

# Health problems of street children and women in Awassa, Southern Ethiopia

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## Abstract

**Background:** The number of street children and women in major towns of Ethiopia is rapidly increasing. Yet their problems have not been fully studied.

**Objective:** To assess health and related problems in street children and women.

**Methods:** A cross sectional survey was conducted in Awassa town, southern Ethiopia in December 1999. Data was collected using a uniform questionnaire. The respondents were interviewed by trained health workers in purposively selected nine data collection sites for one week. The data was processed using Epi Info version 6 statistical package computer software.

**Results:** A total of 506 street children and women participated in the study. A considerable proportion (63.0%) of respondents had daily income of less than four birr, all women being included in this category of income, and 15% of them had an income of less than two birr. Two hundred forty one (47.6%) of the respondents reported that they have had meals as available. Two hundred seventy eight (58.0%) of the children were homeless. Two hundred eighty (55.3%) of the street children reported one or more previous health problems. Malaria-like febrile illnesses (42.6%) followed by respiratory tract illnesses (33.1%) and diarrhoeal diseases (4.5%) were the major health problems reported. The majority of them attended government health care facilities to the reported health problems. About half of the children reported that they used one or more of the habit-forming substances (alcoholic drinks, chat and cigarette). Among street children above 15 years old and women, only 22.8% used family planning and prevention methods for sexually transmitted diseases (STDs). The majority (55.7%) of street children and women did not know the transmission routes of STDs and HIV. A large proportion (64.5%) of the street children did not attend any kind of health education programs. Their personal hygiene is found to be very poor.

**Conclusion:** Improving access to existing health facilities, providing them with health education and looking for possibilities to reunite the street children with their families are recommended.

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## Introduction

Demographic health surveys in many of the developing countries have shown that, today, boys and girls experience puberty at a younger age than the previous generations (1,2). In particular street boys and girls experience various kinds of problems, such as health, social and economic problems. Because of these problems, homeless children are reported to have a high rate of developmental and

emotional problems (3-6). Street children face these problems at early ages and because of this they remain disadvantaged throughout their lifetime due to lack of experience in a functional family (7).

As most of the street children are adolescents, the majorities of them are sexually active. A study conducted on youth in Awassa (8) indicated that 84% of them started having sex between the ages of 15 and 19 years. It is well documented that street girls and women in particular are also exposed to sexual exploitation, rape, and prostitution (9). These may put street children and women at a high

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risk of getting HIV/AIDS and other STDs. Furthermore, sexual activity among youths in Ethiopia has resulted in large number of unwanted pregnancies and illegal abortion, which pose serious health and social problem (10).

Recent information indicated that, the number of street children in Ethiopia is estimated to be 150,000, of this 66.7% is living in Addis Ababa (personal communication). Even though there is no published data, various reports from zonal Labor and Social Affairs Division indicates a rapid increase of street children in many parts of Southern Nation, Nationalities and Peoples' Region. Awassa, Wolkele, Dilla and Wollayta Soddo are the major towns of the region encountering a growing number of street children. According to Sidama zone Labor and Social Affairs Department, the number of street children in Awassa is estimated to be 5,000.

The magnitude of the problem of street children has not been fully studied in Ethiopia (11). Furthermore, it is believed that the problem is showing a similar increase to that of elsewhere in the developing world (12).

Therefore, the present study was conducted with the aim of describing the health situation and related problems of street children and women in Awassa. It will also attempt to evaluate the knowledge of these groups about STDs particularly HIV/AIDS, and family planning methods. It is intended that this study may help to facilitate the designing and implementation of effective interventions to improve their living conditions.

#### Methods

Awassa town, which is 275 km south of Addis Ababa, was selected for the study because it is one of the towns in the region with rapidly increasing number of street children. Street children and street women were the target population of this study. Street children are boys and girls at the age of seventeen and below who live or spend most of their time on street to get income for their daily need by polishing shoe; selling cooked food and other

small items; begging; serving as daily laborer, etc. Street women are females of childbearing age who have one or more children and who get their income by selling cooked food and other small items; begging; serving as daily laborer, etc. The study was conducted in December 1999, in nine data collection sites that were purposively selected and these sites were the locations frequently used by street children and women for gathering with the purpose of obtaining casual work.

