and to take care of them. A study conducted by FSCE and USAID Ethiopia had stated that more than half of the children whose parents are outside of Nazareth had never visited their families since living home. Close to half of the children have also stated that their families do not know their current address (2).

Because of their low educational status and negative societal perception towards them they face problems of regular employment opportunity. A study conducted in Nazareth by Yemane has revealed that only 18.3% of study subjects were attending school during the study period (8). 61.3% of them had primary school education and 27.6% were totally illiterate. As a result most of the children were involved in non formal and unskilled businesses to secure money for the survival of themselves and their families as well. 34.2% of the children get income from shoe

shining and working as taxi driver's assistants, 31.3% were involved in carrying and messaging and the rest were involved in vending, begging, and brokering (8).

The study conducted in Dire Dawa indicates that the mean daily income for the 'on' the street children was Birr 3.04 ± 2.06 (S.D), while it was Birr 2.44 ± 1.95 (S.D) for the 'off' the street children. The daily income ranged between birr 0.50 and 20 for the 'on' the street children and birr 0.50 and 15 for the 'off' the street children (5). When street children face such limited options to get income they may have turned to illegal activities like delivering drugs and engaging in petty theft to make money (3). While youths of the street were economically viable, 69% had a history of alcohol abuse, 14% of drug abuse, and 24% operated as drug couriers; 46% reported school refusal, 27% school suspension, and 47% school truancy (12).

As it is stated in the study conducted by Yemane, 14.6% of children reported the use of at least one substance like alcohol, cigarette, and chat. Even if 81.9% have not started sexual intercourse, 17.9% had reported starting sex between the age of 10 and 18 years, 1% reported to start sex between 5 and 9 years (8).

In addition to the risky sexual behaviors they have, it is obvious that substance abuse would increase their demand for more money, which in turn may force them to get involved in anti-social activities such as robbery.

It is also stated that street children spend their income according to their priority needs: assisting family, food, clothes, school fee, shelter recreation and substance addiction respectively (2)

Most female street children use sex as a source of income in their daily life. Because they don't have proper information and adequate access to preventive services they are mainly at risk of acquiring HIV/AIDS. About half the female sex workers (FSWs) in India do not use condom consistently with their clients. Non-brothel-based FSWs, who form the majority of sex workers in India, were at a significantly higher risk of HIV infection as compared with brothel-based FSWs (13).

The survival strategies used by street children mainly depend on their income, educational status, and societal perception towards them. As they are living under poor economical status and detached from the surrounding community they are prone to adhere to their own strategies that may increase their chance of having various health problems especially HIV/AIDS.

Knowledge and attitude of street children towards HIV

HIV/AIDS represent a permanent threat to street children, who frequently catch sexually transmitted infections (STIs)-an indication of unprotected sexual activity.

Although the health care facilities are readily available physically in Nazareth, the children's access to them is limited by their status and economical constraints (8). Because of the low economical status and lack of access to proper and adequate health information and services street children suffer from various forms of health problems especially STIs and HIV/AIDS.

A study conducted in Awassa states that only 35.5% of respondents attended one or more kind of health education. Their knowledge of family planning, STDs and HIV/AIDS transmission ways and prevention methods, personal hygiene and sanitation in street children and women is very

low (9). The same study also identified that only 44.3% of respondents have specified the common ways of HIV transmission and only 37.3% of those who knew transmission routes practiced one or more of the prevention methods. In the contrary majority of street children in Addis Ababa know the transmission and prevention of HIV/AIDS, and most get the information from non-governmental organizations and charities working on street children (1).

HIV/AIDS related risk factors of street children

Vaginal, oral and/or anal sexes are widely practiced among street children and a substantial minority had had intercourse with 20 or more partners during their life times (6). Sexual abuse and exploitation by street boys and other members of society including police are also common threats of female street children. Out of those street children found in Nigeria forty-nine percent admitted to being sex workers and 11% had been raped and were, therefore, at risk of contacting sexually transmitted diseases (14).

In Ethiopia it is also stated that Of the 32 interviewed, 21 girls had been sexually attacked. Those girls who were not attacked were either too young (that is, not sexually mature), already pregnant or had a child with them. For many girls, this had occurred a number of times, the perpetrators usually being a group of drunken street boys. The average age of the girls' first experience of rape is 14.25 years (11).

A study conducted by Mitike to assess sexual violence among female street adolescents in Addis Ababa has found out that the street adolescents are at high risk of sexual violence. Among the sexually active study groups 43% initiated sexual activity as a result of forcible rape. The perpetrators used different tools to intimidate the victims such as beating, threatening with

pointing a knife and verbal threat. Since they are always at high risk of being raped, using contraceptives and protecting themselves from STDs including HIV/AIDS is beyond their control Even if they have good awareness about STDs and contraceptive use (15).

For the reason that street children are far from any adult supervision and live in a very harsh environmental condition they tend to use substances like chat, cigarette, ganja, shisha and benzene. While using these substances the children get lost control of themselves and indulge into unprotected sexual intercourse, criminal acts and theft (16). They often use objects that could be contaminated to perforate the skin, such as razors or needles, to carry out scarification or blood brotherhood rituals (9).

Objective

General objective

- To assess the survival strategies of street children and their exposure to HIV/AIDS related risk factors in Adama town.

Specific objectives

- To identify the survival strategies of street children
- To identify HIV/AIDS related risk factors of street children

Methods

Study Area

Adama, a major trade centre located in Oromia region, is located 100 Km east of Addis Ababa on the route between the capital and the port at Djibouti. It is the second largest city outside Addis Ababa and its location on the main trade route between Addis Ababa and Djibouti means it is a major truck stop and market center. The town is divided into 14 Kebeles and 2 highers. Based on the 2004 report the total population is estimated to be 390,574 with 50.3% males and 49.7% females. (Adama statistics office).

Study design

The study design is a cross sectional descriptive study in which both qualitative and quantitative methods are employed. This design has also triangulated two types of data collection methods, focus group discussion and structured interview.

Source population

All street children found in Nazareth (Adama). A total of 998 street children were registered in Adama town.

Study population

Street children fulfilling the inclusion criteria of age between 7-17 years living and/or working on the streets of Adama.

Inclusion Criteria:

- All children found in the age group of 7-17 years and those who are working and/or living on the streets. (Because children below seven years are at relatively low risk and they are not able to express themselves)
- Those who do not have hearing and speech impairment, and with out mental problems.

Sample size

For the purpose of defining the socio demographic characteristics and quantifying survival strategies through structured questionnaires sample size will be determined using the following assumptions.

- 1) Considering the absence of previous data on the specific study area and to obtain large sample size, this study assumes that 50% of street children in Nazareth use survival strategies that expose them to HIV/AIDS (P= 0.05).
- 2) 95% confidence Interval (Z= 1.96)
- 3) A 5% margin of error (d=0.05)
- 4) A 15% allowance for non-response rate

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

$$\begin{aligned} \text{There fore } n_o &= \frac{(1.96)^2 \times 0.05 (1-0.05)}{(0.05)^2} \\ &= 384 + 58 \\ &= 442 \end{aligned}$$

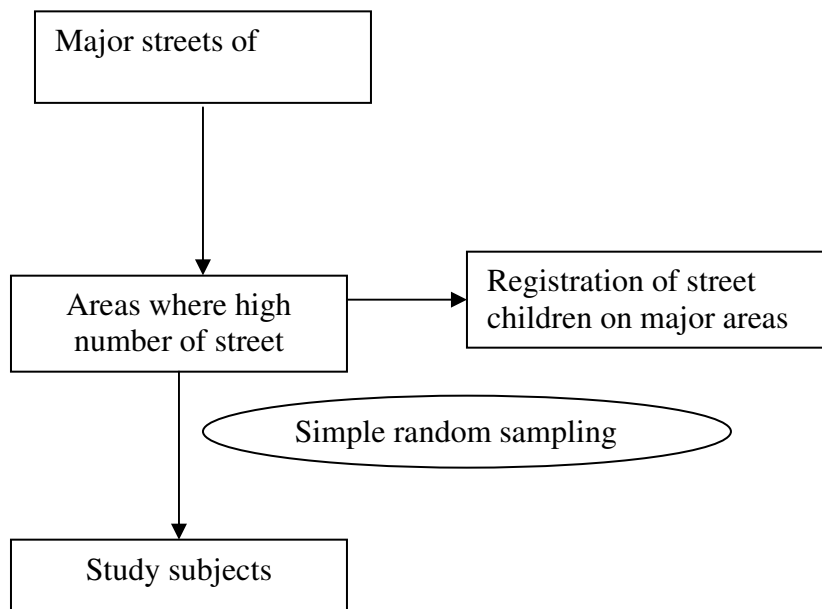
Four focus group discussions each consists of 6-10 individuals were conducted by categorizing the children by age and sex.

Sampling procedure

In order to get maximum number of source population for the sample frame streets were selected based on their concentration of street children. Selection of streets was done through observation and consulting some street children and individuals working in the area of street children. One day prior to data collection date, registration of all street children living/working in the streets of Adama was conducted to get the sampling frame. The second day was also used for registration and data collection.

Simple random sampling method was used to select sample population for the quantitative study and snowball technique was employed for qualitative study.

Sampling procedure for quantitative study



Data collection procedures

For the qualitative study:

Semi- structured open-ended questionnaire was used in order to provide more insight in to the life styles of street children and their knowledge, attitudes and practices towards HIV/AIDS.

