

PREGNANCY/STD PROTECTIVE MEANS USED BY HIV FEMALE SEX WORKERS IN ETHIOPIA

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SUMMARY: In 1988 and 1989, 2663 women in Addis Ababa and 6564 women in 23 other towns of the country practicing multi-partner sexual contacts (MPSC) were interviewed during sero-prevalence surveys for HIV infection. Outside the capital city 42.2% (n=2771) of the women reported using oral contraceptives always or often and only 1.8% of all women in the study always or often used condoms. The results were similar in the capital city. The study indicated that condoms and spermicides known to protect from sexually transmitted disease (STD) and HIV infection were very rarely used by the females practicing MPSC in urban areas of Ethiopia. Since the use of condoms by the study groups was low in general, no significant difference in the frequencies of STD was found between females using them often and non-users. Immediate intensive actions should be directed at the provision of condoms and intensified education aimed at behavior change in order to decrease transmission of HIV.

INTRODUCTION

Numerous studies in Africa have shown that prostitutes are at a higher risk of HIV infection and probably play a significant role in the spread of the virus (1,2,3). As there is no effective treatment or vaccine at the moment, intensive intervention strategies for this group will have to be designed on the basis of objective to assess knowledge of their sexual behaviour and the means used for protection from sexually transmitted diseases and pregnancy. In Ethiopia, no adequate up to date information was available on these subjects. This study was designed to obtain baseline data on the use of pregnancy/STD protective means among women at high risk of HIV infection in the period preceding the implementation of the intensive intervention within the national AIDS Control Programme.

SUBJECTS AND METHODS

Females practicing multi-partner sexual contacts (MPSC) as a source of income in Addis Ababa and in 23 other major towns of Ethiopia were included in the study. The study in the towns outside of Addis Ababa was conducted between July and December 1988. In Addis Ababa it was carried out in July 1989. The lists of bar girls available from the local health institution for periodic check-up on Sills were updated and used for selecting of individuals. In Addis Ababa a special census was performed in randomly selected Kebeles (lowest administrative units) for use in further systematic random selection of subjects for the study. The target group in Addis Ababa included four subgroups of women: bar girls, tej (local wine) sellers, tella (local beer) sellers, and

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women in red-light houses. Selected persons were individually interviewed by specially trained interviewers who were rehabilitated prostitutes. Individual records included questions on social status, health status, sexual practices of women, and on protective means from pregnancy and

sexually transmitted diseases. Five frequencies were included in the questionnaire on the STD/pregnancy protective means: always, often, rare, occasionally, and never. The data were processed using "EPIINFO" software.

RESULTS

A total of 2663 women in Addis Ababa and 6564 in 23 other larger towns of the country were interviewed. Outside the capital city, 42.2% (n = 2771) of the target group used oral contraceptives always or often (table 1).

Table 1. Frequency of use of some STD/Pregnancy protective methods by 6564 females in 23 urban areas of Ethiopia, 1988

Methods	Frequency of use		
	Always or Often	Occasionally Rarely	Never
Oral contraceptive pills	2771(42.2%)	190(2.3%)	3605(54.9%)
IUCD	(%)	3(0.05%)	647(99.7%)
Spermicides	(%)	2(0.04%)	6554(99.8%)
Condoms	(%)	383(5.8%)	6050(92.4%)
Traditional methods	(%)	18(0.3%)	6537(99.5%)
Washing female genitalia after sexual contact	(%)	51(0.8%)	169(2.6%)

Condoms ranked second, though the number of females using them always or often represented only 1.8% of all women in the study. Contraceptive pills were more frequently used by women in the age group of 20-29 years (48.3%). The frequency of oral contraceptive use increased with educational level (table 3), ranging from 23.0% among illiterate women, to 51.2% among persons who had attended a senior secondary school in the past ($p < 0.01$). 96% of females outside the capital city reported to wash their genitalia immediately after sexual contact. The frequency of occurrence of STDs among regular oral contraceptive users was significantly higher ($p < 0.01$) than among the women using them occasionally or never.

Sexually transmitted diseases were reported less frequently in the women using condoms always or often (15.6%) than in those who rarely or never used condoms (17%); there was, however, no statistical significance ($p > 0.05$). A very small number (0.1%) of MPSC women in the regional towns used herbal drugs as contraceptive.

In Addis Ababa, the frequency of use of protective means varied among the four different groups of women interviewed (table 2). On an average, 33.1% of all MPSC females in Addis Ababa used oral contraceptive pills (always or often). Bar girls and women in red-light houses used them more frequently: 44.6% and 39.3% ; respectively. Similarly regular use of condoms by bar girls and women in red-light houses was higher than in the other two groups: 7.1% of bar girls and 4.9% of women in private red-light houses have always or often used condoms as compared to less than 1% usage by tej and tella sellers. Washing external genitalia immediately after sexual contact was documented to be a very popular protective means used against pregnancy and STDs (83%) (tables 2).

Some women reported to practice vaginal douching. The frequency of use of contraceptives in Addis Ababa women (table 4) also varied in the groups of different educational background, though it was not statistically significant.

DISCUSSION

The prevention of HIV transmission through sexual intercourse is one of the leading strategies of the AIDS control programme in Ethiopia (4). Use of condoms and spermicides serve both in prevention of pregnancy and sexually transmitted diseases (5). At the moment the condom is one of the most important weapons in the public health fight against AIDS.

Its value in protecting from HIV and a wide variety of sexually transmitted diseases in homosexual and heterosexual communities has been documented (5). Despite intensive promotional efforts condoms were so far rarely used, especially by individuals who were most at risk (5). Spermicides which inactivate sperm and inhibit or destroy several pathogenic organisms and, therefore, reduce the risk of contracting STDs (6), are not popular either .