A cross sectional descriptive survey design was used to assess health and related problems of street children and women in Awassa town.

The study population was identified by a census registration conducted by the Regional Labor and Social Affairs Office (LSAO) one day before the interview was conducted at the nine selected sites. The subjects were informed to come the next day for the interview. Although the number of street children in Awassa is estimated to be 5,000, during census registration we got the list of 3,250 street children (3,206 male and 44 females) and 27 women. The name list of male street children was used as a sampling frame and respondents for the interview were sampled by a systematic sampling method after a random start. All of the street girls and women that are registered were included in the study; this was because their number during census registration was small. A total of 506 subjects were studied, of which 479 street children and 27 women. These study subjects were assumed to be about 10% of the total study population of street children and women in the Awassa town that assumed to be a significant sample size.

Local authorities were briefed about the purpose of the study. Respondent's participation in the study was voluntary and informed consent was obtained from all study subjects. Lost work hours of street children and women during the interview were compensated by paying some amount of money.

A uniform and pre-tested structured questionnaire was used to collect data from the

study subjects. Trained health workers conducted the interviews in first week of December 1999 in the selected nine data collection sites. Questionnaires were administered in Amaharic. Questions focused on demographic characteristic, income and living conditions use of habit forming substances; previous health problems and present health conditions; attendance of health care facilities to seek advice and treatment; knowledge and practice of family planning, the prevention methods for STDs and HIV and the way they can be transmitted; health education attendance; personal hygiene and sanitation, etc.

Investigators supervised data collectors at the data collection site while the interviews were underway. Each completed questionnaire was checked for consistency and errors, and when necessary re-visits of the respondents were made.

Data were processed using Epi Info version 6 statistical packages. Frequency, rate ratio and proportions were used to present the results.

## Results

A total of 506 street children and women participated in the study, of which 479 (94.7%) were children and 27 (5.3%) were women. Of the street children 435 (90.8%) were male and 44 (9.2%) were female. About 52.8% of the children were aged 15-17 years while the dominant age group of women was 25-30 years. The children's ages ranged from 8 to 17, with the mean age of 14.4 (SD=2.39) and that of women range from 18 to 35 with mean age of 26.8 (SD=4.6). Quite a large proportion (70.7%) of respondents were literate (had primary, junior secondary and secondary school education), 25.7% illiterate and 3.6% can read and write (Table 1).

A considerable number (319 or 63.0%) respondents, including all women interviewed, had daily income of less than 4 birr, and 23.8%

Table 1: Socio-demographic characteristic of street children and women, Awassa 1999

Characteristic	Study subjects		
	Children (n=479)	Women (n=27)	Total (n=506)
Age			
< 10 years	47(9.8)	-	49(9.3)
10-14	179(37.4)	-	179(35.4)
15-17	253(52.8)	-	253(50.0)
18-24	-	7(25.9)	7(1.4)
25-30	-	15(55.6)	15(2.9)
> 30	-	5(18.5)	5(1.0)
Sex			
Male	435(90.8)	-	435(86.0)
Female	44(9.2)	27(100.0)	71(14.0)
Marital status			
Married	529(10.9)	17(63.0)	69(13.6)
Single	427(89.1)	10(37.0)	437(86.4)
Educational level			
Illiterate	118(24.6)	12(44.5)	130(25.7)
Read and write	15(3.1)	3(11.1)	18(3.6)
Literate*	346(72.3)	12(44.4)	358(70.7)

Note: Numbers in parenthesis are percentage of the total

\*Primary, junior and secondary school education

of them (15.0%) of the total respondents) had an income of less than 2 birr (Table 2). One hundred forty five (28.7%) of the respondents (all of them children) had an income of 4-5.99 birr. Two hundred forty one (47.6%) of the total respondents, 226(47.2%) of the children and 15(55.6%) of women, reported that they have meals between. In fact were respond reported that had their meals twice/day (24.1%), three times/day (14.6%) and once/day (12.7%).