Those children between the ages of 7-12 years were considered as one group and the others between 13-17 years were the second group. For each age category males and females had separate sessions of FGD. The principal investigator moderated the discussion with the assistance of trained note taker and tape recorder.

To collect data for the quantitative part of the study a structured questionnaire was used, and to assure the quality of data:

- Children's fingers were painted by gentian violet to avoid double counting during registration
- Supervisors and data collectors were selected based on their abilities and skills (Diploma graduates and grade 12+)
- Data collectors were trained by the principal investigator about the objective of the study and ways of data collection
- Questionnaire was prepared in English and then translated to Amharic and then translated back in to English in order to check for consistency
- Questionnaire was tried to be standardized from similar studies
- Questionnaire was pre tested on 10% of the sample population on street children found in neighbouring town, Mojo.

- Data collectors were encouraged to have a fieldwork diary to put all the notes of the field work for latter consideration.
- Each data collector and supervisors checked the questionnaires for completeness before winding up the interview with each study participant.
- The principal investigator rechecked 10% of the questionnaires at the end of each data collection day.

Time and place of data collection

- The preferred time for registration and data collection was the time between 7.00 pm- 12.00 pm
- Data was also collected during the day time at their convenient times
- Permission was given from Forum on street children Ethiopia for a place to conduct FGD.

Data Analysis procedures

The quantitative data entered and cleaned and analyzed using SPSS software version 13. Frequencies proportion and summery stastics were used to describe the study population in relation to relevant variables. Association between dependent and independent variables assessed and presented using odds ratios and confidence intervals. Logistic regression was used to control possible confounders. The qualitative data was analyzed manually.

The dependent variables; alcohol, cigarette and chat use were measured based on the frequency and amount of consumption. Children who used these substances occasionally or once in life time are considered as non users.

Variables

Dependent variable - Having multiple sexual partners, early sex, chat cigarette and alcohol use

Independent variables - Socio demographic variables (Age, sex, literacy, income, religion), awareness on HIV/AIDS, lack of adult supervision, self-risk perception

Ethical consideration

- Ethical clearance for the study received from Addis Ababa University Faculty of Medicine
- Since street children have no one to decide for them, informed verbal consent obtained from all study participants.
- Local authorities contacted and informed
- Participants of FGDs and interview were paid to compensate for their lost times.

Dissemination of results

The result of the study will be presented to concerned bodies and stakeholders and will also be published on appropriate journals

Operational definitions

- **Children on the street-** working children who spend all their days and some of their nights on the streets and in public places, but who have occasional family contact
- **Children off the street-** children such as orphans, runaways, refugees, and displaced persons who do not have any contact with their families.
- **Gang-** A leader of the street children, who is older and physically bigger than others on whom the children depend for protection and support.
- **Multiple sexual partner-** More than one sexual partner at the same time

- **HIV/AIDS related risk factors-** those who had sex earlier than 18 years of age, or have sex with non regular partner, exchange sex for money, or have more than one sexual partner or use condoms inconsistently or do not use condom at all.
- **Streetism-** Life style of children who for various reason work or live on the streets with all of its subgroup cultural values, norms, customs and expectations.
- **Street child-** A child between the age of 5-17 and living and/working on the street
- **Survival strategy-** Ways of meeting the basic survival needs (food, water, shelter, and medical insurance) while living on the streets
- **Substance Abuse:** Poor lifestyle that predispose to HIV Infection including chat chewing, alcohol drinking, cigarette smoking and other drug use

Results

Socio demographic characteristics

A total of 998 street children aged above seven and less than eighteen completed years were registered in the survey and 441 of them have participated in the study. The mean age of the children was 14.34 (+ SD 2.62) and 340 (77.1%) of the respondents were males with female to male ratio of 1:3.3. The majority of the respondents (95.5%) were singles. Orthodox Christians account for about 58.0% of the study participants (see Table 1).

Concerning educational status, 305 (69.2%) of the study participants are in primary education level but the majority, 65.1% are not attending school and 26.3% are attending primary school by the time of the interview (see Table 1).

With regard to parental education, almost half (50.4%) of the respondents' mothers and (37.5%) of their fathers are illiterate. One hundred fifty four (34.9%) of the respondent children have answered that both of their parents are alive and 88 (20%) have mentioned that both of their parents have died (see Table 1).

Table 1 Distribution of socio demographic characteristics of street children, Adama, 2007

Variables	Frequency	Percentage
Age (years)		
7-10	21	4.8
11-14	196	44.4
15-18	224	50.8
Sex		
Male	340	77.1
Female	101	22.9
Marital status		
Single	421	95.5
Married	7	1.6
Divorced	5	1.1
Others	8	1.8
Religion		
Orthodox	256	58.1
Other Christian	44	10
Muslim	140	31.7
No religion	1	0.2
Educational status		
Illiterate	67	15.2
Priest school	14	3.2
Koran school	9	2.0
Primary education	305	69.2
Secondary education	27	6.1
Others	19	4.3
Parental status (n=428)		
Both alive	154	34.9
Both died	88	20
Mother alive	120	27.2
Father alive	49	11.1
I don't know	17	6.8
Mother's educational status (n=409)		
Illiterate	206	50.4
Read and write	67	16.4
Primary education	38	9.3
Secondary education and above	60	14.7
I don't know	38	9.3
Father's educational status (n=381)		
Illiterate	143	37.5
Read and write	41	10.8
Primary education	56	14.7
Secondary education and above	82	21.5
I don't know	59	15.5
Total	441	100

Original place and duration of stay on the street

In terms of place of living before coming out to streets, the majority (42.2%) are from Nazareth town and 158 (35.8%) came from an urban area that is outside of Nazareth. Search of job and disagreement with family were mentioned as reasons to leave home by 180 (40.8%) and 142 (32.2%) respondents respectively (see Tab.2).

Two hundred thirty nine (57.0%) and 117 (27.9%) of respondents left home at the age of 10-14 and 5-9 years respectively. As to family size, children who came from 2-6, and 7-11 family size are 249 (65.9%), and 120 (31.7%) respectively. Out of the 255 respondents for the number of years they lived/worked on streets 128 (50.2%) have responded that they have stayed for two to five years and the others 55 (21.6%) came to street before one year (see Table 2).

FGD discussants have reported that they do not get advantage from living on street. They are facing hardships of rain, cold, hunger, diseases (relapsing fever) and shortage of cloth and rape. All of the participants reported there is high rate of physical abuse by police and the society has negative attitude towards them so that they don't give them job opportunities. The society including the police considers street children as thieves. They have agreed that the freedom they have on street is the only benefit. But one of the female participants reported that living on street is better because she got support from Forum (FSCE), that her family didn't give her.

Table.2 Original place and reasons given by street children to leaving home, Adama, 2007.

Variables	Frequency	Percentage
Respondents' original place of living (n=436)		
Nazareth urban	186	42.2
Nazareth rural	6	1.4
Outside Nazareth urban	158	35.8
Outside Nazareth rural	86	19.5
Reasons for leaving home (n=422)		
Search of job	180	40.8
Peer pressure	41	9.3
Following a stranger	7	1.6
Attracted by city life	3	0.7
Looking for lost relative	4	0.9
School failure	7	1.6
Disagreement with family	142	32.2
Others	38	8.6

Survival strategies

As shown in Table 3 almost half (49.9%) of the respondents are living alone either on the street or in rented houses. The others 37 (8.5%) are living with both parents, and 39 (9.0%) are living in female-headed family. Three hundred three (69.2%) of all the respondents do not get any type of support either from family, caregivers or organizations. But 56 (12.8%) have mentioned that they get food, shelter and cloth from family, caregivers or organizations.

One hundred (23.0%) of the study participants do not have income at all. Petty trade and begging driver were mentioned as a source of income by 134 (30.8%), 73 (16.8%) of the study participants respectively (see Table 3). It was also found out during FGD that Begging, theft, petty trade, carrying messages, selling thrown metals and bottles, shoe shining, assistant driver, and working in metal and wood works are the main sources of income.

From FGD, the sources of income mentioned as mainly practiced by female street children are "chireba" (A street girl goes with people who ask for sexual favors while they are begging, but they tell a false story for the man that they will be back with in some minutes and will run away taking the money and having dinner), "Kuk" (hanging a drunken man being in-group and take his money and properties), and "Kumulegn" (practicing sex for money by renting a house in areas where there are high number of brothels).

Two hundred eighty two (86.5%) of the study participants earn less than 10 ETH birr per day and the mean average income of study subjects is 1.19 ETH birr per day. As to the saving methods 174 (52.7%) don't save from their income. Out of those who save 103 (66.5%) keep their money

with parents, relatives, friends or individuals whom they trust. Some also use a small metallic or wooden box. Bank and Iqub were used as a saving method by only 29 (18.7%) and 23 (14.8%) of respondents respectively (see Tab. 3).

With regard to availability of food for these groups of population, 190 (44.5%), 159 (37.2%) and 62 (14.5%) are able to have meal as available, three times and two times a day respectively (see Table 3). Only 224 (55.7%) of the respondents have mentioned that they have additional cloth than they wear at the time of interview.

When street children feel hungry they usually go to hotels and ask for leftover foods ("bulle"). Some also eat rotten fruits from fruit shops and garbage. If they get money by begging they also use it to buy food. The children have also mentioned that chat and cigarette help them to forget the feeling of hunger.

