

Knowledge, attitude and behavior (KAB) on HIV/AIDS/STDs among workers in the informal sector in Addis Ababa

Zenabu Abera

Abstract

Introduction: Workers in the informal sector have not been studied in Ethiopia concerning their awareness about HIV/AIDS.

Methods: A cross-sectional study was conducted between February and March 1999 in ten Kebeles of Addis Ababa, Ethiopia. Data were collected by employing multi-stage sampling techniques.

Objective: To explore the level of knowledge and sexual behaviour on HIV/AIDS/STDs among workers in the informal sector.

Results: Awareness of Sexually Transmitted Diseases (STDs) was lower than AIDS in the study population (88.7% and 96.3%, respectively) with a wide variation with background characteristics. Awareness of AIDS declined as age increased and increased as education level increased. More males (7.5%) reported STDs than females (2.7%). Respondents in the core business area and working outside home, and the youth (15-29) years were highly affected. Misconception on mode of HIV transmission, as mosquito bites (34.1%) was observed. Condom use to avoid getting AIDS was reported by 57% males and by only 46% females. Females were less aware than males that healthy looking person could have the virus.

Conclusion: Intensive and multi-sectoral intervention via appropriate Information Education and Communication (IEC) channel is recommended. [*Ethiop. J. Health Dev.* 2003;17(1):53-61]

Introduction

The AIDS epidemic began spreading in 1980 in North America, and has quickly reached all corners of the globe (1). In Ethiopia, the first evidence of HIV infection was found in 1984 and the first AIDS case was reported in 1986 (2). The sub-Saharan African Countries are the worst affected world wide (3). Underreporting of the AIDS cases in developing countries including Ethiopia, masks the real consequence of the disease (1,4).

Since AIDS related death is more common in the productive age, for example, in Ethiopia about 90% of and reproductive reported AIDS cases occurs in adults between ages of 20 and

49 (4), the loss of young adults will certainly affect the overall economic development. Past gains in life expectancy, an important measure of progress, are being eroded in the most severely affected countries. In Zimbabwe life expectancy was reduced by 22.2 years, in Burkina Faso by 11.3, in Cote d'Ivoire by 11, and in South Africa by 7 (5).

In the absence of preventive and curative medicine for HIV/AIDS, the key instrument to arrest its spread is to understand the behavior of each group in the society in order to draw effective intervention strategies. Therefore, the objective of this study is to explore the level of knowledge, attitude and sexual behavior on HIV/AIDS and STDs among workers in the informal sector in Addis Ababa, Ethiopia.

Lecturer, Department of Banking and finance at the Addis Ababa Commercial College, P.O. Box 40110, Addis Ababa, Ethiopia

Methods

A cross sectional survey was conducted between February and March 1999. Workers in the informal sector, both males and females, in age group 15-49 were interviewed. To identify workers in this sector, the definition given by the Central Statistical Authority (CSA) and Ministry of Labour and Social Affairs (MOLSA) (6) is adapted.

The sampling techniques used in this study were both purposive and random sampling, based on multi-stage sampling techniques. The overall umbrella to the sampling technique was governed by the very nature of the study population. Most of the workers in the study group are concentrated in the central part (core) of the city where the market for their product is available. Data were collected from core and non-core business areas.

Accordingly, five Weredas were selected purposively: two from core and three from non-core. From the core, Wereda 5 (Merkato) and Wereda 3 (Teklehaimanot). From the non-core, Wereda 8, 25 and 19. In the second stage, from

each area, five Kebeles were selected andomly.

The data were collected using standard questionnaire prepared in English and then translated into Amharic. The field data collection was undertaken by 18 (nine male and nine female) interviewers who have completed grade 12 and 3 field supervisors (including the researcher). Before the data were collected, a 5-day intensive training was conducted. The instrument was pre-tested on a similar group prior to data collection. Field data editing and coding was undertaken on the spot by field supervisors.

Data entry and cleaning were done using SPSS statistical package and analyzed by employing uni-variate and bi-variate statistics.

Results

The socio-demographic profile of respondents is shown in Table 1. Of the total 1,177 respondents, 548(46.6%) are males, 863(73.3%) were between age of 20-39, 197(16.7%) were illiterate, 598(50.8%) were never married.