Two hundred seventy eight (58.0%) of the children were homeless and of these 179 (64.4%) sleep under plastic shelters, 50(18.0%) on balconies and 49(17.6%) on the street. The remaining 201(42%) reported that they have a house to live or sleep in at night. Of these 86(42.8%) live in rented houses, 61(30.3%) live with their relatives and 54(26.9%) sleep in overnight rented rooms (Table 2). Of the total respondents, 157(31.0%) had no bedclothes and 292(57.7%) reported that bedclothes were available but not enough. Majority (84%) of the respondents claimed that day clothing they had is not enough.

Table 2: Living conditions of street children and women, Awassa 1999

Variables	Study subjects (n=506)		
	Children (n=479)	Women (n=27)	Total (n=506)
<b>Income (Birr/day)</b>			
<2	71(14.8)	5(18.5)	76(15.0)
2-3.99	221(46.1)	22(81.5)	243(48.0)
4-5.99	145(30.3)	-	145(28.7)
6-7.99	30(6.3)	-	30(5.9)
8-9.99	7(1.5)	-	7(1.4)
10 and above	5(1.0)	-	5(1.0)
<b>Males</b>			
Once/day	64(13.4)	-	64(12.7)
Twice/day	110(23.0)	12(44.4)	122(24.1)
Three times/day	74(15.4)	-	74(14.6)
Four times/day	5(1.0)	-	5(1.0)
As available	226(47.2)	15(55.6)	241(47.6)
<b>Housing</b>			
Homeless	278(58.0)	-	278(54.9)
House to live/ Sleep	201(42.0)	27(100)	228(45.1)
<b>Bedclothes</b>			
Enough available	52(10.8)	5(18.5)	57(11.3)
Available not Enough	270(56.4)	22(81.5)	292(57.7)
No clothing	157(32.8)	-	157(31.0)
<b>Day clothing</b>			
Enough available	74(15.4)	7(25.9)	81(16.0)
Available not Enough	405(84.6)	20(74.1)	425(84.0)

Two hundred eighty (55.3%) of the street children and women reported one or more previous health problems (Table 3). Previous health problems are health problems encountered by street children with in six months before the study was conducted. Malaria-like febrile illnesses (40.7%) followed by respiratory tract illnesses (31.6%) and diarrhoeal diseases (4.3%) were the major health problems reported. Other minor health problems reported (19.0%) include ear and nose diseases, abdominal pain, toothache, epilepsy, mental disorders, leg ulcer, etc.

According to respondents, malaria-like illnesses have signs and symptoms such as headache, fever, sweating and shivering. The respiratory tract illnesses are characterized by chest pain, cough, fever and purulent sputum.

Among the street children and women who reported health problems, 63.4% attended government health facilities (hospitals and health centers), 15.7% used traditional medicine and 9.1% attended private health institutions. Furthermore, 6.6% of those who reported health problems did not obtain medical treatment for economic reasons.

Table 3: Selected risk factors and health problems of street children, Awassa 1999

Variables	Health problems			OR <sup>a</sup> (95% CI <sup>b</sup> )
	Yes (n=280)	No (n=199)	Total (n=479)	
<b>Age</b>				
<10 years	40(85.1)	7(14.9)	47	1.00
10-14	93(51.9)	85(48.1)	179	5.28(2.13-13.70)
15-17	147(58.1)	106(41.9)	253	4.12(1.69-10.51)
<b>Educational level</b>				
Illiterate	64(54.2)	54(45.8)	118	1.00
Read and write	5(1.8)	10(66.7)	15	2.37(0.69-8.56)
Literate	211(60.9)	135(39.1)	346	0.76(0.49-1.18)
<b>Housing</b>				
Homeless	160(57.5)	118(42.5)	278	1.00
House to live/sleep	118(58.6)	83(41.4)	201	0.95(0.65-1.40)
<b>Use habit forming substances</b>				
Yes	152(63.9)	86(36.1)	238	1.00
No	128(53.1)	113(46.9)	241	1.56(1.06-2.29)

<sup>a</sup>OR = odds ratio, <sup>b</sup>CI = confidence interval, P < 0.05

Table 4: Street children and women who used family planning (FP) service and STD prevention methods, Awassa 1999