As indicated in Table 3 almost half (49.4%) of study subjects sleep (spend the night) on the streets and the others 102 (23.2%) spend the night at home. One hundred thirteen (50.0%) of the children who spend the night on street wear plastics to protect themselves from rain and cold, the other 38 (16.8%) use alcohols and 36 (15.9%) use plastics as well as drugs.

Concerning alcohol use, the FGD result has found out that tella, beer (mainly draft), arakie, Tej and mixture of left over alcohols are the commonly used ones. 146 (33.1%) of study subjects have admitted that they use one or more of these drinks (see Tab.3). Tella, is used by 109 (25.7%) of the respondents. With regard to frequency of alcohol consumption, indicating 31

(21.5%) reported that they consume every day, 47 (32.6%) 3-4 day per week, 35 (24.3%) at least once per week, 8 (5.6%) one per month and the rest 23 (16%) only on holidays

Cigarette is used by 128 (29.5%) of study subjects. As to the amount of cigarette consumption 112 (87.5%), 13 (10.2%) and 3 (2.3%) of them smoke less than 10 pieces, 10-20 pieces and > 20 pieces per day respectively (see Table 3)

With regard to chat chewing, 180 (42.1%) of study participants have answered that they chew chat (see Tab 3). Out of these respondent children, 73 (40.6%) and 61 (33.9%) chew chat daily and three to four times a week respectively.

Only 13 (3.2%) and 17 (5%) of the respondents admitted that they use benzene and other drugs like Shisha, glue and ganja respectively. Through the focus group discussion, it was found out that street children use substances like benzene, glue, shisha (a kind of tobacco), atsefaris (cannabis), hashis (marijuana), ganija, mixture of local leaves like "shewishewe" and "tikure (yewef kolo)", orange rind, and tea. In addition to using drugs the FGD discussants have reported that there are street children who transfer drugs like hashish. But they don't know the original place of that drug.

Twenty two (9.0%) of the respondents have ever used one or more of the above alcohol drinks and substances in their past life history. Avoiding anxiety, Peer pressure, and for sense of pleasure are the major reasons for using the listed drugs by 27 (26.5%), 21 (20.6%), and 21 (20.6%) of respondents respectively. The FGD discussants have also mentioned peer pressure, desire for sense of pleasure, overcoming cold, scared of the night, getting strong when going for

robbery as reasons. The girls also chew chat and smoke cigarette not to fall asleep because they are afraid that they could be raped while sleeping

Aware of side effects and afraid of being arrested by the police were mentioned by 9 (40.9%) and 8 (36.4%) of them as a reason to stop using these substances.

Table 3. Survival strategies and related variables of street children, Adama, 2007.

Variables	Frequency	Percentage
Activities to earn money (n=335)		
petty trade	134	30.8
Begging	73	16.8
Prostitution	6	1.4
Others	122	28.0
Income (ETH birr/day) (n=425)		
No income	99	23.3
< 5	128	30.1
5-10	154	36.2
11-15	27	6.4
> 15	17	4.0
Place to spend the night (n=439)		
Streets	217	49.4
Overnight rent	8	1.8
At families place	102	23.2
Relatives house	33	7.5
Rented house	79	18
Frequency of having meals (n=411)		
As available	190	44.5
Twice a day	62	14.5
Three times a day	159	37.2
Alcohol use (n=424)		
Yes	146	34.1
No	278	65.6
Chat chewing (n=428)		
Yes	180	42.1
No	248	57.9
Cigarette smoking (n=434)		
Yes	128	29.5
No	306	70.5

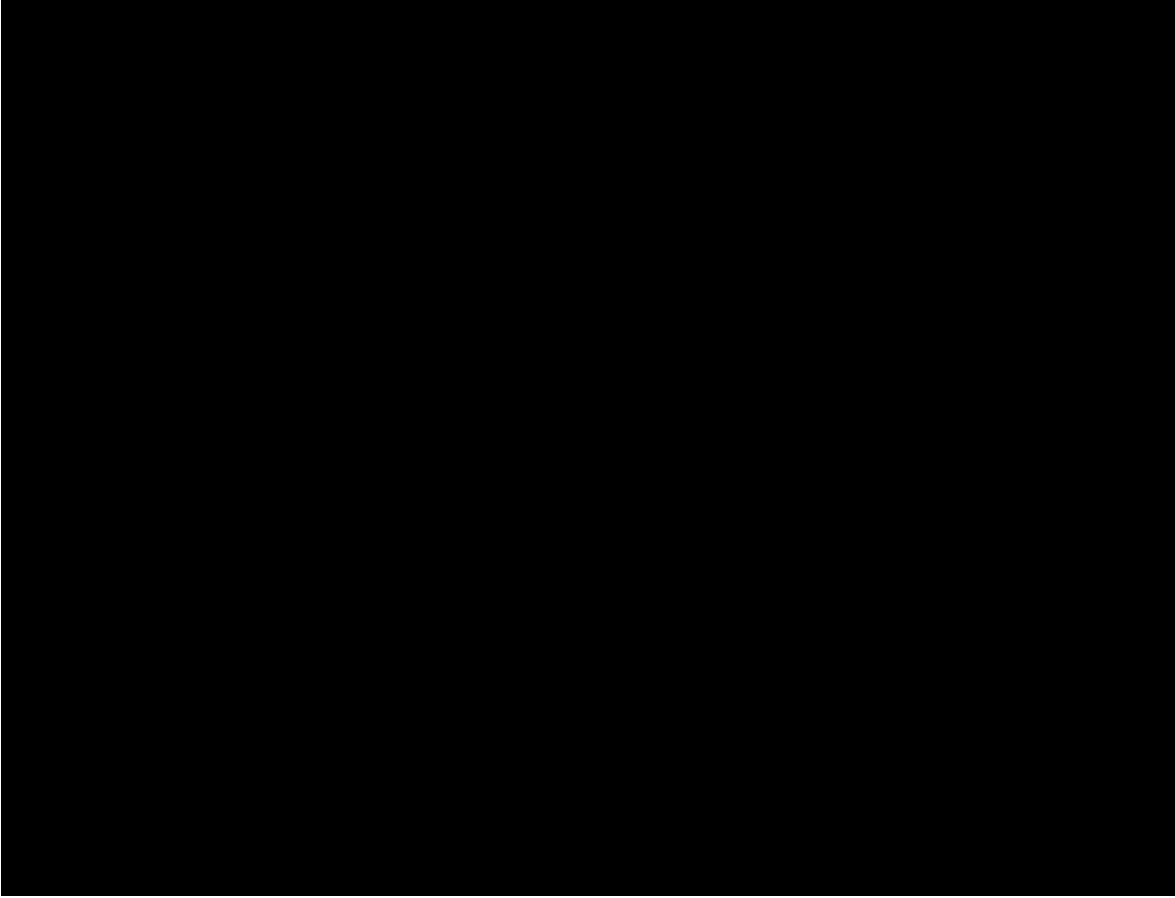
Health problems

One hundred sixty two (37.6%) of the respondents have mentioned that they have some form of health problem during the time of data collection. Intestinal parasites are the leading cause of illness among study participants that was mentioned by 72 (42.9%) of them (see Fig.1).

FGD participants have also listed food poisoning, abdominal pain, gastritis, malaria, headache, anemia cough, relapsing fever, stab injury, bullet injury when attempting to rob a house, and car accident by a drunken driver when they are sleeping on street as a health problems they face frequently. They have also reported rape, unwanted pregnancy, and physical abuse by police as health problems.

As to the actions they take when they get sick, 226 (69.8%) of the respondents go to health institutions, while the others: 68 (21.0%), 12 (3.7%), and 10 (3.1%) do nothing, use holly water and take traditional medicine respectively.

The FGD participants have also stated that when a street child is sick the other children will take care for the sick. They look money and take the child to hospital they also bring food for him/her.



Sexual behaviours and practices

One hundred forty (32.2%) of the respondents are sexually active. Half of the study participants (53.3) had their first sexual experience between the age of 10 and 14, the other (39.3%) started sexual intercourse when they were 15 and above, and only 9 (7.4%) answered that they were less or equal to nine at their first sexual experience (see Tab.4). During FGD street boys in the age group of 7-13 have stated that even if they are few there are sexually active children who are in the same age group.

Personal interest was mentioned as a reason to initiate early sex by 67 (54.0%) of the respondents. The other reasons were peer pressure, promising words from partner and marriage, which were mentioned by 32 (25.8%), 7 (5.6%) and 6 (4.8%) of the respondents respectively (see Tab 4).

It was also found through FGD that there is a high chance of being raped for females sleeping on streets. But they reported that the problem of rape is decreasing because the boys are being educated by organizations like FSCE. It was also reported by male FGD participants aged 14-18 that there is a habit of street boys that they make sex with the same girl turn by turn (Yedama). They also added that the females like this kind of sex. It was also found out that there are males who have sex with other males ("bushiti"). They usually do it in cinemas and they rape younger street boys.

Concerning having multiple sexual partners, 23 (17.2%) of the respondents have answered that they have more than one sexual partner at the time of data collection (see Table 4). It was also

found through FGD that some street girls can have sex with more than one person especially when they get drunk and some are engaged in commercial sex work. Street children of both sexes have sexual relationship with non street children ("Yeebetlij"). This was raised during FGD as a main risk factor in the way that their partners go out with some other guy/girl and also will have sex with them with out condom. Adults of both sex also come to street children to ask for sexual favors in exchange for money, food, and drink. Some of street children agree with them.

