Co-morbidity of HIV, Hepatitis B, and Syphilis, among victims of sexual assaults in Transkei region, South Africa.

To the Editor: Sexually transmitted infections (STI) occur throughout the world. WHO estimates that worldwide 250 million new STIs occur yearly. Over 20 distinct pathogens are currently recognized. HIV infection boosts the virulence of STI pathogens. In South Africa, an estimated 40% of women attending family planning clinics were diagnosed with a STI. One in 10 sexually active persons in South Africa may be infected with a STI every year. The purpose of this study was to determine the co-morbidity of HIV, hepatitis B, and syphilis, among victims of sexual assaults at the time of incident reporting.

This was a record review of victims of sexual assault who attended the Sinawe Centre, between January and December 2004. One hundred and eighty eight victims of sexual assault were reported, of whom 35% (19.8%) tested HIV sero-positive. Hepatitis B antibodies were detected in 7 (7.6%), and RPR was positive in 5 (2.9%). Except 1 victim, all the rest were under 30 years of age. Of those who were 30 years and younger, 12 were between 21 and 30 years, 16 between 11 and 20 years and 2 were less than 10 years. None was positive for all three tests. Two were positive for hepatitis B and HIV, and 2 others were positive for syphilis and HIV.

In this study 1 in 5 was HIV positive which is similar (1 in 5 or 6) to UNAIDS estimates for South Africa. In 2003 in Swaziland, prevalence of HIV amongst young adults was estimated to be more than 38%, Botswana 37%, Lesotho 28.9% and in Zimbabwe 25%. A total of 122,951 HIV-infected individuals were detected in South Africa in 1991. Of them, 69% were from urban black population and 20% were rural. It is surprising that there is a significantly low infection of hepatitis B (7.6%) compared to HIV in this study. This is because of the scanty reservoir of hepatitis B in the local community. This is an advantage because mandatory hepatitis B vaccination can be enormously beneficial in protecting them. This would further contain the existing reservoir.

About half the victims (48.9%) were between 11 and 20 years old. This same group had the highest sero-prevalence of HIV (9%), hepatitis B (4.3%), and syphilis (2.9%). Syphilis serology was negative in those over 30 years of age and HIV in those over 40 years. Hepatitis B serology was positive in 2 who were over 40 years of age (Table 1).

The 11 to 20 year age group is the school going population. For them to be sero-positive for these 3 infections, they must have been sexually active from a very young age. This is alarming news for public health workers. Sixty percent of new HIV infections occur before the age of 25 years.

South Africa has to learn a lesson from the rising incidence of HIV/AIDS. More active measures must be taken to prevent sexual assaults. Despite the government spending enormous amounts of money on free condom distribution, there is no sign of declining of the transmission of HIV. The prevalence of HIV/AIDS in South Africa in 1990 and Thailand was 0.7%. A decade later, the rate in Thailand had stabilised at less than 1.8% in the reproductive age group, whereas in South Africa it had risen to 20%. There is no significant co-morbidity of HIV, hepatitis B and syphilis observed in this study although they have the same mode of transmission.

References