UNLINKED ANONYMOUS STUDY OF HIV PREVALENCE AMONG ATTENDERS AT SEXUAL HEALTH CLINICS 1996/7

REPORT TO MINISTRY OF HEALTH

AIDS EPIDEMIOLOGY GROUP
1999

1. SUMMARY

1.1 Background

Because of the frequently prolonged period between infection with HIV and the development of AIDS there has always been a need to monitor HIV infections as well as AIDS diagnoses. The introduction of new treatments which delay the progression of HIV infection has given further emphasis to the surveillance of HIV infection rather than of AIDS.

As not all people at risk of HIV infection are tested it is essential to develop ways of gaining information on the prevalence of HIV that are not dependant on clinical testing. In addition because of variation in prevalence between groups within the population it is recommended that prevalence is determined in sentinel populations. Unlinked anonymous monitoring among such populations, in which blood collected for other purpose is anonymised and unlinked from the individual before testing for HIV is such a method.

A 1991/2 the AIDS Epidemiology Group performed an unlinked anonymous seroprevalence study among sexual health clinic attenders in Auckland and Christchurch. The study confirmed the seriousness of the epidemic amongst men who had sex with men (MSM), and suggested that prevalence amongst heterosexual men and women was relatively low.

A repeat unlinked anonymous seroprevalence study performed by the AIDS Epidemiology Group among sexual health clinic attenders in 1996/7 is reported here.

1.2 Method

New patients attending the sexual health service in Auckland, Hamilton, Wellington and Christchurch over a 12 month period who had blood taken for serological tests for hepatitis B and/or syphilis were informed of the study and invited to be included.

An aliquot of blood from the specimens of blood drawn for clinical purposes, was anonymised in a way that meant it could not be linked to the person from whom it came but could be linked to individual demographic, behavioural and diagnostic information.

A proportion of the sample was pooled and the pooled specimen tested for HIV antibodies. Individual samples were tested if the pool had a high level of antibody.

The prevalence of HIV infection among groups of attenders was calculated.

1.3 Results

Overall, of the 7111 sample tested that could be linked with demographic and behavioural information 10 were found infected with HIV.

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The prevalence among MSM was 18.8 per 1000 (95% CI 6.2-43.3 per 1000). Half of the infected people were MSM whereas they comprised only 5.5% of the whole sample. Among the heterosexual men the prevalence of 0.8 per 1000 (CI 0.2-2.4 per 1000), and among women 0.7 per 1000 (CI 0.1-2.5 per 1000). None of the small number of transsexuals were infected.

Among MSM attending the Auckland and Christchurch clinics there was a drop in prevalence from 44.1 to 31.3 per 1000 between the 1991/2 (which only involved these centres) and the 1996/7 study. This drop was not statistically significant. Among the heterosexual men and women in these comparable samples the rates dropped slightly from 1.3 to 1.0 per 1000 for the men and from 1.1 to 0.9 per 1000 for the women. Again the drops were not statistically significant.

One (female) of the 279 people (37 males, 235 females and 7 transsexuals) who were reported to be current sex workers, was found to be infected.

One of the 285 people who were reported to have ever injected drugs, was found to be infected. This person was a man who also reported sex with men.

Of the 10 people found to be infected, 5 were known to be HIV positive prior to that consultation. Of the remaining 5, 4 were reported to have a clinical HIV test at that visit. Therefore only one of the 10 people was neither known to be infected before, nor tested at, that consultation.

Named HIV testing, as part of the clinical consultation, was reported for 56% of the sample. Testing was most common among transsexuals and more common among females than males. Among men, testing was less common among Maori and Pacific Island compared to European/Pakeha men. Among women there were no differences between Maori and European/Pakeha but testing was less common among Pacific Island women. Testing was less common among teenage men and women. Among men, MSM were more likely to be tested. Among women testing was most common among those who had sex with both men and women.

A lower proportion of clinic attenders were enrolled in this study that in the comparable study in 1991/2. In addition, the proportion enrolled appeared to drop more during this study than the earlier one. Clinicians involved have reported that the requirement to inform all patients that blood was being anonymously tested for HIV, which was introduced to comply with the Code of Health and Disability Services Consumers' Rights, became onerous and therefore staff were disinclined to enrol every case.

1.4 Conclusions

There is a stable prevalence of HIV among sexual health clinic attenders suggesting the virus is not spreading extensively within the New Zealand population. MSM continue to be the most affected with much lower prevalence rates among heterosexual men and women, sex workers and injecting drug users.

Although just over half (56%) in this sample (those being tested for hepatitis B an/d/or syphilis) were tested for HIV at the consultation, the majority (90%) of the infected people were either known to be infected before, or tested at that consultation. Although this suggests that few infected clinic attenders are not being identified, the current pattern of testing might not pick up early an evolving epidemic among Pacific Island people or Maori men.

The similar prevalence, and the lack of increase over the period 1990 to 1997 in England and Wales outside London, suggests that the epidemic in New Zealand is of a similar magnitude and following a similar pattern to that area.

1.5 Implications

A major implication of this study is the need to maintain the strategy that has successfully controlled the spread of HIV within New Zealand among MSM and has prevented extensive spread among others at significant risk – injecting drug users and sex workers. However as infections continue to be diagnosed among MSM it is important that complacency does not set in among this group which could be fostered by the decreasing incidence of AIDS and improved anti-viral treatments.

In this study the low prevalence among injecting drug users (and that the one injecting drug user found to be infected was a man who had had homosexual) contact confirms other recent New Zealand findings on the prevalence among this group. It is important to maintain a range of prevention activities to prevent the spread of HIV and other viruses in New Zealand through injecting drug use and continue surveillance of the situation among this group.

While it is encouraging that only one sex worker was found to be infected, care must be taken to ensure that this information does not undermine the efforts of sex workers to encourage practices that reduce the risk of transmission of HIV and other sexually transmitted infections.

Although clinical HIV testing is more common among those whose behaviour puts them more at risk of HIV, it is less common among the very young attenders, among Maori and Pacific Island men, and among Pacific Island women. Although our results show that this has not resulted in undiagnosed HIV infection, changes in the pattern of the epidemic among these people may not be rapidly detected. Clinicians should consider appropriate policy and possible barriers to HIV testing, and audit of HIV testing in their clinics.

As clinical testing is unlikely to become universal, and the pattern of testing is not uniform, further unlinked anonymous surveys will be necessary to monitor HIV infection in this population. Whereas the frequency will need to be considered in the context of the findings form clinical testing, repeat studies should be considered at five yearly intervals.

Unlinked seroprevalence studies that utilise left over blood and follow specific guidelines for this kind of research have been deemed ethical both in New Zealand and overseas. However legislation introduced in New Zealand at the start of this study required that addition of a

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further procedures that added complexity to the study, required further input from the clinicians and resulted in lower enrollment and more withdrawals by patients. The legislation, the Code of Health and Disability Services Consumers' Rights, is being revised in 1999. The AIDS Epidemiology Group has made a submission recommending that Right 7(10) of the Code be directly amended, or that an amendment be made which would allow ethics committees to recommend exceptions from compliance with the Code, when in the public interest.