Concerning condom use almost all FGD participants have mentioned that they don't use condom with regular partners for the sake of trust between them. The female participants reasoned that it is the boys who don't want to use condom. Both sexes have stated they have no difficulty of getting condom. Getting drunk and fear that they may lose the chance while looking for condoms were mentioned by male participants in the age of 14-18 as a barrier to use condom

Tab.4 Description of sexual history of street children, Adama, 2007

Variables	Frequency	Percentage
Having sexual experience (n=435)		
Yes	140	32.2
No	295	67.8
Age at first sex (n=122)		
< 9 years	9	7.4
10-14 years	65	53.3
>= 15 years	48	39.3
Reasons to have first sex (n=124)		
Marriage	6	4.8
Personal interest	67	54.0
Peer pressure	32	25.8
Promising words from partner	7	5.6
For exchange of materials and money	2	1.6
Forced	4	3.2
Others	6	4.8
Multiple sexual partner (n=134)		
Yes	23	17.2
No	111	82.8

Knowledge of and attitude towards HIV/AIDS

With regard to having awareness on HIV/AIDS 394 (89.5%) of respondents have heard of HIV/AIDS and the other 46 (10.5%) never got any information. 202 (55.2%) of study participants have access to media to get information about HIV/AIDS (see Fig.2). Having sex with infected person, sharing contaminated needles and promiscuity were answered by 304 (68.9%), 304 (68.9%), and 255 (57.8%) of the respondents respectively as a route of transmission for HIV/AIDS (see Tab 5).

Three of female FGD participants found in the age groups of 7-13 years have never heard about STIs and HIV/AIDS. The remaining has got information from media, health education in forum (FSCE), and Family guidance association.

Concerning self-risk perception to HIV/AIDS, only 132 (30.7%) of the respondents consider themselves as having risk of being infected with HIV. The other 298 (69.3%) perceive themselves as having no risk of infection. Only 14 (3.5%) of respondents have had sexually transmitted diseases in their past history.

With regard to risk factors it was found out during the FGD that having sex after getting drunk, rape, lack of information, poor knowledge on the use of condom, and sharing under wears were mentioned as factors that expose street children to HIV/AIDS. The male participants aged 7-13 have stated that they could acquire HIV as they are using blades that are used and thrown and/or in common. But those who are beneficiaries in FSCE have reported they get enough amounts of blades for free.

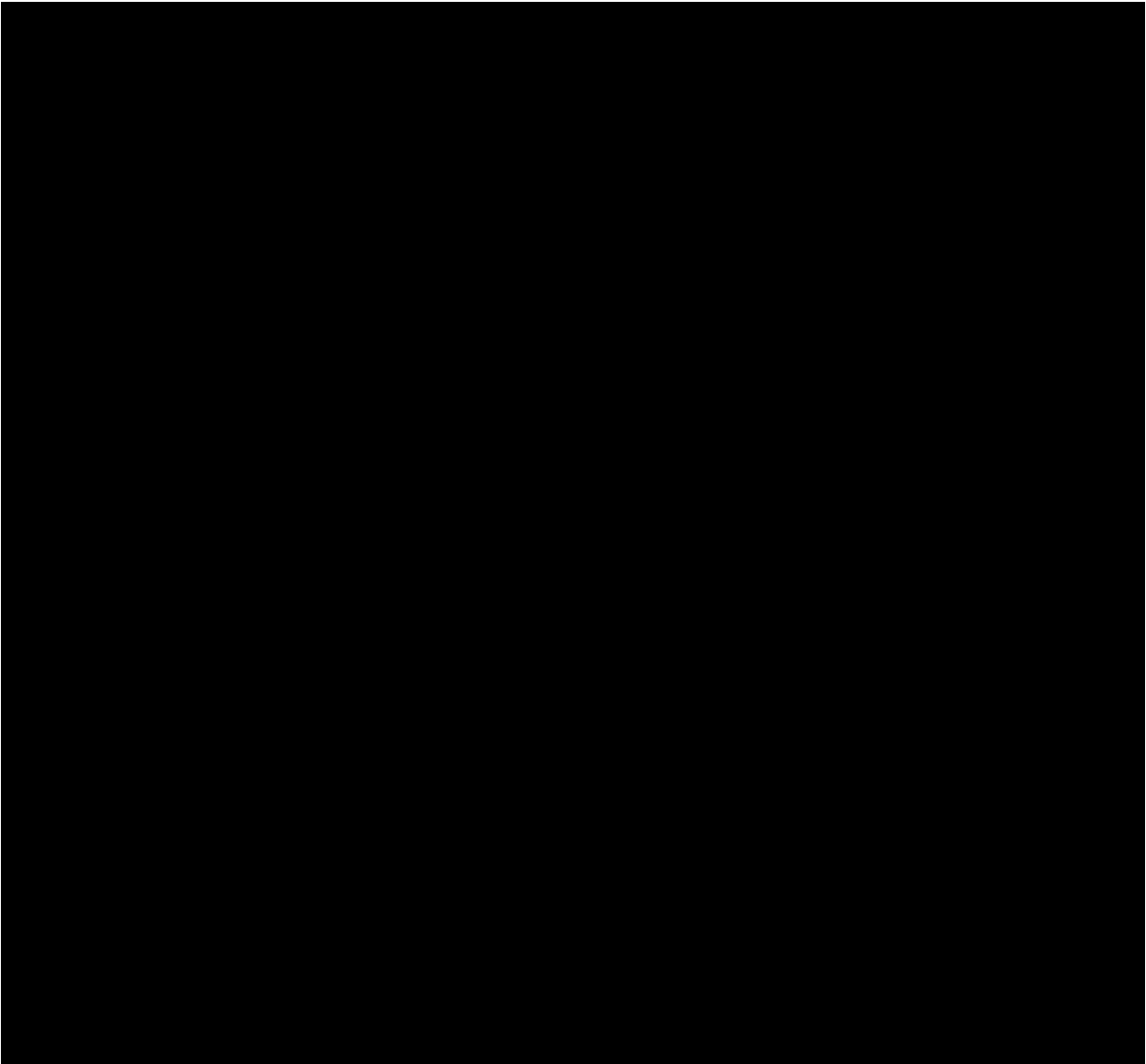


Table 5. Knowledge of street children on HIV/AIDS transmission, Adama, 2007

Variables	Frequency	Percentage
Have heard of HIV/AIDS (n=440)		
Yes	394	89.5
No	46	10.5
Transmission methods of HIV/AIDS		
Promiscuity	255	57.8
Blood transfusion	50	11.3
Sharing contaminated needles	304	68.9
Having sex with infected person	304	68.9
Mother to child	71	16.1
Mosquito bite	3	0.7
Sharing toilet	2	0.5
Shaking hands	10	2.3
Social kissing	9	2.1
Total	441	100

Association between dependent and independent variables

As shown in table 6 the likelihood of using alcohol was higher to statistically significant level among children in the age group of 13 to 18 than among those between age of 7-12 (AOR=6.62; 95% CI= 3.96-11.06). The odds of using alcohol was also higher to statistically significant level among males (AOR= 2.04; 95% CI= 1.04-4.00) and those who have no adult supervision (AOR= 3.03; 95% CI= 1.39-6.57) than females and who live with adults.

The other factors; religion, and educational status were not found to be significantly associated with alcohol use.

Table 6: Socio demographic factors associated with alcohol use among street children, Adama, 2007

Variables	Alcohol use		Crude OR (95%CI)	Adjusted OR (95% CI)
	Yes	No		
Age group				
13-18	144	181	*7.39 (4.54-12.05)	*6.64 (3.96-11.06)
7-12 Yrs	2	97	1.00	1.00
Sex				
Male	129	200	*2.96 (1.68-5.23)	*2.04 (1.04-4.00)
Female	17	78	1.00	1.00
Adult supervision				
No	133	178	* 7.17 (3.60-14.29)	* 3.03 (1.39-6.57)
Yes	10	96	1.00	1.00
Religion				
Christian	106	183	1.41 (0.91-2.19)	1.02 (0.60-1.72)
Muslim	39	95	1.00	1.00
Educational status				
Illiterate	20	44	0.86 (0.48-1.53)	0.59 (0.31-1.14)
<= grade 6	109	205	1.14 (0.69-1.87)	1.85 (0.95-3.61)
>= grade 7	9	18	0.97 (0.42-2.21)	0.81 (0.28-2.34)

*= p value <0.05

In Univariate analysis using chat is significantly associated with age (COR= 4.64, CI=3.03-7.11), sex (COR=3.02, CI=1.08-5.04) and adult supervision (COR=7.89, CI=4.24-14.68).

In multiple logistic regression analysis, the odds of using alcohol was higher to statistically significant level among children in the age group of 13-18 than children aged 7-12 (AOR= 3.83; 95% CI= 2.41-6.07). The likelihood of using alcohol was higher to statistically significant level among males (AOR= 2.18; 95% CI= 1.18-4.02) and children who do not have adult supervision (AOR= 3.82; 95% CI= 1.92-7.59) than females and those who live with adults.

As shown in table 7 religion and educational status were not associated with chat use.

Table 7: Socio demographic factors associated with chat use among street children, Adama, Nazareth.

