

# HIV Seroprevalence in Women of Childbearing Age in Benin City, Nigeria

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## ABSTRACT

HIV seroprevalence was still low in some parts of Nigeria from 1989 to 1991, and only limited reports were available on seroprevalence in childbearing women. In order to assess HIV seroprevalence in pregnant women in Benin City and Bendel State, two sampling methods, unlinked anonymous testing and voluntary testing, were employed. Data obtained from testing 358 sera from pregnant women attending antenatal clinics and cord blood from labour wards in Benin City were compared with data obtained from testing 833 pregnant women at four sentinel surveillance sites in Bendel State. The samples were all analysed by ELISA technique at the University Teaching Hospital, Benin City. Repeatedly reactive samples were confirmed by Western blot. The seroprevalence of HIV-1 in Benin City and in Bendel State was 0.28 percent and 0.36 percent, respectively. At this point in time, intensive health education campaigns targeted at the general population are necessary. (*Afr J Reprod Health* 1997;1(2): 36–40)

## RÉSUMÉ

**La séroprévalence au VIH chez les femmes en âge de procréer dans la Ville de Benin, Nigéria**  
Entre 1989 et 1991, la séroprévalence au VIH était encore faible dans certaines parties du Nigéria, et il existait peu de rapports sur la séroprévalence des femmes enceintes. Afin d'évaluer la séroprévalence au VIH des femmes enceintes dans la Ville de Benin et dans l'état du Bendel, deux méthodes d'échantillonnage, à savoir les tests anonymes et les tests volontaires, ont été employées. Les données obtenues en testant les sérums de 358 femmes enceintes fréquentant des cliniques pré-natales et les cordons ombilicaux recueillis dans les salles de travail de la Ville de Benin ont été comparés avec des données obtenues en testant 833 femmes enceintes se trouvant dans quatre sites expérimentaux situés dans l'état de Bendel. Les échantillons étaient tous analysés par technique ELISA à l'Ecole de Médecine de l'Université de la Ville de Benin. Les échantillons qui réagissaient positivement à plusieurs reprises ont été confirmés par la méthode du Western blot. La séroprévalence au VIH-1 dans la Ville de Benin et dans l'état de Bendel était respectivement de 0,28 pourcent et de 0,36 pourcent. Au jour d'aujourd'hui, de vastes campagnes d'information sanitaire visant un public large sont nécessaires. (*Afr J Reprod Health* 1997;1(2): 36–40)

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KEY WORDS: *HIV-1 seroprevalence, childbearing women, Benin City, Bendel State, Nigeria*

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## REFERENCES

1. Panos. AIDS: the second decade [Media Briefing]. London: Panos, 1993:1.
2. World Health Organization. WHO calls on policy makers to reduce women's growing vulnerability to HIV/AIDS [Press Release]. Geneva, World Health Organization, 1995:11.
3. Sapulveda J. Heterosexual transmission of HIV infection. ARHN Newsletter 1984;1(1).
4. Mann J, Tarantola D, eds. AIDS in the World II: global dimensions, social roots, and responses. New York: Oxford University Press, 1996.
5. Clumeck NO, Van de Perre P, Caraël M, Nzaramba I. Heterosexual promiscuity in African patients with AIDS. *N Eng J Med* 1988;31:182.
6. World Health Organization Global Program on AIDS. The HIV/AIDS Pandemic: 1993 overview. Geneva: World Health Organization, 1993.
7. World Health Organization. WHO asks the OAU Heads of State to make personal commitment to AIDS control [Press Release]. Geneva: World Health Organization, 1994:11.
8. Nigerian Bulletin of Epidemiology. HIV Sentinel Surveillance in Nigeria, 1992;2:1.
9. World Health Organization Global Program on AIDS. Unlinked anonymous screening for the public health surveillance of HIV infection: proposed international guidelines. Geneva: World Health Organization, 1989.
10. Bayer R, Lumey LM, Wan L. The American, British and Dutch responses to unlinked anonymous HIV seroprevalence studies: an international comparison. *AIDS* 1990;4:283–90.
11. De Cock KM, Porter N, Kouadio J, et al. Rapid and specific diagnosis of HIV-1 and HIV-2 infections: an evaluation of testing strategies. *AIDS* 1990;4(9):875–8.
12. Harry TO, Ekenna I, Chikwem JO, et al. Sero epidemiology of Human Immunodeficiency Virus infection in Borno State of Nigeria by sentinel surveillance. *J Acquir Immune Defic Syndr* 1993;6(1):99–103.
13. Olaleye OD, Bernstein I, Ekweozor CC, et al. Prevalence of Human Immunodeficiency Virus types 1 & 2 infection in Nigeria. *J Infect Dis* 1993;167:710–4.
14. Berkley SF, Naamara W, Okware S, et al. HIV infection in Uganda, are more women infected than men? *AIDS* 1993;4:1237–42.
15. King E, Frey S, Beisha R, et al. Women of child-bearing age: Rwanda. *AIDS* 1993;3:437–42.
16. Piot P, Geoman J, Laga M. The epidemiology of HIV and AIDS in Africa. In: Essex M, Mboup S, Kanki PJ, Dalengayi MR, eds. AIDS in Africa. New York: Raven Press, 1994:165–71.
17. William EE, Mohammed I, Chikwem JO, et al. HIV-1 and HIV-2 antibodies in Nigerian population with high and low risk behavior patterns. *AIDS* 1990;4:1040–1.
18. Heymann DL, Bres P, Karam M, et al. AIDS related research in sub-Saharan Africa. *AIDS* 1990;4:469–70.