Use of oral contraceptives, which has been well proven to prevent pregnancy, was of reported as a possible cofactor in facilitating ed HIV transmission in exposed women (7). This creates a conflicting situation in reaching the of objectives of the programmes dealing with birth

Table 2. Frequency of use of STD/Pregnancy protective means by females practicing MPSC in Addis Ababa, 1989

Protective Bar	Bar girls (966)	"Tej" sellers (124)	"Tella" sellers (791)	Females in "red-light" (782)	All groups
Always/Often	431(44.6%)	(%)	(%)	(%)	(%)
Rare/Occasional	23(2.6%)	(%)	(%)	(%)	(%)
<u>IUD</u>					
Always/Often	7(0.7%)	2(1.6%)	3(1.2%)	0	12(0.5%)
Rare/Occasional	0	0		0	
<u>Spermicides</u>					
Always/Often	1(0.1%)	0	0	1(0.1%)	2(0.08%)
Rare/Occasional	0	0	1(0.2%)	0	1(0.04%)
<u>Condom</u>					
Always/Often	99(7.1%)	1(0.8%)	3(0.4%)	38(4.9%)	142(5.3%)
Rare/Occasional	216(21.8%)	2(1.6%)	13(1.3%)	185(23.7%)	416(15.6%)
<u>Washing genitalia after sexual contact</u>					
Always/Often	842(88.9%)	91(73.4%)	532(70.2%)	532(70.2%)	2209(83.0%)
Rare/Occasional	20(0.2%)	0	7(0.9%)	7(0.9%)	10(0.4%)

control, and those aimed at prevention of sexually transmitted diseases, including HIV. So far we have not found any report of a community based study on the use of STD/pregnancy protective means by female sex workers in Ethiopia. The importance of such data for the AIDS control programme can not be overestimated. The extent of the contraceptive/spermicide use can serve, among other aspects, as an efficient tool to evaluate the efficiency of the interventions.

A report compiled by the AIDS Control Programme (Mulugeta Workalemahu, personal communication 1988), indicated that the Family Guidance Association of Ethiopia (FGAE) was the only institution that had provided condoms as a means of contraception to clinic attendants for the past 20 years. The number of condom users registered in 8 years in the country was 20,000. According to this report about 1.3 million condoms were distributed between 1980 to 1988. There were two other private enterprises which also imported condoms.

This study on STD/pregnancy protective means in Addis Ababa and 23 other towns has shown that over one third of the target population has used oral contraceptives. Table 3. Education and frequency of use of oral contraceptives by MPSC females in urban areas of Ethiopia, 1988

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Grades completed	Contraceptive		
	Always/Often	Never used	Total used
Illiterate	17(23.0%)	57(77%)	74
1 -6	2090(43.5%)	3087(56.5%)	5166
7- 8	324(43.5%)	420(56.5%)	744
9-12	342(51.2%)	240(48.8%)	580
Total	2771(51.2%)	3793	6564

P < 0.01

Condoms and spermicides were not popular among the women practicing MPSC in all urban areas studied. Male populations in Ethiopia rarely used condoms due to a negative attitude, ignorance, and a lack of the product (Mulugeta Workalemahu, personal communication, 1988).

The regular condom users (always/often) in Addis Ababa and other urban areas represented only 5.3% and 1.8% respectively of the women in the study (table 1 & 2). The explanation for the higher frequency of condom use in Addis Ababa may be that the women in this city were

Table 4. Frequency of oral contraceptive use by MPSC females in Addis Ababa, 1989

Educational level (grades completed)	Bar girls (966)	"Tej" sellers (124)	"Tella" sellers (791)	Female in "red-light" houses (782)	All
Illiterate	-	-	-	1	1
1-6	267(483.7%)	14(16.5%)	112(17.6%)	112(17.6%)	651(34.2%)
7-8	90(46.2%)	3(27.3%)	7(11.3%)	7(11.3%)	128(37.6%)
9-12	115(52.0%)	5(183.35%)	9(9.9%)	9(9.9%)	166(39.7%)

P<0.08

interviewed a year later than those in the peripheral towns, and awareness of condom use and condom supplies for these women had thus improved. Further analysis of the data on different subgroups in Addis Ababa showed that bar girls and women in red-light houses were using condoms more frequently (7.1 % and 4.9% respectively) than the women in local beverage houses. The use of spermicides and intrauterine contraceptive devices (IUCD) was extremely rare. Educational level had a significant role in the promotion of contraceptive use in the other 23 towns except Addis Ababa. In the case of the Addis Ababa MPSC females educational level did not make a significant difference in the frequency of use of oral contraceptives. One of the reasons might be that most of those females claimed to get the information from their peer groups probably indicating same source of education.

Washing external genitalia or douching immediately after sexual intercourse was the most popular hygienic practice both in the capital city and the other urban areas. Detailed interviews with the target population revealed that group discussions with their friends had taught them that washing out seminal fluid from the vagina would prevent pregnancy as well as sexually transmitted diseases. This is a positive indicator of self education.

Sexually transmitted diseases occurred less frequently in the women using condoms often or always than among non-users or occasional users. The difference, however, was not significant probably because of the small number of condom users in general. The frequency of AIDS among regular oral contraceptive users was significantly higher ($p < 0.001$) than among occasional or non-users. The reason may be that use of the pills causes neglect of barrier contraceptive means which also protect from STDs. In conclusion, the use of condoms and spermicides known to protect from AIDs which include HIV infection, was rare among the women in urban areas of Ethiopia.

Immediate intensive actions should be directed at regular provision of condoms and education on safe sex behaviour in order to decrease transmission of HIV.

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