Variables	Used FP and STD prevention methods			OR <sup>a</sup> (95% CI <sup>b</sup> )
	Yes (n=64)	No (n=216)	Total (n=280)	
Study group				
Children	52(20.6)	201(79.4)	253	1.00
Women	12(44.4)	15(54.6)	27	0.32(0.13-0.79)
Sex				
Male	44(19.5)	182(80.5)	226	1.00
Female	20(37.0)	34(63.0)	54	0.41(0.21-0.81)
Marital status				
Married	42(60.9)	27(39.1)	69	1.00
Single	22(10.40)	189(89.6)	211	13.36(6.62-27.32)
Educational level				
Illiterate	14(33.3)	27(66.7)	41	1.00
Read and write	3(40.0)	4(60.0)	7	0.69(0.11-4.63)
Literate	88(37.9)	144(62.1)	232	0.85(0.40-1.79)

Among street children below 10 years of age 40 (85.1%) reported health problems. The proportion is lower for older age groups. Therefore, there is significantly association between younger age and health problems.

Two hundred thirty eight (49.7%) of the children reported that they used one or more of the habit-forming substances (alcoholic drinks, chat and cigarette). Among these 63.9% reported one or more of the health problems. Furthermore, of two hundred eighty street children who reported health problems 54.3% used habit-forming substance. The data clearly shows the use of habit-forming substances is significantly associated with health problems (OR=1.56, CI=1.06-2.29) (Table 3).

A total of 280 respondents (253 street children and 27 women) reported that they have had sex. Of these 226 were males and 54 female. Among the 280 respondents who practiced sex, 216 (77.1%) did not use any of the modern methods of contraception. Of these 182 (84.3%) were males while 34 (15.7%) were females. Forty-four (19.5%) of the males and 20 (37.0%) of the females used some modern prevention methods (Table 4). More females than males used contraception (OR=0.41, CI=0.21-0.81). Forty two (60.9%)

of married and 22 (10.4%) of single respondents were users of contraception. Marriage is strongly associated with the use of contraception (OR=13.36, CI=6.62-27.32). However, literacy did not influence the use of contraceptive methods (OR=0.85; CI=0.40-1.79).

Of those (i.e. 64 respondents) who used the FP and STDs prevention methods, 46.9% got the service from government health care facilities (HCF), 37.5% from shops and 7.8% from private HCF. Among male users, 50% got the service from shops and 34.1% from overnment HCF while 75% of the females used FP and STDs prevention tools from government HCF.

The majority (282 or 55.7%) of the street children and women were unaware of the transmission routes of STDs and HIV. Only 224 (44.3%) of them were able to specify one or more of the common ways of transmission of the disease (Table 5).

Of the street children, 204(42.6%) knew about transmission and the proportion with knowledge was greater (58.1%) among the older age group (15-17 years old) than the younger ones (26.8%) (below 15 years old). Seventy four percent of the women knew about modes of transmission.

Table 5: Knowledge of STD and HIV mode of transmission in street children and women Awassa 1999

Variables	Knowledge of transmission			OR <sup>a</sup> (95% CI <sup>b</sup> )
	Yes (n=224)	No (n=282)	Total (n=506)	
Age				
< 10 years		47(16.7)	47	Nd <sup>a</sup>
10-14	57(25.4)	122(43.2)	179	1.00
15-17	147(65.6)	106(37.6)	253	0.34(0.22-0.51)
> 18	20(6.0)	7(2.5)	27	0.13(0.05-0.35)
Sex				
Male	172(76.8)	263(93.3)	435	1.00
Female	52(23.2)	19(6.7)	71	0.24(0.13-0/43)
Educational level				
Illiterate	34(15.2)	96(34.0)	130	1.00
Read and write	7(3.1)	10(3.6)	17	1.98(0.62-6.23)
Literate	183(81.7)	176(62.4)	359	0.34(0.21-0.54)

<sup>a</sup>Nd=OR is not determined

One hundred twenty eight (62.7%) of the street children who answered correctly the mode of transmission of STDs and HIV never practiced any of the prevention methods of the diseases (Table 6). The remaining 76(37.3%) reported that they practiced one or more of the common methods. All the women who were aware of how the diseases were transmitted practiced the prevention methods. Condom use was the most common form of prevention followed by descending order, avoiding causal sex and abstaining from sex before marriage.

