
SHORT REPORT

Low HIV-seroprevalence in pregnant women in a rural area in Tanzania

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According to estimates (December 2000) from the World Health Organization, 36.1 million people live with HIV worldwide, and 25.3 million of them are found in Sub-Saharan Africa (1). Tanzania is one of the countries hardest stricken. In 1995, the proportion of HIV-1 infected male blood donors in this country was 6.7% (2), and in 1998, the HIV prevalence rate among rural pregnant women was 12.3–24% (3). Population based surveys have shown a decreasing prevalence gradient from towns to areas of lower population density, and the HIV prevalence for women of fertile age in Arusha town was estimated to be 11.6% in 1991–1994 (4).

Less is known about typically rural areas. A recent article reported low HIV prevalence (0.95–2.23%) in rural traditional Maasai communities in Kenya, but a high prevalence (up to 12%) of syphilis (5). The study was done in 1989–92.

Material and methods

As part of a hospital activity, we assessed the HIV prevalence among women attending the antenatal clinics of Haydom Lutheran Hospital (HLH). HLH is situated in Mbulu, a rural district 300 km from Arusha town and 100 km from Singida town, towns known to be sites of medium to high HIV prevalence. Mother- and child health services (MCH) included 21 antenatal clinics located in small, remote villages in Mbulu and Hanang dis-

tricts within 100 km distance from HLH. The Tanzanian government encouraged hospitals to check for HIV and syphilis as part of antenatal care, but testing was restricted through lack of funds. We examined anonymously by ELISA technique 733 pregnant women in the years 1995–1996 (Abbott Test pack HIV-1/HIV-2), and again 467 in 1999 (Vironostika HIV Uni-Form II plus O, Organon Teknika). In the first survey, 681 of the pregnant women were also examined for syphilis by the VDRL test. All the women were recruited consecutively among attendants of the 21 antenatal clinics after obtaining individual consent. The National AIDS Control Programme approved publication of the results.

Results

In the first survey, dating from 1995/1996, we found that two (0.3%) of 733 samples tested HIV positive. One hundred and thirty-one of 681 women (19%) had a positive VDRL. In 1999, two (0.4%) of 467 samples were HIV positive.

Discussion

Our results show that the situation is not universally bleak with regard to HIV infection in Tanzania. We find a low prevalence of HIV among pregnant women in rural Tanzania, and no increasing

trend from 1995 to 1999. This supports the findings of Valadez et al. (5) from neighboring Kenya that certain areas and tribes are not yet as much affected as other communities. This might be due to factors like remoteness, less migration, less traffic or tribal and cultural differences. We think the results reflect a true low prevalence of HIV infection in this area. The high proportion of VDRL positive women argues against a selection of low risk women in our sample, and indicates alarming conditions for the spread of the HIV epidemic into this area. A good HIV prevention program might be particularly important in this early phase of the epidemic.

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