Table 1: **A profile of respondents**

Background Characteristics	Male	Female	Total
Sample area			
Core	278(46.8)	316(53.2)	594(50.5)
Non-core	270(46.3)	313(53.7)	583(49.5)
Place of work			
At home	308(52.3)	281(47.7)	589(50.0)
Outside home	240(40.8)	348(59.2)	588(50.0)
Age group			
15-19	125(55.8)	99(44.2)	224(19.0)
20-29	287(52.3)	262(47.7)	549(46.6)
30-39	106(33.8)	208(66.2)	314(26.7)
40-49	30(33.3)	60(66.7)	90(7.7)
Educational level			
Illiterate	45(22.8)	152(77.2)	197(16.7)
Read and Write	18(36.0)	32(64.0)	50(4.2)
Elementary (1-6)	135(44.7)	167(55.3)	302(25.7)
Junior (7-8)	104(51.5)	98(48.5)	202(17.2)
Secondary+ (9+)	246(57.7)	180(42.3)	426(36.2)
Current Marital Status			
In Union	160(38.1)	260(61.9)	420(35.7)
Formerly in union*	30(18.9)	129(81.1)	159(13.5)
Never married	358(59.9)	240(40.1)	598(50.8)

Note: figures in parenthesis are percentages

*Formerly in union includes: separated, widowed and divorced.

In the survey, respondents were asked about their awareness of STDs. Table 2 depicts their spontaneous knowledge of STDs (awareness

without probing). Accordingly, 92% of males and 86% females reported that they knew STDs in general.

Table 2: **Knowledge of sexually transmitted diseases (STDs)**

Background characteristics	Ever heard of STDs	Syphilis	Gonorrhoea	HIV/AIDS	Chancroid	Genital warts	Others	Do not know	Total
Sex									
Male	92.0	67.9	72.2	95.4	45.2	13.3	2.8	8.0	548
Female	85.9	64.1	54.3	97.0	27.2	5.6	6.6	14.1	629
Sample area									
Core	87.5	62.7	63.5	95.4	36.2	10.8	1.9	12.5	594
Non-core	89.9	69.1	62.4	97.1	35.7	7.8	1.3	10.1	583
Place of work									
At home	90.8	69.0	65.2	97.6	37.4	10.3	1.3	9.2	589
Outside home	86.6	62.7	60.5	94.9	34.4	8.3	2.0	13.4	588
Age group									
15-19	84.4	49.7	52.4	97.9	24.3	4.8	1.1	15.6	224
20-29	91.8	67.7	64.1	97.0	39.3	11.3	1.8	8.2	549
30-39	87.6	72.7	68.4	94.5	38.5	7.6	2.2	12.4	314
40-49	84.4	69.7	61.8	93.4	32.9	13.2	0.0	15.6	90
Educational Level									
Illiterate	70.6	59.7	54.0	93.5	32.4	7.2	1.4	29.4	197
Read and write	86.0	86.0	74.4	81.4	41.9	9.3	0.0	14.0	50
Elementary	88.7	57.5	54.5	95.1	24.6	5.6	1.1	11.3	302
Junior	90.1	58.8	59.9	97.3	31.3	4.9	1.6	9.9	202
Secondary+	96.7	74.5	71.6	99.0	45.9	14.3	2.2	3.3	426
Current marital Status									
In union	88.1	70.3	62.7	95.1	37.3	9.2	1.1	11.9	420
Formerly in union	81.8	63.1	63.8	93.8	34.6	6.2	2.3	18.2	159
Never married	91.0	63.6	62.9	97.6	35.3	10.1	1.8	9.0	598
Total	88.7	65.4	63.5	96.2	35.7	9.3	1.3	11.3	1177

Note: Figures are based on spontaneous knowledge of sexually transmitted disease (i.e without probing)

Fourteen percent of females and eight percent of males were unable to name any STDs. Awareness of HIV/AIDS, in the core-business area and non-core business area was almost the same, about 95% and 97% respectively. Awareness of AIDS declined as age increased but the reverse was true about the other STDs.

Particularly, respondents in age group 15-19 were less aware of other STDs than AIDS as compared with the higher age groups. The level of awareness of the respondents was found to be highly associated with educational level.

As shown in Table 3, of the total 841 respondents who ever had sex, in the past one year prior to the interview, 4.9% reported that they had STD, of which 7.5% are males and 2.7% are females and none of them reported HIV/AIDS (Table 3).

percentage was observed in the never married groups. The youth, in the age between 15-29, was highly exposed to STDs. Those respondents operating in the core (6.1%) and working outside home (5.3%) were highly affected than their counterparts (Table 3).