Variables*	Chat use		Crude OR (95% CI)	Adjusted OR (95%CI)
	Yes	No		
Age group				
13-18	173	157	*4.64 (3.03-7.11)	* 3.83 (2.41-6.07)
7-12 Yrs	7	91	1.00	1.00
Sex				
Male	157	172	*3.02 (1.80-5.04)	* 2.18 (1.18-4.02)
Female	23	76	1.00	1.00
Adult supervision				
No	162	150	*7.89 (4.24-14.68)	*3.82 (1.92-7.59)
Yes	13	95	1.00	1.00
Religion				
Christian	123	166	1.09 (0.72-1.64)	0.67 (0.41-1.09)
Muslim	56	82	1.00	1.00
Educational status				
Illiterate	24	41	0.78 (0.45-1.34)	0.53 (0.28-0.98)
<= grade 6	138	179	1.32 (0.82-2.12)	2.09 (0.11-3.92)
>= grade 7	10	17	0.79 (0.36-1.79)	0.84 (0.29-2.38)

*= p value <0.05

In Univariate analysis cigarette smoking is significantly associated with age (COR= 3.53, 95%CI= 2.23-5.59), sex (COR= 3.18, 95%CI= 1.73-5.85) and adult supervision (COR= 8.84, 95%CI= 3.98-19.65). But after entering the data in multiple regression analysis the variables found to be associated significantly with cigarette smoking are age, sex and adult supervision.

As presented in table 8; males (AOR= 2.02; 95% CI= 1.03-3.98), children in 13-18 age group (AOR= 2.88; 95% CI= 1.77-4.69) and those who do not have adult supervision (AOR= 4.33; 95% CI=1.85-10.12) have higher odds of smoking cigarette than females, children aged 7-12 and those who live with adults.

The independent variables: religion and educational status were not found to be significantly associated with smoking cigarette.

Table 8: Socio demographic factors significantly associated with cigarette smoking among street children, Adama, 2007

Variables	Cigarette smoking		Crude OR (95% CI)	Adjusted OR (95%CI)
	Yes	No		
Age				
13-18	125	211	*3.53 (2.23-5.59)	*2.88 (1.77-4.69)
7-12	3	95	1.00	1.00
Sex				
Male	114	220	*3.18 (1.73-5.85)	*2.02 (1.03-3.98)
Female	14	86	1.00	1.00
Adult supervision				
No	119	198	*8.84 (3.98-19.65)	*4.33 (1.85-10.12)
Yes	7	103	1.00	1.00
Religion				
Christians	93	200	1.45 (0.92-2.29)	1.04 (0.63-1.72)
Muslims	34	106	1.00	1.00
Educational status				
Illiterate	17	50	0.79 (0.44-1.45)	0.65 (0.34-1.22)
<= grade 6	96	225	1.18 (0.70-1.97)	1.61 (0.84-3.05)
>= grade 7	8	19	1.03 (0.44-2.41)	1.06 (0.36- 3.08)

*= p-value<0.05

As shown in Table 9 having multiple sexual partners is found to be significantly associated with none of the selected determinant variables: age, sex, religion, income, risk perception, and place to sleep on the night.

Table 9: The association of having multiple sexual partners with specified variables of street children, Adama, 2007

Variables	MSP		Crude OR (95%CI)	Adjusted OR (95%CI)
	Yes	No		
Sex				
Male ^R	17	81	1.00	1.00
Female	6	30	3.22 (0.34-2.64)	2.51 (0.53-82.13)
Age group				
13-18	21	105	1.00	1.00
7-12	2	6	1.56 (0.46-5.29)	1.38 (0.59-23.69)
Religion				
Christian	19	88	1.00	1.00
Muslim	4	22	0.84 (0.26-2.73)	0.71 (0.24-5.06)
Income				
<10 ETH birr per day	12	68	1.00	1.00
>= 10 ETH birr per day	5	10	2.83 (0.82- 9.76)	2.41 (0.43-13.50)
Self risk perception				
No	12	58	1.00	1.00
Yes	9	50	0.87 (0.34-2.24)	0.74 (0.24-3.70)
Sleeping place				
Streets	17	62	1.00	1.00
House	3	27	0.41 (0.11-1.49)	0.15 (0.02-1.56)

Discussion

Majority of Street children in the study area originate from urban side of Adama, which is different from that of Awassa with higher number of rural migrants (9). But the numbers of rural migrants in Adama are lower than Addis Ababa (6). It may be due to the more urbanization is high, the higher proportion of poverty occurred, and the more marginalized population found.

Concerning education this study revealed that more than half of study subjects are in primary education level and this result is almost comparative with a study conducted on health and social problems of street children in Nazareth town. The current study has also found out that a relatively higher number of children are attending school than the previous study conducted in Adama (18.3%) (8).

Because almost half of the respondents are living alone and majorities of street children do not get any type of support either from family, caregivers or organizations they are forced to engage in street activities to support themselves. This study has found out that higher proportions of street children are engaged in petty trade (selling small items) as a source of income. Even though the majorities are engaged in petty trade street children are also involved in violent and risky practices like theft and commercial sex work to earn money.

The fact that high number of children engaged in petty trade is different from the previous study conducted in Adama by FSCE that shows a higher percentage of the children involved in shoe shining and working as taxi driver's assistants (2). The number of children involved in petty is

high for Adama than for Bolivia (17). Large proportion of Bolivian street children are engaged in begging and robbery (17).

Intestinal parasites and gastritis were the frequently mentioned health problems of street children which were identified in both study designs. This could be due to the fact that Street children mainly consume left over foods from hotels and rotten fruits from fruit stores and garbage when they have no money to buy foods.

Violence by members of the community especially by police is a common phenomenon among street children in Adama. This is reported by FGD participants by saying that the police always consider them as robbers and trouble makers. The children are bitten by police even for a material which is stolen by somebody who is not a street child. Some of the children consider police violence as a health problem because it was happening frequently and they were injured.

Half of the children spent the night on the streets permanently and the others will be on the streets for the day time and at least until 10.00 p.m. Due to the harsh environmental condition and peer pressure they face, they are prone to use alcohol and other substances. Through a study conducted in Addis Ababa it was seen that children are addicted to chat, alcohol cigarette, ganja and shisha (16). The major substances to be used among street children in Adama are chat, cigarette, benzene, glue, shisha, cannabis, marijuana, ganija, mixture of local leaves like "shewishewe" and "tikure (yewef kolo)", orange rind, and tea.

Substance abuse is a common phenomenon among street children even in those who are as young as 7 to 8 years old.

High prevalence rate of alcohol and substance use was observed among older children and males than females. This finding is consistent with a study conducted in USA (18). When street children of Adama are compared with children in Nigeria they are less likely to use alcohol. (14). This could be due to the fact that alcohol use by children is mainly discouraged in Ethiopian families and society and there may occur social desirability bias.

Chewing chat and alcohol intake were found to be significant predisposing risk factors which put children at risk of having sex either with non regular sexual partner or to have sex in exchange of money ,which is a risk for contracting HIV/AIDS. This was similar with a study conducted on street children in Addis Ababa (16).

Majority of street children in Adama are not sexually active. This may be due to respondent's bias that they do not want to disclose about their sexual experiences. But this study has showed a relatively lower number than previous study conducted in Adama (8). A relatively higher number of children have started sex earlier (between the age of 10 and 14) than that of Yemane's study (8). The reason for this could be that children are getting matured both physically and psychologically earlier than they do in the previous years. The increasing flow of western countries' culture does also contribute significantly as more numbers of children are spending their day time in cinemas.

Even though very small number of children in the interview reported having multiple sexual partners, the FGD participants have mentioned it as a common practice especially when they get drunk or after taking drugs.

There is low chance of engaging in CSW for street children in Adama than children in Nigeria. Out of those street children found in Nigeria forty-nine percent admitted to being sex workers (14). But only 1.4% of participants of this study are commercial sex workers. This very low figure could be due to either social desirability bias or most children get money through petty trade or begging which may satisfy their needs. The fact that majorities of street children have awareness about HIV/AIDS may have also protected them from joining commercial sex work.

Majority of street children in Adama are at a better chance of getting information on HIV/AIDS. They got information from different sources like media, schools, Non governmental organizations and friends. But among all these Medias have played a major role in providing information for these groups of population.

Almost half of study participants reported that they started sex out of personal interest. None of the males and 5.7% of female respondents stated forced sex as first experience. This result is different from that of Mitike's study which found out that 43% initiated sexual activity as a result of forcible rape (15). Another study conducted in California revealed that a significant number of street children reported to be sexually assaulted while living on the streets (18). The discrepancy with the study in Addis Ababa could be due to the fact that majorities of female participants (86.1%) pass the night in houses or organizations.

Almost all of FGD discussants have reported that they do not use condom consistently due to the effect of alcohol and substances they take and also due to trust they have with their regular partners. The same finding was seen in a study conducted in Addis Ababa (16). This can increase the children's risk of being infected with HIV together with having early sex and multiple sexual partners.

Strengths and limitations of the study

Strengths of the study:

- ❖ As studies conducted on this area are not too many this study can be used as a baseline data for further studies and program implementation in organizations working on street children.
- ❖ The study has tried to standardize questionnaire from similar studies and both quantitative and qualitative methods were employed to assure the validity of the data.
- ❖ This study has high response rate (99.8%)
- ❖ Simple random sampling method for the quantitative study and snow ball technique for FGD was used.

