PREV ALENCE OF HIV -1 INFECTION AMONG OUT PATIENTS OF ASSELA TOWN, ETHIOPIA, 1989

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Several surveys in Ethiopia, among population groups practicing risky sexual behaviour, demonstrated a rapid progression of the HIV -1 epidemic. Among females involved in multi-partner sexual contacts (MPSC), the HIV prevalence rates rose from 18.5% in 988,

to 29.2% in 1989 (1); among the long distance truck drivers the rate has also been increasing (2). As no comparative study was made in the general population of Ethiopia, a serosurvey was initiated in Assela town in December, 1989. Three years earlier (1985 -1986) during a survey aimed at determining hepatitis B prevalence, 300 outpatients of Assela Hospital were also tested for HIV-1 infection (3). Two specimens were found repeatedly reactive for HIV-1 by ELISA test, but the confirmatory tests Western Blot (WB) gave negative results. The present survey was designed to use the same methodology and sample selection as in the previous survey. All persons in the age group

15 to 40 years applying for medical aid during morning sessions of the outpatient department of Assela hospital, gave 5ml of blood, with no linkage to personal identification. Collection of blood samples continued until the number of persons in the study equaled the target number of the survey conducted in 1985 -1986.

A total of 317 individuals (males and females) were tested by double ELISA and Western Blot; the test results revealed that the population is affected by HIV-l (Table 1). Eleven specimens were positive for HIV antibodies, both by ELISA and Western Blot, representing 3.5% of the population tested. The HIV prevalence rates were found to be about equal in both sexes. The females were found to get infected at earlier ages than males (though statistically the differences for matching age groups is insignificant). This may reflect the respective age specific partnership in sexual relations; other factors may also be involved.

The HIV prevalence rate in the general population involved in this study correspond to the results of other surveys conducted the same year: 3.6% among antenatal clinic attendants in Addis Ababa and surrounding urban settlements (4), 3.7% among blood donors (DAC records, 1990), and 3.2% among young adults, scholarship winners going abroad (DAC records, 1990). The result of this and other similar studies demonstrate that the HIV epidemic is rapidly progressing in the general adult urban population of Ethiopia.

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outpatients of Assela town, 1989 -NO TESTED NO POSITIVE PREVALENCe-(95% C.I.) Mal"" 1~~, --Males 163 6 3.7(t2.9) Females 154 5 3.2(t2.8) Both Sexes 317 11 3.45(t2.0)

REFERENCES

1. Mebret M, Kbodakevicb L, Zewdie D, Ayebunie S, Bekele S, Getacbew G, Asefa G, Mengesba Y, Tadesse F, Hailemicbael M, Demissew B, Semunegus L. Progression of HIV Infection the Population With Different HIV Prevalence Rates. VI International Conference on AIDS San Francisco 1990; Abstract No. f 3160.

2. Mebret M, Kbodakevicb L, Zewdie D, Asefa G, Ayebunie S, Bekele S, Getacbew G, Mulugeta T, Tesbome A, Wondowssen T, Ermias H. Progression of HIV Infection Among Long Distance Truck Drivers and Technicians. The Ethiopia Medical Docton Association. Addis Ababa, Ethiopia. XXVI annual Medical Conference, 24-26 May, 1990, poster 9.

3. Kefene Hailu, Serological Survey of Human Immunodeficiency Virus (HIV) in Ethiopia. Journal of Medical Virology 28:21-24 (1989).

4. Zewdie D, Tafari N, Kebede T, Gebrehiwot B. Seroprevslence of HIV and Syphilis infection among childbesring age women of central Ethiopio. Vlth International Conference on AIDS, San Francisco 1990; Abstract No. FC 600.