Journal of Medical Practice and Review

A comparative study of HIV sero-prevalence between nulliparous and parous women of reproductive age who attended the Sinawe Center, Mthatha, South Africa.

Meel Banwari

Abstract:

Objective:

To compare the sero-prevalence of HIV infection between nulliparous and parous women who attended the Sinawe Center following sexual abuse.

Methods:

A record review of victims of sexual abuse who reported to the Sinawe Center, Mthatha General Hospital.

Results:

Six hundred and eighty-five females attended the center between 1 January and 31 December 2005. Two hundred and seventy-eight were 16 years or older. Of these, 268 had testing for HIV done and 72 (26.8%) were found to be positive. The highest number of positive results, 30 (11.2%), was found in women between 21 and 25 years.

There were 160 (59.7%) nulliparous women, of whom 30 (11.1%) were HIV positive, and 108 (40.3%) parous women of whom 42 (15.7%) were HIV positive. Among the nulliparae the highest positivity, 17 (6.3%), was in the 16–to-20-year age group, while in the parous women it was in the 21-to-25-year age group: 26 (9.7%). Twenty-nine (10.8%) rapists used condoms during the sexual act. Condoms were used by the perpetrators when raping 15 (50%) victims who were HIV positive.

Conclusion:

There was a higher prevalence of HIV among parous women than among nulliparae who attended the Sinawe Center.

Introduction:

When AIDS was first detected 25 years ago, few would have imagined the devastating impact it has today. To date, more than 65 million people have been infected with HIV and more than 25 million have died. Nearly one in 20 children in sub-Saharan Africa has been orphaned by AIDS. A quarter-century into the epidemic, the global AIDS response stands at the crossroads. Despite progress in expanding access to HIV prevention and treatment, the epidemic continues to worsen, especially among women and young people.[1] The Human Developmental Report 2005 identified AIDS as having inflicted the single greatest reversal in human development. Still in its early stages, the pandemic is rapidly globalizing, affecting new countries as well as new populations within countries where the epidemic is already established. The AIDS burden is growing especially severe for women and girls. Not only is AIDS an unprecedented public health challenge, it represents a profound threat to prospects for poverty reduction, child survival and economic development.[1]

The HIV/AIDS epidemic has had many negative implications for South African society, which stem from the illness and eventual death it causes.[2] There are only two prevalence studies that estimate how many South Africans have HIV. The first is based on a report of the Department of Health, “National HIV and Syphilis Sero-prevalence Survey in South Africa”. This annual study looks into antenatal clinics and uses the result to estimate HIV prevalence among pregnant women. In 2004, it estimated that 29.5% of pregnant

women were living with HIV.[3] The highest incidence occurred in KwaZulu-Natal (40.7%) and the lowest in the Western Cape (15.4%). The Eastern Cape had a prevalence rate of 28%.[4]

The second source is the report: "South African National HIV prevalence 2005". In this survey, a sample of people were chosen to represent the general population, 55% of whom agreed to give a blood sample to be anonymously tested for HIV. Based on this survey, the researcher estimated that 10.8% of all South Africans over the age of two years were living with HIV in 2005 (National Survey, 2005). The highest (16.5%) prevalence was in Kwazulu-Natal and the lowest (1.9%) in the Western Cape. In the Eastern Cape it was 8.9%.[5]

These prevalence studies provide quite different results, bearing in mind that they were conducted in different years. Antenatal surveillance is internationally recognized as the most useful way of assessing HIV prevalence in countries. This study excluded all nulliparous women, which is a big limitation. The present study aims to compare the HIV sero-prevalence between nulliparous and parous women in the reproductive age group who have been sexually abused.

Methods:

This is a descriptive study. The 685 victims of sexual abuse were examined and tested for HIV at the Sinawe Referral Center, Mthatha General Hospital, of whom 268 were 16 years or older. They were divided into two groups, nulliparous and parous. Sinawe Center is the only unit in this area that deals with cases of sexual abuse. It renders services to about 400 000 people. It is staffed by 15 people, including medical consultants, professional nurses, social workers and police officers on duty. The center offers a 24-hour service.