This study had some limitations:

- ❖ All street children in Adama town may not be included in the registration because of time and financial constraints.
- ❖ There could have occurred respondent biases even if the instrument was pre tested.

Conclusions and recommendations

The problem of Streetism exists at higher level in Adama town. These children are living under very poor economical condition without complete adult supervision. Poverty and disagreement with family are the main reasons that push street children out of home.

Most street children don't get full support from either organizations or family. So that they are expected to support themselves and may be their family by engaging in different street activities like begging, petty trade, daily labor, etc. But they are not mainly engaged in commercial sex work to earn money.

Because of lack of adult supervision, peer pressure and harsh environmental conditions they are prone to use alcoholic drinks and other substances. This may increase their risk of acquiring HIV/AIDS through having unprotected sexual intercourse with multiple partners.

Given that they are sexually active, they use alcohol and substances; they do unprotected sexual intercourse, and have low perception of having risk of acquiring HIV/AIDS street children's vulnerability to HIV/AIDS is high.

Based on these findings:

- Organizations working on street children should strengthen their work on awareness rising programs on child rights to prevent children from running out of home.

- Children engaged in street activities should be supported through income generating activities to improve their economical status and reduce their vulnerability to HIV/AIDS
- Strong sex and drug education programs (BCC) should be planned and implemented for street children both at all levels
- The government should take legislative actions against drug/substance traffickers and distributors
- The community should encourage children working on streets and respect their rights
- Since street children don't like their life on street, more should be done on reunification with their families.
- Further studies should be undertaken to explore various survival strategies that increase street children's risk of acquiring HIV/AIDS

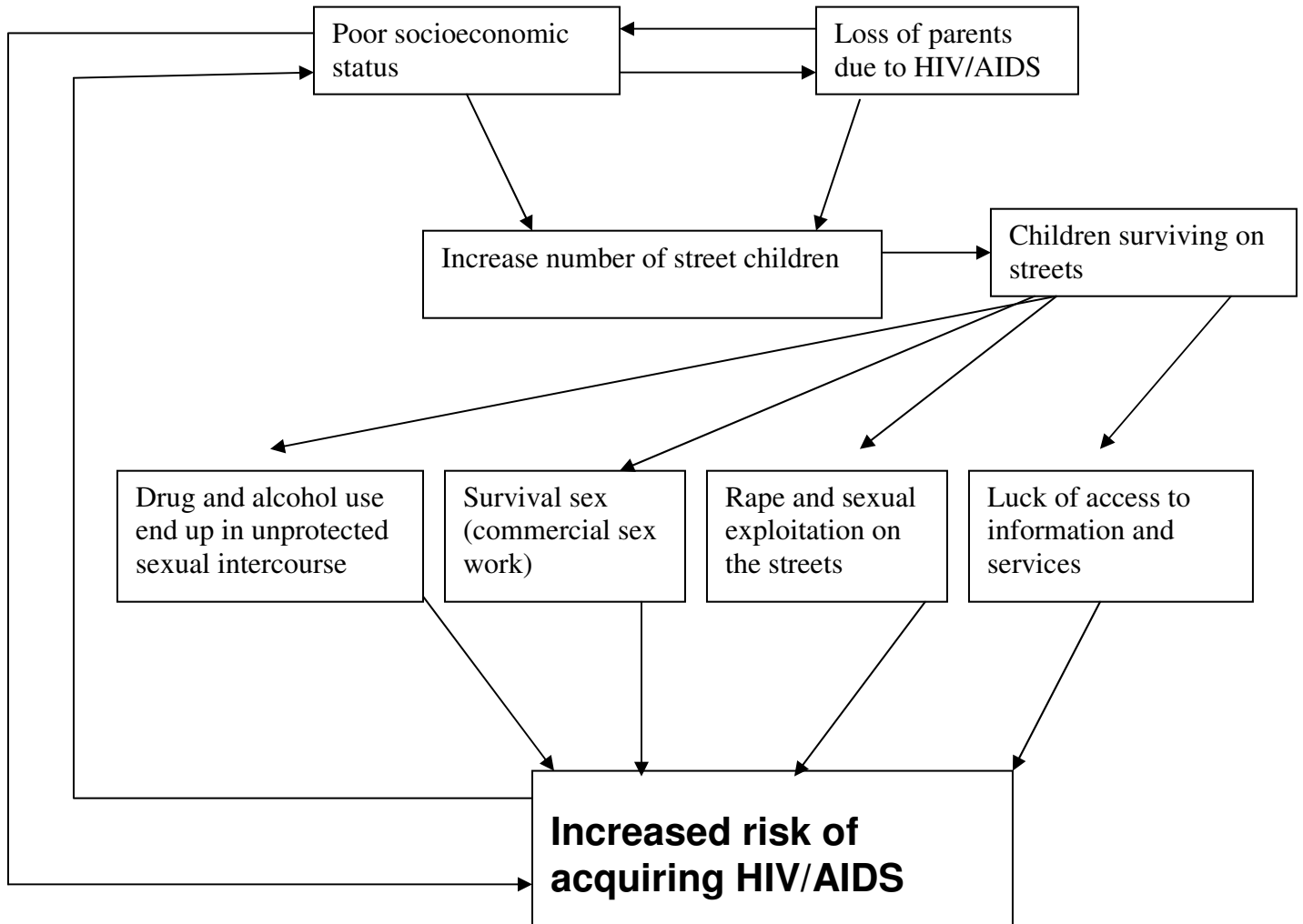
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Annex

Annex 1. Conceptual framework on the effect of street children's survival on the spread of HIV/AIDS.



Annex 2 Focus group discussion guide and Questioner
Discussion guide to identify the commonly used survival strategies of street children

Theme of the focus group

Introduction

Introduction of the moderator and note taker with the participants

Introduce the aim of the study

Obtain consent from FGD participants

Discussion

- How is life on street? What are the good sides and the hardships of living on streets?
- How do you get money to meet your needs? Do you think it is enough?
- What do you do to overcome problems on streets like hunger, rain, cold, loneliness, sickness, etc?
- Have you ever faced a problem that threatened your life? If yes how do you overcome it?
- Have you ever heard about STDs and HIV/AIDS? What was your source of information?
- Do you think you are at risk of acquiring these diseases? Why?
- Do you use any type of substances and alcohol?
- What type of sexual behavior do you have?
- What should be done to help children to get out of street life?

Questionnaire

Time		Hour ()
Section I. Socio Demographic characteristics		
Questions and filters		Coding categories
1	Respondent's age in years	
2	Sex	Male () Female ()
3	Religion	1. Orthodox 2. Other Christians 3. Muslim 4. No religion 5. Others
4	Marital status	1. Never married 2. Married 3. Divorced 4. Widowed 5. Others
5	Respondents level of education	1. Illiterate 2. Church school 3. Koran school 4. Primary (1-6) grade 5. Secondary (7-12) grade
6	Are you currently attending school	1. Yes 2. No
7	Where was your permanent residing area before you come to Nazareth	1. Nazareth Urban (skip to no. 9) 2. Nazareth rural 3. Urban outside of Nazareth 4. Rural outside of Nazareth
8	When did you come to Nazareth	

9	What was the reason for living home	<ol style="list-style-type: none"> 1. looking for work 2. Influenced by a friend 3. Following a stranger 4. Attracted by city life 5. to find a lost relative 6. school failer 7. forced by family 8. others
10	Number of siblings (make + if mom or dad otherwise fill number)	<ol style="list-style-type: none"> 1. Father 2. Mother 3. Sister 4. Brother 5. Others
11	Mother's educational level	<ol style="list-style-type: none"> 1. illiterate 2. read and write 3. primary school 4. secondary school 5. above high school level
12	Father's level of education	<ol style="list-style-type: none"> 1. illiterate 2. read and write 3. primary school 4. secondary school 5. above high school level
13	Parental condition	<ol style="list-style-type: none"> 1. Both are not alive 2. mother only 3. father only 4. both are alive 5. don't know
14	Age at living home	
	Section II. survival strategies	

1	With whom are you currently living	<ol style="list-style-type: none"> 1. married 2. both parents 3. father only 4. mother only 5. step parents 6. uncle/aunt 7. grand parent 8. other relatives 9. alone 10. others
2	What support do you get from parent/ guardians or organizations (more than one answer is possible)	<ol style="list-style-type: none"> 1. None 2. food 3. cloth 4. shelter 5. school fee 6. others
3	Where do you sleep at night	<ol style="list-style-type: none"> 1. on the streets 2. by paying overnight 3. plastic houses 4. relative house 5. rented house 6. others
4	What is your main source of income	<ol style="list-style-type: none"> 1. no income at all 2. vending 3. changing sex for money 4. begging 5. others
5	What is your daily income on average	<ol style="list-style-type: none"> 1. none 2. less than five birr 3. 5-10 birr 4. 11-15 birr 5. greater than 15 birr