Three hundred nine (64.5%) of the street children did not attend any kind of health education programs. Only 170(35.5%)

attended one or more kinds of program and of these, 66.7% participated in personal hygiene and sanitation, 71% on STDs and HIV/AIDS, 33.3% on family planning and unwanted pregnancy, and 44.9% on communicable diseases.

Among the street children who attended health education on STDs and HIV/AIDS, the vast majority (113 or 94.2%) reported that they well knew the transmission route of the diseases. In fact 25.3% of the children who did not attend health education knew the transmission ways. All women who attended health education knew how STDs are transmitted.

Table 6: STD and HIV prevention methods practice among street children who reportedly knew the mode of transmission, Awassa 1999.

Variables	Practiced Prevention methods			OR <sup>a</sup> (95% CI <sup>b</sup> )
	Yes (n=76)	No (n=128)	Total (n=204)	
Age				
< 10 years				Nd <sup>a</sup>
10-14	10(13.2)	47(36.7)	57	1.00
15-17	55(86.8)	81(63.3)	147	0.26(0.11-0.59)
Sex				
Male	64(84.2)	108(84.4)	172	1.00
Female	12(15.8)	20(15.6)	32	0.99(0.43-2.31)
Educational level				
Illiterate	10(13.2)	20(15.6)	30	1.00
Read and write	2(2.6)	3(2.3)	5	0.75(0.08-8.2)
Literate	64(84.2)	105(82.0)	169	0.82(0.33-1.99)

<sup>a</sup>Nd=OR is not determined

### Discussions

The daily average income of the respondents was very low. Some of them earn less than 2 birr (Table 2). Women reported the lowest income. A study conducted in 1994 by Beyene & Berhane (11) indicated that the daily income of the majority (63.2%) of Nazareth street children was less than 2 birr. Although the income of Awassa street children seems to be better than that of Nazareth, under existing living condition this income is too low even to buy essential needs. From this, one can infer how difficult the life of the street children and women in Awassa is.

Most of the respondents reported that they eat meals as available. This indicates that their feeding conditions depend on amount of their income. It is anticipated that the observed low income may force them to eat or buy leftover food or food cooked and heated in poor hygienic conditions. Therefore, as indicated by Gross and Roscberg (13), the feeding habits of the children, in general, might have exposed them to various kinds of food borne infectious diseases, such as diarrheal diseases.

The majority (54.9%) of street children in Awassa reported to be homeless and had insufficient bedclothes (Table 2). The housing conditions of street women seems to be better than the children, since all women claimed to have houses to live/sleep. This may be explained by the fact that most of the women were married and they were probably supported by their husbands or other members of the family.

Malaria-like febrile illnesses (40.7%) followed by respiratory tract illnesses (31.6%) and diarrheal diseases (4.3%) were the major diseases reported by the street children. The major health problems reported in this study are different from those reported by Nazareth street children. According to Beyene & Berhane (11), abdominal pain, coughs and chest pains, eye and ear problems, headaches, and leg ulcers were the major complaints of Nazareth street children. The educational level of the children had no significant association with health problems (OR=0.76, CI=0.49-

1.18) (Table 3). The younger age group reported highest proportion of health problems and this indicates significant association.

According to Richard, *et al.* (4), the health problems of the homeless derive from many factors such as exposure to disease causing organisms, overcrowding in shelters, unsuitable sleeping accommodation, unsanitary living conditions, poor hygiene, poor nutritional status, drug abuse, mental illness, and exposure to trauma and crime. Although 57.5% of the homeless and 42.9% of those who had houses to live/sleep reported health problems in the present study, the difference between the homeless and those with houses is not statistically significant (OR = 0.95, CI = 0.65-1.40).

