



Challenging racial stereotyping of AIDS in South Africa with prevalence of HIV in pregnant women

Athmanundh Dilraj, Salim S Abdool Karim, Sally Pillay

To the Editor: By the end of 2002 the global estimate of people living with HIV/AIDS reached 42 million, with over 70% of these people living in sub-Saharan Africa.¹ In South Africa about 1 in 9 (almost 5 million) people are living with HIV/AIDS.¹ These estimates suggest that South Africa has more people living with HIV/AIDS than any other country in the world, although UNAIDS underscores that populous countries with fast-growing epidemics may soon surpass this figure.¹

The South African Ministry of Health has been conducting annual seroprevalence surveys since 1990 among pregnant women attending antenatal clinics (ANCs) to obtain information on the prevalence of HIV and syphilis infection and to monitor trends over time. Heterosexual transmission of HIV is the main route of transmission in this country and ANC attenders represent sexually active women who are the most accessible for HIV testing. According to these annual surveys, national HIV prevalence rates were 24.5% in 2000 and increased to 26.5% in 2002.² Analysis of prevalence at provincial level shows that HIV/AIDS is disproportionately distributed throughout the country, with the highest prevalence in KwaZulu-Natal (36.5%) and the lowest in the Western Cape (12.4%).²

Pregnant women are an important sentinel population as they are sexually active, constitute an easily identifiable, accessible and stable population, and are more likely than other groups to be representative of the general population. However, the national antenatal surveys do not adequately represent the racial composition of the country. The majority (89.4%) of all pregnant women tested at the ANCs are black, with other ethnic groups being underrepresented.³ Therefore, HIV statistics published in scientific reports and quoted by the media relate largely to the black population. Consequently there is a perception that HIV/AIDS is a 'black' problem. While it is generally acknowledged that women of other ethnic groups are at lower risk than black women, it is important to determine the HIV prevalence in the various ethnic groups so as to factually challenge racial stereotyping of the HIV epidemic in South Africa.

HIV Vaccine Research Unit, Medical Research Council, Durban
Athmanundh Dilraj, PhD

Centre for AIDS Programme of Research in South Africa (CAPRISA), Nelson R Mandela School of Medicine, University of KwaZulu-Natal, Durban
Salim S Abdool Karim, MB ChB, PhD

Department of Obstetrics and Gynaecology, Nelson R Mandela School of Medicine, University of KwaZulu-Natal, Durban
Sally Pillay, ICU BA Cur

Corresponding author: A Dilraj (dilraja@mrc.ac.za)

The objective of this study was to assess the prevalence of HIV infection in public-sector ANCs in the greater Durban area that are utilised by ethnic groups other than blacks.

Methods

Information obtained from monthly antenatal statistics on ethnic designation and average first-time/repeat attenders from public-sector ANCs in the Durban metropole were used to select the study group and area. The study focused on the Indian and coloured populations only because white attendance was too low at these clinics. The study was conducted from June to November 2001. Four clinics were chosen, 1 in Chatsworth, 2 in Phoenix and 1 in Wentworth. Wentworth is largely populated by coloureds while Chatsworth and Phoenix have mainly Indian residents. All pregnant Indian and coloured women attending the selected clinics qualified for inclusion in the study.

Specimens were collected throughout the study period. This was an anonymous, unlinked study and only the clinic name, and race and age of the subject were recorded on the specimen collection tube label. All sera were tested by enzyme-linked immunosorbent assay (ELISA) for the presence of HIV antibodies. Ethical approval to conduct the study was obtained from the Ethics Committee of the University of KwaZulu-Natal.

Results

Nine hundred and eighty-eight specimens were collected at all 4 clinics. Of these samples, 97% had complete information on age, ethnic designation and a HIV result. The prevalence of HIV was 1.1% (exact 95% confidence interval (CI): 0.5%; 2.1%) for Indians and 4.4% (exact 95% CI: 1.6%; 9.4%) for coloureds. Ages of those who are HIV-positive ranged from 18 to 33 years (mean 27 ± 5 years) for Indians and 17 - 31 years (mean 25 ± 5 years) for coloureds, with a higher prevalence in older women (Table I). Coloured women had a significantly higher HIV prevalence than Indian women ($p < 0.01$).

