

# HIV-Positive Women Report More Lifetime Partner Violence: Findings From a Voluntary Counseling and Testing Clinic in Dar es Salaam, Tanzania

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There is growing evidence linking the epidemics of HIV and violence against women.<sup>1</sup> Women are the fastest-growing population to become infected with HIV in most regions of the world. In 1999, it was estimated that there were 15 000 new infections per day, 95% of which occurred in developing countries and more than 40% of which occurred in women.<sup>2</sup> In many sub-Saharan African countries, more females than males are infected with HIV. HIV prevalence rates among young (aged 15–24 years) women and men is 27.13% and 15.11% in South Africa, 16.04% and 8.00% in Malawi, and 9.27% and 5.28% in Tanzania, respectively.<sup>2</sup> The most common form of violence against women globally is abuse by intimate male partners.<sup>3</sup> In general, from 10% to 50% of women worldwide have been physically assaulted by a male partner in their lifetime.<sup>4</sup> Table 1 provides estimates of violence against women from sub-Saharan Africa and North America.<sup>4–9</sup>

Increasingly, violence and threats of violence are emerging as important factors fueling the rapidly increasing HIV epidemic among women. There are different ways in which the epidemics of HIV and violence overlap in the context of women's lives. Violence may increase a woman's risk for HIV infection through forced or coercive sexual intercourse<sup>10–13</sup> and by limiting her ability to negotiate HIV-preventive behaviors.<sup>14–17</sup> Physical and sexual abuse during childhood has also been associated with high-risk sexual behavior in adolescence and adulthood.<sup>18–20</sup>

Previous studies have found the following factors to be positively associated with women's risk for violence: lack of financial autonomy, control of household income by a partner, partners' other relationships, women's negotiated condom use, partners' alcohol consumption, shorter duration of relationship

**Objectives.** Experiences of partner violence were compared between HIV-positive and HIV-negative women.

**Methods.** Of 340 women enrolled, 245 (72%) were followed and interviewed 3 months after HIV testing to estimate the prevalence and identify the correlates of violence.

**Results.** The odds of reporting at least 1 violent event was significantly higher among HIV-positive women than among HIV-negative women (physical violence odds ratio [OR]=2.63; 95% confidence interval [CI]=1.23, 5.63; sexual violence OR=2.39; 95% CI=1.21, 4.73). Odds of reporting partner violence was 10 times higher among younger (<30 years) HIV-positive women than among younger HIV-negative women (OR=9.99; 95% CI=2.67, 37.37).

**Conclusions.** Violence is a risk factor for HIV infection that must be addressed through multilevel prevention approaches. (*Am J Public Health.* 2002;92:1331–1337)

(years), lower education of partner, lower household income, drug use, women's multiple sex partners, lack of a steady male partner, women's positive HIV status, and CD4 count over 350.<sup>16,18,21,22</sup>

This report describes the meaning of partner violence in the Tanzanian context, and the forms this violence assumes, and it identifies the prevalence and correlates of violence against women who use HIV voluntary counseling and testing (VCT) services in Dar es Salaam, Tanzania.

## METHODS

### Design

The study was conducted in 1999 at the Muhimbili Health Information Center, 1 of 6 free-standing voluntary HIV counseling and testing clinics in Dar es Salaam.

The goal of the first phase of research was to define violence in the local context; to describe the HIV testing and serostatus disclosure decision-making process among men, women, and couples (findings have been reported elsewhere<sup>23</sup>); and to develop the survey instruments for use in the second phase. The first phase consisted of in-depth interviews with 15 women (13 HIV positive, 2

HIV negative), 17 men (6 HIV positive, 11 HIV negative), and 15 couples who had been through the HIV counseling and testing process at the Muhimbili Health Information Center.

The second phase of research measured the prevalence and identified the correlates of violence among 340 women enrolled immediately after their HIV pretest counseling session and before receiving test results in the posttest counseling session. To be enrolled in the study, women had to be at least 18 years of age, have a primary sexual partner for at least the past 3 months, and plan to reside in Dar es Salaam for at least the next 3 months. On average, women were 32 years old and had 9.23 years of education; 29.8% were infected with HIV, 48.3% were married, and the average duration of relationships was 7.5 years (Table 2). A total of 245 of these women (72%) were followed and interviewed 3 months after enrollment and testing. The only factor that was statistically different between women who were followed up and those lost to follow-up was the baseline report of violence with their current partner before the past year (47.6% and 61.8%, respectively;  $P=.068$ ), suggesting that our final estimate of violence may be an underestimate of the ac-