



Link between HIV risk and other STDs debated at forum

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Surveillance and treatment of sexually transmitted diseases is more important than ever in light of research showing that these diseases facilitate transmission of HIV, physicians attending a federal forum on STDs were told recently.

Indeed, the probability of HIV making significant inroads into Canada's heterosexual population could depend on infection rates for other STDs, Dr. Marie Claude Boily, a mathematical epidemiologist at Laval University, told the February forum in Ottawa. STDs are also associated with complications such as infertility and cancer.

Four STDs are currently reportable to Health Canada, and one of them, genital chlamydia, accounts for 85% of all STDs. The other reportable diseases are chancroid — no cases were reported in Canada during the latest period — gonorrhoea and syphilis.

Physicians were warned that rates for herpes, a “forgotten” and unreportable infection that is the second most common STD in Canada, appear to be exploding. Dr. Marc Steben of the Direction de la santé publique Montreal-Centre, said most doctors consider herpes “trivial” and they frequently miss the diagnosis. The major risk is for those who are infected during pregnancy, but the presence of genital herpes can also point to heightened risk of HIV infection.

People with STDs face a twofold to fivefold risk for HIV infection, with the risk being highest for those with STDs that cause ulceration. To ascertain the possibility of a heterosexual AIDS epidemic, Boily and colleagues constructed a model based on the heterosexual population of Montreal. They considered known sexual behaviour and existing infection rates for the most prevalent STD — chlamydia.

Their model shows that even a slight increase in the rate of chlamydia infection could set the stage for the establishment and persistence of HIV infection within a strict heterosexual setting in which no infection is imported because of injection drug users or bisexuals. HIV rates would increase slowly and peak at about 400 new cases a year, she said.

On the other hand, the model reveals that the eradication of chlamydia would eliminate the risk of establishment of persistent HIV infection within a heterosexual population, even if there is contact with bisexuals and intravenous drug users.

Although overall rates for reportable STDs in Canada have declined in recent years, researchers are worried because rates remain high among certain groups, and particularly for those aged 15 to 24.

Several presenters noted that STD rates are linked to difficult-to-solve risk factors that include sexual abuse, injection drug use and social isolation. For example, involuntary first intercourse was found to be a predictor of STD risk behaviours in a Winnipeg study, and a Health Canada pilot study of street youth found early abuse was a trigger for leaving home and a risk factor for both substance abuse and STD infection.

Dr. David Patrick, associate director for STD/AIDS control at the BC Centre for Disease Control, predicted consecutive epidemics in Vancouver's Downtown Eastside “unless the drug-addiction problem is dealt with.” There are an estimated 7000 to 8000 drug addicts living in that part of Vancouver, he said.

The number of new HIV cases in that area began to fall off at the beginning of 1998, probably because of epidemic saturation, but by early 1998 he said the area began to experience a rise in the number of cases of syphilis, which peaked halfway through the year. Despite the obstacles, Patrick said new approaches can reduce infection rates among core groups.

Dr. Richard Rothenberg, an STD expert from the Emory University School of Medicine in Atlanta, said that using a “social network” theory to track STDs uncovers more infected people than traditional contact tracing.

Under the network approach, public health workers who have identified a cluster of STDs create a street team and spend most of their time in the field, not in clinic offices. They begin with infected persons and interview their sexual, drug and social partners. Rothenberg explained that a social group is considered the unit of analysis and cases are kept open for a year, compared with the typical 30-day limit.

When applied to a localized outbreak of syphilis in the US, the social-network approach identified twice as many cases as traditional methods, he said. The outbreak involved 10 cases of syphilis within a group of 18 young women, most of them younger than 16. In all, 48 people infected with syphilis were found, many through social, not sexual, connections and contacts. “Of course, the Holy Grail is to find interventions that make sense and use the network information.”

Highlights of the 1998 Canadian STD Guidelines, including treatment decision trees, can be found at www.hc-sc.gc.ca/hpb/lcdc/bah.

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