The proportion of street children of Awassa town that used habit-forming substances is higher than that reported by Nazareth town (16.8%) (11), and also than that of high school students (9.2%) in Addis Ababa (13). As indicated for Nazareth town street children (11), the highest level of habit forming substance abuse seems to put the street children of Awassa town at higher risk of developing complications from the use and dependence of these substances. It is also 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. This problem seems to be due to lack of any parental supervision and guidance, since most of them are beyond the control of their families. Such problems could be reduced or solved by exploring possibilities to rehabilitate and reunite them with their families, and/or by providing them guidance and counseling service.

According to the results, government health care facilities seem to be the primary choice of health service for street children and women. The majority (52%) of those who got medical treatment in government health care facilities attended treatment for malaria-like febrile illnesses. The reason for this may be the malaria diagnosis and treatment service provided by Sidama zone malaria control

laboratory, situated in Awassa health center, is free of charge. The fact that traditional medicine was the second choice (15.7% of them used it) of treatment may be an indication that they prefer treatments that are less costly because of financial problems. Moreover, financial problem seems to be one of the reasons for not seeking any form of medical treatment.

The present study indicated that, although the health care facilities are readily available in Awassa, the street children and women's access to them is limited by their status and economic problems. Moreover, as indicated by Richard, et. al. (4), homeless people sometimes fear visiting health care facilities because of previous bad experiences with health care system. Therefore, a comprehensive health intervention program need to be designed and implemented so that they can get access to existing health care facilities, particularly the government health care facilities. Furthermore, they have to be informed about health care services provided free of charge; e.g. malaria diagnosis and treatment service.

Only 22.8% of sexually active street children above 15 years old and women used family planning and STDs prevention methods (Table 4). This indicated that the proportion using these methods by the study population was very low. Almost half of male respondents who used the method indicated that shops were sources of FP and STDs prevention aids (Table 5). This may be an indication that male street children might have used condoms from shops as the main prevention tool. Because the quit common FP and STDs prevention tool available at present in common shops is condom. Female respondents used the service in the government health care facilities and this indicates that some of them had information about FP service provided by Awassa health center.

Prevention of unwanted and/or teenage pregnancy and STDs including HIV/AIDS are an urgent challenge, the problem is especially serious for street girls and women. It is very

important to make this group more knowledgeable about the importance and availability of the family Planning Service. In addition, contraceptive-counseling service should be made readily available to street women and girls of childbearing age.

The current study indicated that knowledge of transmission routes of STDs and HIV among street children is very low. Only 44.3% of them specified the common ways of transmission. A study conducted on youth in Awassa town also indicated that a large number of the youth don't have enough knowledge regarding the transmission of STDs (9). The present study indicated that (OR=0.34; CI=0.22-0.51), females OR=0.24; (CI=0.13-0.43) and those who are literate (OR=0.34; CI=0.21-0.54) are more likely to have more knowledge in this area (Table 5).

However, only 37.3% of those who knew transmission routes practiced one or more of the prevention methods (Table 6). More practice was reported by older (15-17 years) than younger age group (OR=0.26, CI=0.11-0.59). This result indicates that behavioral change may not follow awareness, particularly in the younger age groups. This may be because of incomplete information received by the street children from different sources. Even if information about STDs and HIV/AIDS is made available, it may not be strong enough to bring about a significant change in youth behavior. However, the practice was similar in males and females (OR=0.99, CI=0.43-2.31), and also literacy did not influence the practice (OR=0.82, CI=0.33-1.99).

The results of this study indicated that only 35.5% of the respondents attended one or more kind of health education. Health education is believed to be a very important tool in disease prevention and control. The present study revealed that 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. This is believed to be because of lack of accessibility of this group to health education.



They have no access to mass media (radio, television, etc) and their participation in formal education is very low because of their living status. As a result they have no source to get information about disease prevention and control.

The findings of this study clearly indicate the great importance for health promotion and disease prevention to street children and women. The rate at which the number of street children has increased highlights the urgent need for the problem to be addressed by the government and the society.

Thus, in addition to making health care facilities available to them, a street-based health education program that is aimed at disease prevention and control, promotion of the use of FP and STD prevention methods, personal hygiene and sanitation has to be designed and implemented as an intervention measure.

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