6	Do you smoke? how many in a day	<ol style="list-style-type: none"> 1. Never 2. less than 10 3. 10 to 20 4. above 20
7	Do you drink	<ol style="list-style-type: none"> 1. No 2. Tella 3. Areke 4. Tej 5. Beer 6. others
8	How often do you drink	<ol style="list-style-type: none"> 1. every day or nearly every day 2. 3-4 times a week 3. every week 4. every month 5. only on holidays
9	No. of drinks you usually use when you drink	
10	Do you chew cat? if yes how often	<ol style="list-style-type: none"> 1. never 2. every day 3. 3-4 times a week 4. every week 5. every month 6. occasionally
11	Do you sniff benzene? if yes how often?	<ol style="list-style-type: none"> 1. never 2. every day 3. 3-4 times a week 4. every week 5. every month 6. occasionally
12	Why do you use these substances	<ol style="list-style-type: none"> 1. Don't know 2. because my friends do it 3. to be happy 4. to get warmth

		<ul style="list-style-type: none"> 5. to avoid misery 6. others specify
Section III.sexual behavior and HIV/AIDS		
1	Have you ever had sexual intercourse	<ul style="list-style-type: none"> 1. No 2. Yes
2	Age at first sexual debut	
3	What made you have it	<ul style="list-style-type: none"> 1. marriage 2. personal desire 3. persuaded by friends 4. promising words from partner 5. for exchange of money or property 6. forced 7. others
4	Have you heard about HIV/AIDS	<ul style="list-style-type: none"> 1. No 2. Yes
5	What was your source	
6	What are the modes of transmission of HIV/AIDS	<ul style="list-style-type: none"> 1. promiscuity 2. blood transfusion 3. sharing contaminated needles 4. having sex with infected person 5. mother to child 6. mosquito bite 7. sharing toilet 8. shaking hands 9. social kissing 10. others
7	Do you think you can get HIV? If yes why?	<ul style="list-style-type: none"> 1. No

		2. Yes
8	Have you ever had sexually transmitted diseases	1. Yes 2. No

Date of interview _____

Name of interviewer _____

Annex 3. English Information sheet

Hello, my name is ----- I am here to enroll and interview eligible study participants, and fill in questionnaires forms to assess "Survival strategies of street children and their effect on the spread of HIV/AIDS". I am glad to inform you that you are one of the eligible study participants, and you are chosen to take part in this study. This study is part of a two-year study in department of community health, Medical faculty; Addis Ababa University is going to be conducted in selected parts of Nazareth/Adama town. You have been chosen to participate in this study by chance and I want to assure you that your responses will be kept strictly secret. I will not keep a record of your name or address. You have the right to stop the interview at any time, or to skip any questions that you do not want to answer or you will not be obliged to continue the study or give reasons for doing so, and refusing to participate or with drawing form the study process, will not have any consequence to you.

Annex 4. English Consent form

The information that you give will solely be used for this study and the result of the findings might get published, but your identity will be treated with confidentiality and your name will not be used in connection with the information that you gave. Your participation is completely voluntary, but your experiences could be very helpful to other street children in the country.

Do you have any question?

The interview will take approximately one hour and the focus group discussion will take two hours and we will consider compensation fee for the time lost in our interview and discussion participation.

If you are clear with the information provided and agree to participate we can proceed to interview/discussion and thank you for agreeing to spare me your time.

To be completed by the interviewer.

I certify that I have read the above procedure to the participant/s.

Name/Sign-----

Annex 5. Amharic version information sheet

Ö? " ÅeØM~ eT@ ÄvLM:: ¼ÔÇ" }ÇÇ] lí" f ' <a U" ÅSeLM K>?< >Ã y=>?Ée
¼T>ÁÒM×†" < vl' Áfe U"É" "†" < ¼T>M Ø" f LÃ }dlò ¼T>J' < lí" f" ¼SKSMÿ< ¶" ØÁo-<" ¼Ö¼ÿ<~ ¶Ñ—
KG<:: u²=IU Sc[f >"}>" ¼²=I Ø" f }dlò SJ"l"/l" eÑMî uÁe¶" <::
ÄI Ø" f uÇ=e >uv ç'>y`e+ ¼lw]cw Ö?" f/f iöM ¼T>cØ >É ¼Ø" f iöM "'<:: Ø" ~ ¼T>"H@Ä" <U u}"c' <
¼' _f x[-< w%o "'<:: >}U/>"^U K²=I Ø" f ¼S[Øÿ" <lí" < u>Ø×T> c=J" KØÁo-‡ ¼UfcÖ" <¼Ufcß" < SMe
G<K< T>eØ^©'~ ¼}Öuk ¶" ÁJ' S<K< uS<K< L[ÒÓØMI/i ¶" ÇKG<:: eUIU/iU J' S•JÁ >É^hl/i uøèU >ÄS²ÑwU::
Äl" ØÁo uS<K< "ÄU uÿòM SSKe "ÄU uðKÓl/i Ñ>²? Ts[Ø Swf/l/i "'<:: ¼TÄðKÑ< ØÁo-<"U S'KM Ä%oLM::
¶"Ç=I uTÉ[Ól/i ¼T>Ä`ewl/i 'Ñ` ¼KU::

Annex 6. Amharic version consent form

u}cÖ“< S[í Sc[f K²=I Ø“f ¼UfcÖ“</Ü“< SMe KØ“~ w%oo ¼T>“<M “< “<Ö?~U Klfsf ÄunM:: ‘Ñ` Ó”
Á”}/Á“^ U”f “ eU YUfcÖ“</Ü“< SMe Ò` ›ÄÑ“~U:: Á”}/^ SMe SeÖf uS<K< ðnÁ“f LÄ ¼}Sc[] J• ›”}/>”^”
ScM lí“f” K=ÖpU eKT>«M “<’}— ULi “ÉfcÖ“/Ü” “ÖÄnKG<::
nK SÖÄI u=u³ ›É c>f ÄđÍM u²=IU KT>v_i“< Ñ>²? SÖ’— iðÁ “YöLK”::

ØÁo ›KI/>Ki;

ØÁo YK?KI/i “ uØ“~ KSd}ð ðnÁ— YJ”i/i “Á ØÁo “ SMc< “S^K”:: KT>k`u<f ØÁo-< KUfcÖ“/Ü” SMe
Ymw ›ScÓ“KG<::

YLA ÁK“<” îG<ð K}ÖÁm“</ª T”uu?” uò`TÂ ›[ÖÓ×KG<::

eU.....

ò`T.....

- uÔÇ“ lî“f ¾T>²”}\ ¾c=w É`Ñ>„, U” >Ã’f “†”<; (ç”ÊU
- ÝSÖkU [“ u}n^> ï]-< S”ÝM ÝT>Á[Ó “<Ü;

nK SÖÃp

jõM >”É		
}.l	ØÁo-†	>T^ß SMZ†
1	⊠ÉT>l/i e”f ”<;	
2	ïï	1. ””É 2. c?f
3	¾Öw%oo G<’@⊠	1. ÁLÑv 2. ÁÑv 3. ¾}ó⊠ 4. vM/T>ef ¾V}uf 5. K?L ”K ÁÖke
4	GÄT•f	1. * „Ê;je 2. K?L j`e+Á” 3. ⊠eMU“ 4. GÄT•f ¾K~U 5. K?L ”K ÁÖke
5	¾}ÖÁm”< ¾f/f Á[í	1. ÁM}T[2. ¾oe f/f ¾}ÿ⊠}K 3. ¾ ’>” f/f ¾}T[4. >”Á— Á[í ÁÖ“kk 5. G<K}— Á[í ÁÖ“kk
6	u>G<’< ”pf SÁu— f/f [¾}ÿ⊠}Mj/i ”<; SMel/i >” ÝJ’ ⊠v;j/l” ¾}õM Á[í”/i” Øke/i	1. >” 2. >MT~U
7	”Ä “_f Ý}T ÝSU×f/l/i uòf ¾f f•’/] ’u`;	1. “_f Ý}T ”<eØ (“Ä }.l 9) 2. ¾“_f ÑÖ` jõM 3. Ý“_f ”<Ü ÁK Ý}T 4. Ý“_f ”<Ü ÁK ÑÖ`
8	”Ä “_f S< S×l/i;	

9	Yü?f "Ä ÖÇ" KS"<xf U; "Äf ¼J'I/i U" 'u';	<ol style="list-style-type: none"> 1. e^ KSðKÓ 2. uÖÅ— Óðf 3. ¼TL"<k"<" c"<}YfÄ 4. ¼Y}T ' <a uSðKÓ 5. ¼Öów~" ²SÉ KSðKÓ 6. fUI' f eLM}d"M~ 7. uu?}cw Óðf 8. K?L "K ÄÖke
10	¼u?}cw/i w³f e" f "'<; (f f " >vf ulÄ" f "K< ¼SÄS` UM;f ÄKSØ KK?L"< IØ` ÄVL)	<ol style="list-style-type: none"> 1. >vf 2. f f 3. f f 4. "ÉU 5. K?L "K ÄÖke
11	¼" f ¼f/f ÄÍ	<ol style="list-style-type: none"> 1. ÁM}T[< 2. T"uw f" Síö 3. >"Ä— ÄÍ ÄÖ"kk< 4. G<K}— ÄÍ ÄÖ"kk< 5. YG<K}— ÄÍ uLÄ
12	¼>vf ¼f/f ÄÍ	<ol style="list-style-type: none"> 1. ÁM}T[2. T"uw f" Síö 3. >"Ä— ÄÍ ÄÖ"kk 4. G<K}— ÄÍ ÄÖ"kk 5. YG<K}— ÄÍ uLÄ
13	¼"LD< G<'@	<ol style="list-style-type: none"> 1. G<K~U ulÄ" f ¼K<U 2. f f w%o ulÄ" f >K< 3. >vf w%o ulÄ" f >K 4. G<K~U ulÄ" f >K< 5. >L"<pU
14	Yü?f "Ä ÖÇ" ef"x/Ü ÜÉT@/i e" f 'u';	
jöM G<Kf		
1	u>G<'< "pf ¼Uf•["<f]"< YT" Ö" "'<;	<ol style="list-style-type: none"> 1. >Öw%oKG< 2. Y f f" Y>v, Ö` 3. Y>v, Ö` 4. Y f, Ö` 5. Y f" E^ f" f/>vf Ö` 6. Y>Öf/>ief Ö` 7. Y>Ä,,Š Ö` 8. YK?KA< ²SÉS Ö` 9. w%oÄ" 10. K?L "K ÄÖke
2	Yü?}cx<l/i' Y>dÇÑ>-<l/i "Ä"U YÉ"l, < U" >Ä'f ÉÖö ÜÑ—Kl/i;	<ol style="list-style-type: none"> 1. U"U ÉÖö >LÑ~U 2. UÓw 3. Mwe