Further more, STD was reported by all groups irrespective of their marital status but a higher

Table 3: **Self-reporting of sexually transmitted diseases in the past year**

Background characteristics	Any STD	HIV/AIDS	Syphilis	Gonorrhoea	Chancroid	Others	Total
Sex							
Male	7.5	-	0.5	5.1	1.2	0.7	389
Female	2.7	-	0.4	1.8	0.0	0.4	452
Sample area							
Core	6.1	-	0.5	4.1	1.0	0.5	392
Non-core	3.8	-	0.4	2.8	0.2	0.4	449
Place of work							
At home	4.5	-	0.4	3.2	0.9	0.0	444
Outside home	5.3	-	0.5	3.5	0.3	1.0	397
Age group							
15-19	5.7	-	1.4	2.9	0.0	1.4	70
20-29	6.7	-	0.5	4.7	1.2	0.9	381
30-39	4.2	-	0.3	2.7	0.3	0.3	301
40-49	0.0	-	0.0	0.0	0.0	0.0	89
Educational Level							
Illiterate	2.5	-	0.0	1.9	0.0	0.6	162
Read and write	2.1	-	0.0	2.1	0.0	0.0	47
Elementary	4.1	-	0.5	1.8	0.9	0.9	222
Junior	7.2	-	0.0	6.5	0.7	0.0	138
Secondary+	6.5	-	1.1	4.0	0.7	0.7	272
Current marital status							
In union	2.8	-	0.3	1.5	0.2	0.8	403
Formerly in union	4.5	-	0.7	3.2	0.6	0.0	155
Never married	8.4	-	0.7	6.0	1.1	0.6	283
Total	4.9	-	0.5	3.3	0.5	0.6	841

Table 4 summarizes the result on the sources of information from which respondents had learned about AIDS: Radio 98.2% and TV 63.7%, were found to be dominant sources of information. Other sources, such as, health workers (56.3%), friends (51.1%), churches/mosque (29.1%), relatives (24.5%), at work place (23.3%), community meeting (21.6%), and schools/teachers (19.8%) were also reported.

The total of 1163 respondents were also asked about the routes of HIV transmission (Table 5). Accordingly, on average, 94.8% of them responded using contaminated skin piercing instruments, 88.3% sex with multiple partner, 55.8% not using condom during sex, 64.4% sex with prostitutes, 34.1% Mosquito bites and 13.6 sharing appliances with Peoples Living with HIV/AIDS (PLWHA). In all circumstances, females, workers in core

Background characteristics	Ever heard of AIDS	Radio	TV	Health workers	Church/Mosque	School/Teacher	Comm. Meeting	Friends/Relatives	Work place	Total No.
Sex										
Male	99.6	98.7	73.0	42.7	27.4	26.5	20.4	62.6/23.0	33.9	548
Female	98.1	97.3	55.5	67.6	30.4	13.8	22.4	40.7/25.3	13.8	629
Sample area										
Core	98.5	97.8	70.4	51.5	24.6	16.7	10.8	41.4/10.1	20.9	594
Non-core	99.1	98.1	56.8	60.5	33.4	22.8	32.4	60.5/38.6	25.6	583
Place of work										
At home	99.8	99.2	66.0	58.9	30.4	21.2	23.6	56.0/27.0	25.1	589
Outside home	97.8	96.8	61.2	53.1	27.6	18.2	19.4	45.7/21.4	21.3	588
Age group										
15-19	98.7	96.9	71.0	38.4	21.0	34.8	13.4	51.8/18.6	23.7	224
20-29	98.5	99.6	72.3	56.3	32.4	24.0	21.1	55.6/22.0	25.7	549
30-39	99.0	98.1	50.6	67.5	28.7	7.0	24.5	45.9/30.3	19.4	314
40-49	100.0	98.9	37.8	57.8	28.9	0.0	33.3	37.8/30.0	17.8	90
Educational Level										
Illiterate	97.5	97.4	29.2	58.3	24.0	0.0	24.0	43.8/29.2	12.5	197
Read and write	100.0	99.1	36.2	41.4	27.6	6.0	19.8	37.1/18.1	16.4	116
Elementary	98.4	99.0	60.9	50.6	28.8	13.8	20.5	47.4/19.6	21.8	317
Junior	99.4	99.7	80.8	62.8	30.4	31.6	22.1	54.9/24.5	28.0	341
Secondary+	99.0	100.0	91.7	62.7	34.3	35.8	22.1	67.6/31.4	32.8	206
Current marital status										
In union	98.3	98.1	49.8	64.0	31.9	7.1	26.2	44.8/28.1	20.0	420
Formerly in union	99.4	96.9	41.5	59.1	23.3	3.8	21.4	40.9/22.0	13.8	159
Never married	99.0	98.2	79.3	49.5	28.4	32.8	18.2	57.9/22.1	27.9	598
Total	99.0	98.2	63.7	56.3	29.1	19.8	21.6	51.1/24.5	23.3	1177