HIV testing with patients' informed consent forms part of the management of sexually abused victims, in view of post-exposure prophylaxis (PEP) and antiretroviral treatment if they are found to be positive. The National Department of Health Guidelines are that a patient who refuses HIV testing or one who presents more than 72 hours after the incident should not be given PEP (DOH. National management guidelines for sexual assault care, March 2005). On obtaining consent, a rapid test is performed in accordance with the National Guidelines 2005. A blood sample is also sent to the laboratory for an ELISA test for confirmation. The test results presented here are from the initial screening test and the ELISA test from the laboratory. To maintain patient confidentiality, HIV test requests and results were coded and data were analyzed.

Results:

Six hundred and eighty-five females attended the center between 1 January and 31 December 2005. Two hundred and seventy-eight were 16 years or older. Of these, 268 had testing for HIV done and 72 (26.8%) were found to be positive (Table 1). The highest number of positive results, 30 (11.2%), were found in women between 21 and 25 years (Table 1 and Figure 1).

There were 160 (59.7%) nulliparous women of whom 30 (11.1%) were HIV positive, and 108 (40.3%) parous women of which 42 (15.7%) were positive (Table 2 and Figure 2). Among the nulliparae the highest positivity, 17 (6.3%), was in the 16-to-20-year age group, while among the parous women it was in the 21-25-year age group (26 - 9.7%) (Table 2). Twenty-nine (10.8%) rapist used condoms during the sexual act. Condoms were used by perpetrators raping 15 (50%) victims who were HIV positive.

Discussion:

There are conflicting reports on the prevalence of HIV in South Africa. Antenatal surveys omit sexually active nulliparous women from their clinic-based studies countrywide. This has led to distorted HIV estimates. Programs aimed at addressing the HIV epidemic in South Africa have to be strengthened by accurate HIV statistics. Victims of sexual abuse make up a suitable subset to determine the prevalence of HIV because they include parous and nulliparous subjects.

Sexual violence is common in South Africa. According to the Crime Analysis Center, 52 550 cases of rape and attempted rape were reported in 2000. This is the tip of the iceberg of sexual assaults in the country. In one representative community-based survey, 2 070 such incidents occurred per 100 000 women per year in the 17-48-year age group.[6]

There were 268 sexually abused victims over 16 years of age in 2005 (Table 1 and Figure 1). The HIV prevalence rate was 26.8% (72), which is 2.7% less than the antenatal survey of 2004, but very close to the prevalence in the Eastern Cape (28%). The largest HIV-positive age group was between 21 and 25 years (11.2%) (Table 1). This was 2.75 times less than the national figure based on the antenatal survey for the 20-to-24-year age group. The difference in this comparison is that all categories of women (pregnant as well as non-pregnant) were tested for HIV, unlike the pregnant women only in the antenatal survey.

This survey included 160 (59.7%) nulliparous and 108 (40.3%) parous women. There were 30 (11.1%) positive cases among nulliparous and 42 (15.7%) among parous women. (Table 2 and Figure 2). Nulliparous women were more prone to sexual abuse but had low HIV seropositivity. Most nulliparous women were 20 years or younger and 6.3% were HIV positive. On the contrary, parous women in the 21-to-25-year age group had the highest seropositivity (26 - 9.7%) (Table 2). In the antenatal survey the seropositivity was 29.5%, but this study found it to be 15.7% among parous women.

Based on the antenatal data it is estimated that 6.29 million South Africans were living with HIV at the end of 2004. It is assumed that pregnant women accurately represent all women aged 15-49 years, and that men are 85% as likely to be infected as women (DOH, 2005). When one extrapolates the statistics of this study, the number of HIV-infected people in South Africa is almost half of this 6.29 million.

This is a preliminary study on a small, highly selected group, but it provides some information to carry out a larger study in this regard. The nulliparous women were 16 years and older and accounted for 60% of the total study population. Omitting them from HIV prevalence studies makes these studies inaccurate. About one third (31.7%) of nulliparous women in this study were girls 20 years or younger as opposed to parous women (2.2%) (Table 2). It appears that women who have borne children are less likely to be sexually abused than young girls who have not. There were no HIV infected women over the age of 50 years, although 9.7% women who were sexually abused were above this age (Table 1).

Condom use is very uncommon among perpetrators. Only a small group of perpetrators (10.8%) used condoms. Condom use was more frequent (50%) when the victim was found to be HIV infected**.** It means that victims' HIV status was known prior to sexual abuse. Many of the rapist were ex-boyfriends and perpetrators were probably HIV-infected themselves.

Conclusion:

It appears that the more children women have, the better protected they are against sexual abuse. There is a higher prevalence of HIV among parous women than among nulliparae who attended the Sinawe Center.

References:

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