Controlling HIV in Africa: effectiveness and cost of an intervention in a high-frequency STD transmitter core group.

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Abstract:

Since 1985, a population of over 1,000 predominantly HIV-positive female prostitutes residing in a low-income area of Nairobi, has been enrolled in a sexually transmitted disease (STD)/HIV control programme. The major elements of the programme include the diagnosis and treatment of conventional STD, and the promotion of condom use to prevent the transmission of HIV and other sexually transmitted infections. Using estimates of numbers of HIV-seropositive prostitutes, numbers of sexual contacts, susceptibility of clients to HIV, HIV transmission efficiency, rates of condom use and the basic reproductive rate of HIV infection in Kenya, we estimate that the programme is responsible for preventing between 6,000 and 10,000 new cases of HIV infection per year among clients and contacts of clients. The total annual operating cost of the programme is approximately US$77,000 or between US$8.00 and US$12.00 for each case of HIV infection prevented. Programmes to reduce the transmission of HIV and other sexually transmitted infections which are targeted at high-frequency STD transmitters, such as prostitutes, can be effective and relatively inexpensive to undertake. More such programmes should be developed and evaluated in different settings.