Table 5: Knowledge of HIV transmission

Background Characteristics	Sex with Multiple Partners	Sharing Appliances With PLWHA	Mosquito Bites	Shaking Hands With PLWHA	Using Contam. Skin piercing instruments	Sex with Prostitutes	Not using condom during sex	Total No.
Sex								
Male	80.0	8.6	20.3	3.8	95.6	65.	60.6	546
Female	95.6	18.6	43.4	6.2	94.2	63.4	51.5	617
Sample area								
Core	90.1	10.3	27.9	2.9	94.7	67.0	57.1	585
Non core	86.1	17.6	40.5	7.3	95.0	62.1	54.5	578
Place of work								
At home	88.1	13.3	34.2	5.4	95.7	68.2	58.7	588
Outside home	88.5	14.6	34.1	4.7	93.9	60.9	52.9	575
Age group								
15-19	86.4	11.8	28.5	1.8	92.3	60.6	56.6	221
20-29	87.6	10.9	30.7	4.3	95.9	66.4	61.2	541
30-39	90.4	16.1	39.5	6.1	94.5	66.6	47.9	311
40-49	90.0	30.0	50.0	14.4	95.6	56.7	48.9	90
Educational Level								
Illiterate	91.1	24.0	47.4	13.0	83.9	50.5	30.7	192
Read and write	93.1	25.0	52.6	7.8	96.6	69.8	61.2	116
Elementary	88.1	11.2	34.9	3.8	94.6	64.1	51.0	312
Junior	87.3	11.5	30.4	2.1	98.8	69.9	63.7	339
Secondary+	84.8	6.4	16.2	2.9	94.4	66.7	64.7	204
Current marital status								
In union	87.4	17.2	39.2	6.3	94.4	64.9	50.6	413
Formerly in Union	94.3	20.9	47.5	11.4	91.8	59.5	43.2	158
Never married	87.3	9.8	27.0	2.5	95.9	65.7	62.0	592
Total	88.3	13.9	34.1	5.1	94.8	64.4	55.8	1163

business area, those who were working outside home, relatively the aged and less educated were less aware about the mode of HIV transmission.

Overall, the knowledge of ways to avoid is unsatisfactory. The knowledge with regard HN to faithful partnership was the highest (Table 6). Females were less aware than males that a health looking person could have the virus.

On the average, only 14.4% and 19.9% of the respondents knew some one with AIDS or who has died of AIDS respectively. From the study population 86% of males and 66% of females showed their willingness to have the HIV test. Furthermore, about 6% of the total respondents responded as to commit suicide if the result happens to be positive and about 25% said “do not know” what to do if the test happens to be positive (Table 7).

Table 6: Knowledge of ways to avoid AIDS

Background characteristics	No way To avoid AIDS	Sex With Faithful partner	Seek protection from traditional healers	Use condom during sex	Avoid sex with Prostitutes	Total #
Sex						
Male	5.1	74.3	9.6	57.1	42.9	499
Female	6.6	84.1	14.2	45.6	33.8	535
Sample area						
Core	6.5	79.0	8.1	62.1	42.8	528
None-core	5.4	79.8	16.0	39.7	33.4	506
Place of work						
At home	4.8	81.8	11.5	53.8	41.4	532
Outside home	7.1	76.9	12.5	48.4	34.9	502
Age group						
15-19	8.6	73.1	8.3	57.0	38.3	193
20-29	4.1	76.8	10.4	54.7	38.3	499
30-39	5.8	87.5	14.4	46.1	39.1	271
40-49	11.1	84.5	23.9	29.6	33.8	71
Educational level						
Illiterate	10.9	79.7	20.3	31.1	34.5	148
Read and write	10.3	76.1	26.1	34.8	29.3	92
Elementary	5.4	79.4	11.9	50.0	40.6	286
Junior	4.1	78.8	8.2	59.2	35.4	316
Secondary+	2.5	81.8	5.2	63.0	46.4	192
Current Marital status						
In union	7.0	87.6	15.2	40.2	38.3	363
Formerly in union	5.7	84.5	17.1	47.3	38.0	129
Never married	5.2	72.7	8.7	59.4	38.2	542
Total	5.9	79.4	12.0	51.2	38.2	1034

Discussion

The result of this study showed that awareness of AIDS in the study population is better than the other STDs. This signifies that the Information, Education and Communication (IEC) programs focused or concentrated on AIDS with little or no emphasis given to other STDs. Females were less aware than males about STDs. This result tally with the finding obtained in Malawi (7).