		<p>4. SÖKÁ 5. KÖ?" ›ÑMÓKAf jöÁ 6. ¾f/u?f jöÁ 7. K?L "K ÄÖke</p>
3	T T ¾f }—KI/i	<p>1. ÖÇ“ LÄ 2. u¾k'< KS T ¾YöMÿ< 3. ¾ýLe+j u? „< eØ 4. ²SÉŠ u?f 5. u?f }Y^ÄŠ 6. K?L "K ÄÖke</p>
4	KK=˘” ÖÇ“ LÄ ¾U dMö/ò YJ' ^el"/i” Y”w ” Yw`É KSÿLYM U” Å`ÖKI/Å`Ñ>ÁKi;	<p>1. Le+j KwdKG< 2. ÁK<” Mwf uS<K< KwdKG< 3. ›MøM ” K?KA< ” eÇKG< 4. U”U ›LÄ`ÓU 5. K?L "K ÄÖke</p>
5	a”< ¾Ñu= U”BI/i U”É” ”<;	<p>1. U”U Ñu= ¾K~U 2. ›e}— ”ÓÉ 3. c?}— ›Ç]f 4. MS“ 5. K?L "K ÄÖke</p>
6	u›T”Ä ¾k” Ñu=l/i U” ÁIM ”<;	<p>1. U”U Ñu= ¾K~U 2. Y›Uef w` uK 3. Y5-10 w` 4. Y11-15 w` 5. Y15w` uLÄ</p>
7	Yk” Ñu=l/i LÄ fqØvKI/fqØu=ÁKi;	<p>1. ›-” qØvKG< 2. ›Ä ›MqØwU</p>
8	¾UfqØw/u= YJ' uU” ›Ä'f ²É” ”<;	<p>1. ¾v”i Äw} ` uSÖKU 2. l/w uS×M 3. K?L "K ÄÖke</p>
9	›w³—”<” Ñ>²? uk” U” ÁIM Ñ>²? fSÑvKI/fSÑu=ÁKi;	<p>1. ”ÇÑ—G< 2. uk” ›”É Ñ>²? 3. uk” G<Kf Ñ>²? 4. uk” fef Ñ>²?</p>
10	›G<” YKueY”</i”< Mwe K?L }ÚT] Mwe ›KI/ i	<p>1. ›-” ›K~ 2. ›Ä ¾K~U</p>

11	c=Ö^ ÜdKI/ i; ÝJ'e uk" U" ÁIM ÜdKI/ i;	<ol style="list-style-type: none"> 1. ›LÚeU 2. Ý10 ö_ uκ 3. Ý10 ŀeÝ 20 ö_ 4. Ý20 ö_ uLĂ
12	ÝT>Ý}K<f ¼MçM SÖÜ< ¼f—<" fÖ×KI/fÖÝKi;	<ol style="list-style-type: none"> 1. ›MçM ›MÖ×U 2. ÖL 3. ›[o 4. Öİ 5. u=^ 6. K?L "K ÄÖke
13	u¾e" f Ń>²?" < ¼MçM SÖØ fÖ×KI/i;	<ol style="list-style-type: none"> 1. uk" uk" 2. udU" f Ýfef ŀeÝ ›^f k" 3. udU" f ›"É k" 4. u"› ›"É k" 5. uu>M k" w%o
14	›w³—<" Ń>²? U" ÁIM ¼MçM SÖØ fÖ×KI/fÖÝKi;	
15	Ýf fpTKI/fpT>ÁKi; ÝJ'e u¾e" f Ń>²?" < fpTKI/fpT>ÁKi;	<ol style="list-style-type: none"> 1. ›MpUU 2. u¾k'< 3. udU" f Ýfef ŀeÝ ›^f k" 4. udU" f ›"É k" 5. u"› ›"É k" 6. ›Mö ›Mö
16	u?²=" fevKI/feu=ÁKi ÝJ'e u¾e" f Ń>²?" <;	<ol style="list-style-type: none"> 1. ›MewU 2. u¾k'< 3. udU" f Ýfef ŀeÝ ›^f k" 4. udU" f ›"É k" 5. u"› ›"É k" 6. ›Mö ›Mö
17	ÝLĂ Ý}Ökc<f ŀi< u}ÚT] ¼UfÖkS" </T>" < ŀi>K; "K ÄÖke	<ol style="list-style-type: none"> 1. ›-› ›K 2. ¼KU
18	ŀ²=l" ŀi< ¼UfÖkUuf/T>uf U;Áf U"É" ""<;	<ol style="list-style-type: none"> 1. U;Á~" ›L" <k" <U 2. ÖÄ™Š eKT>ÖkS< 3. Åe}— Ksj" 4. S<kf ŀÇ=cT~ 5. ß"kf" KTe"ŃÉ 6. K?L "K ÄÖke
19	u>G<'< "pf ÝLĂ ¼}Ökc<f" ŀi< ¼TfÖkU/T> ÝJ' Ý²=l uòf }ÖpSI/i ŀ" <nKI/i;	<ol style="list-style-type: none"> 1. ›-› }ÖpT@ ›" <nKG< 2. }ÖpT@ ›L" <pU

20	SMel/i >-“ ŸJ’ ¼f—“<” ũ’u` ¼UfÖkS“</T>“<;	
21	ŵ“Éf ũ S“<cÉI”/i” MŭqU/T> %Mj/i;	
22	¼Ö?“ <Ó` >ØØVI/i Á“<nM/ u>G<’< “pf ¼ISU eT@f >KI/i;	1. >K~ 2. ¼K~U
23	SMc< >-“ ŸJ’ U” >Ä’f ¼Ö?“ <Ó` ‘u’/’“<;	1. ¼S}”ðh >”M ISU 2. ¼JÉ ISU 3. ¼>vL ² ui 4. K?L “K ÄÖke
24	>w ³ —“<” Ñ>? ISU c=ÄÖØUI/i U” ũÄ`ÖKI/i;	1. “Ä Ö?“ É`i, < ũH@ÇKG< 2. ¼vIM SÉH’>f ũ“eÇKG< 3. ¼vIM Gÿ=U ũÖu—KG< 4. iuM ũ“eÇKG< 5. U”U >LÄ`ÖU 6. K?L “K ÄÖke
jöm fef		
1	¼Öw[eÖ Ö”-<’f ðiSI/i ũ“<nKI/i;	1. >L”<pU 2. >”<nKG<
2	KSÉSjÁ Ñ> ² ¼Öw[eÖ Ö”-<’f e fðiU/T> ũÉT@/i e”f ‘u`;	
3	¼Öw[eÖ Ö”-<’f ¼ðiUY”</i”< KU”É” ””<;	1. uÖw%o Uj”Äf 2. uÖM ðLÖf 3. uÖÄ™Š Ñ<fÖ 4. Ÿ}n^> ũ u}cÖ~ nM 5. Ñ” ² w ũ“ K?KA< ‘Ña” KTÓ-f 6. uGÄM 7. K?L “K ÄÖke
4	Ÿ”É uLÄ ¼”c=w ÖÄ— >KI/i;	1. >-” >K~ 2. >Ä ¼K~U
5	eK >?< >Ä y=/ >?Ée cUj/i ũ“<nKI/i;	1. cUŠ >L”<pU 2. cUŠ >”<nKG<
6	eK >?< >Ä y=/ >?Ée ¼cT” </y”< Ÿ¼f ””<;	
7	¼>?< >Ä y/ >?Ée S}LKòÁ S”ÑÉ‡ ¼f™‡ “†”<;	1. TS” ² 2. ¼ÄU MÑd 3. ¼}uŸK S`ò uÖ^ SÖkU 4. zÄ[c< “Kuf c`< Ö` ¼Öw[eÖ Ö”-<’f SðIU 5. Ÿ”f “Ä Mİ 6. u`v f”~ uS’Äö 7. SiÇI u?f uÖ^ SÖkU 8. uSÚvuØ

		9. uSddU 10. K?L "K ÄÖke
8	u>?< >Ä y= MÁ' [K LKG< wKI/i >eu/i [" <nKI/i; Y'J'e KU";	1. >eu? >L" <pU 2. >eu? >" <nKG<
9	>vL²' ui [Äµl/i Á" <nM;	1. >-" 2. Äµ~ >Á" <pU

k".....
nK SÖÄl" ÄÄ[N" < c" < eU..... ò`T.....