Table I. Seroprevalence of HIV by age group in Indian and coloured public-sector antenatal clinic attenders, Durban, 2001

Age group (yrs)	HIV prevalence (% (N))	
	Indians	Coloureds
< 25	0.1 (3/423)	2.6 (2/78)
≥ 25	1.5 (6/400)	6.9 (4/58)
Total	1.1 (9/823)	4.4 (6/136)



Discussion

The 1.1% of HIV of prevalence rate among Indian and 4.4% rate among coloured ANC attenders indicates that HIV infection is prevalent in all ethnic groups. The HIV prevalence data from this study provide evidence to challenge the misconception that AIDS is an exclusively 'black' disease in South Africa. While the HIV prevalence among the Indian and coloured ANC attenders was much lower than the 24.8% reported nationally in that year,³ it does indicate that the HIV epidemic has become established in the Indian and coloured communities. These communities cannot remain complacent about the HIV threat.

The age-specific HIV prevalence among the Indian ANC attenders was similar to the HIV prevalence among Indian persons in the national household survey⁴ (0.1% and 0.3% for those less than 25 years, and 1.5% and 2.3% for older persons).⁴ While we saw an age-related difference in HIV prevalence among coloureds as well, this was unlike that seen in the national household survey where the prevalence in younger and older women was similar. The higher prevalence in older women seen in our study could be due in part to a cohort effect where women who were infected at a younger age had moved into an older age group.

KwaZulu-Natal has the highest prevalence of HIV in the country; it also has the highest concentration of Indians and a small coloured population. HIV awareness and prevention programmes, in this province in particular, need to be cognisant of cultural barriers to prevent an explosive epidemic. As learned from bitter experience, the prevalence in a rural black population of KwaZulu-Natal jumped from a low of 1.2% to 26% in just 6 years.^{5,6} While the factors influencing HIV transmission among Indians and coloureds may be different, HIV has a foothold in these communities and the concern is how rapidly it will spread. There is a window of opportunity in the Indian,

white and coloured communities to prevent an explosive increase, and the future trajectory depends on the effectiveness of awareness and prevention programmes implemented now.

Obtaining HIV prevalence and incidence statistics for the white ANC attenders has been a challenge as almost all of these women attend private clinics. A significant proportion of Indian, and possibly coloured women as well, attend private ANC. Unless there are innovative ways to access private clinics to obtain HIV statistics, determining prevalence and incidence of HIV in these communities will always be a challenge. Therefore strategies for obtaining statistics and implementing HIV prevention programmes should be expanded to include private-sector ANCs as well. In the meanwhile, data for the underrepresented groups collected from the established national antenatal survey could be made more meaningful by reviewing the proportional representation in the overall sample. In the 2001 survey, whites comprised 0.6%, Indians 0.4% and coloureds 10.5% of the 16 473 women surveyed (personal communication – Department of Health Statistics Section, 2001). Increasing the proportional representation of these groups will aid in obtaining a truer reflection of HIV prevalence in population groups other than blacks. The proportions need not be applied nationally but could be done for specific provinces/regions where the data gathered are meaningful.

1. UNAIDS/WHO. *Report on the Global HIV/AIDS Epidemic*. Geneva: WHO, 2002.
2. South African Department of Health. *Summary Report. National HIV and Syphilis Sero-Prevalence Survey in South Africa 2002*. Pretoria: DOH, 2003.
3. South African Department of Health. *National HIV and Syphilis Sero-Prevalence Survey of Women Attending Public Antenatal Clinics in South Africa 2000*. Pretoria: DOH, 2001.
4. Human Sciences Research Council. *Nelson Mandela/HSRC Study of HIV/AIDS. South African National HIV Prevalence, Behavioural Risks and Mass Media Household Survey 2002*. Cape Town: Human Sciences Research Council, 2002.
5. Abdool Karim Q, Abdool Karim SS, Singh B, Short R, Ngxongo S. Seroprevalence of HIV infection in rural South Africa. *AIDS* 1992; **6**: 1535-1539.
6. Wilkinson D, Abdool Karim SS, Williams B, Gouws E. High incidence and prevalence among young women in rural South Africa: developing a cohort for intervention trial. *J Acquir Immune Defic Syndr* 2000; **23**: 405-409.