Those respondents who were working at home may have an advantage to be aware of AIDS

and STDs as compared to those who were working outside home. Probably, they would have the possibility to get the time and opportunities to discuss among family members or friends than those who were working outside home.

Education was found to be a key variable in determining the level of awareness. Particularly for those who attended secondary and above, awareness was almost universal. This has been seen also in other studies too (8-11).

Table 7: **Awareness of AIDS-related health issues and willingness to have HIV test**

Background characteristics	Can a health looking person have the AIDS virus?	Do you Know someone with AIDS or who has died of AIDS?	Are you willing to have HIV Test?	Commit suicide if tested positive	Do you know what to do if tested positive?	Total #
	Yes	Yes	Yes	Yes	No	
Sex						
Male	76.9	16.8/22.2	85.9	4.7	19.6	546
Female	58.0	12.3/17.8	66.3	6.8	30.8	617
Sample area						
Core	64.3	13.3/22.9	74.7	7.8	17.6	585
Non-core	69.6	15.6/16/8	76.3	3.6	32.0	578
Place of work						
At home	73.3	14.5/21.4	77.7	4.8	26.3	588
Outside home	60.3	14.4/18.3	73.2	6.7	23.3	575
Age group						
15-19	68.8	15.4/18.1	77.8	7.0	27.3	221
20-29	74.1	13.3/20.5	81.9	6.1	21.7	541
30-39	59.2	14.8/13.6	69.1	4.2	27.0	311
40-49	45.6	17.8/21/1	53.3	4.2	35.0	90
Educational level						
Illiterate	41.1	12.5/15.1	55.2	2.8	34.0	192
Read and write	59.5	11.2/16.4	62.1	6.9	23.6	116
Elementary	63.8	12.5/17.0	79.2	9.7	27.1	312
Junior	76.7	18.6/21.5	81.7	4.0	22.0	339
Secondary+	83.8	14.2/27.9	86.3	4.0	21.0	204
Current Marital status						
In union	61.5	17.7/20.6	66.8	4.3	24.6	413
Formerly in union	53.8	10.1/15.8	72.2	5.3	36.8	158
Never married	74.2	13.3/20.4	82.4	6.6	22.1	592
Total	66.9	14.4/19.9	74.0	5.6	24.8	1163

Contracting STD is widely accepted as a co-factor for HIV/AIDS. Self-reported STDs of 4.9% in the study population might be an underestimate for three reasons: reporting an STD is a sensitive issue, which is not easily admitted; many women with STD infection are asymptomatic; and some symptoms may not have been recognized as STDs by respondents. Compared to other studies (7, 8), however, this is an acceptable figure. Educational level which had a positive effect on creating better awareness did not show the same impact on STD occurrence. The same result is reported in similar study (12,13). This result can be the basis for further in-depth research as why

educational attainment did not bring a change in sexual behavior.

Faithfulness in marital life is the key factor for safe and healthy family formation and for prevention from HIV/AIDS, however, STDs were also reported by those respondents in union. This may be an indication for multiple sexual practices outside the union. For those respondents who were formerly in union and never married; the rate was 4.5% and 8.1% respectively. Possibly, those who have never married could be younger than those respondents who were in union and formerly in union. That would be why the rate of STD for

the never married group was very much higher than the other groups. This finding further strengthens the need to pay attention on the youth.

Except the radio and TV as a dominant sources of information about HIV/AIDS, the role played by the remaining sources, work place, friends and relatives was not satisfactory. This signifies that there is a lot to be done in the IEC program design in general.

The fight against AIDS, as both health and development issue, should not be left to any specific public institution. It demands the full effort of all segment of the society, particularly unreserved commitment and initiative by top policy makers is a timely concern. Community mobilization campaign must be made without delay focusing on community and public institutions such as: *Idir*, *Senbete*, *Ekub*, *Mahber*, Churches, Mosques, and Schools.

Intensive and systematic IEC program must be carried targeting females, the youth and those working outside home. An open-air drama or song, fixing radios around working places, peer group education, and the like can be used as an instrument to reach them.

Acknowledgements

I would like to acknowledge the Demographic Training and Research Center (DTRC) of the Addis Ababa University and Action-Aid Ethiopia (International NGO) for their financial support to undertake this study. I would like to acknowledge Dr. Gebremaskal Habtemariam for his advise during the entire study period.

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