

Perspectives

Approaches to HIV Prevention Among Seropositive Patients in the Clinical Care Setting

As discussed by Frederick M. Hecht, MD, at the International AIDS Society–USA course in New York in March, recent trends toward increased risk behavior among HIV-seropositive patients indicate the need for increased prevention efforts in the clinical setting.

A growing body of data indicates that HIV risk behaviors are increasing among men who have sex with men (MSM) and other risk groups in a number of locations in the United States. Since 1994, the proportion of MSM in San Francisco who report using condoms during all sexual encounters has decreased from 70% to just over 50%. Over the same period, both the rate of rectal gonorrhea in men and the proportion of these men who report having multiple partners and unprotected anal sex have increased from approximately 20% to more than 40% (Figure 1).

In apparent association with these disturbing trends, the estimated number of new HIV infections per year in San Francisco has increased from just over 500 in 1997 to approximately 800 in 2000. Outbreaks of syphilis have been reported elsewhere on the West Coast. In Los Angeles, the number of new cases of syphilis in homosexual men increased from 26 during the first 6 months of 1999 to 66 in the first 6 months of 2000. Of these 66 cases, 57 persons (86%) knew their HIV serostatus and 34 (60%) were HIV-seropositive. Similar reports have come from other parts of the industrialized world; in Amsterdam, for example, the number of annual new cases of rectal gonorrhea in homosexual men nearly tripled between 1994 and 1999.

Ongoing sexual risk behaviors are also being reported among HIV-infected heterosexuals. In a cohort of 256 HIV-infected patients in Bronx, New York, 50% of

women reported having unprotected sex, including 65% of those who trade sex for money. Unprotected sex was reported by 29% of heterosexual men, and overall, 29% of patients reported having a new sexually transmitted disease (STD) since receiving diagnosis of HIV infection (McGowan et al, 8th CROI, 2001).

A number of factors are likely to be contributing to increasing risk behavior, including feelings of burn-out among target audiences in response to prevention messages and reduced motivation to avoid HIV transmission in association with advances in treatment. Indeed, there is a degree to which, in places such as San Francisco, the image of HIV infection has been routinized, a process abetted by advertisements that many feel portray the taking of antiretroviral medications to be simply part of a modern, active, robust lifestyle.

It is probably also the case that treatment advances have led to behavior disinhibition by reducing the extent to which those with HIV infection are surrounded by constant reminders of the disease in the form of friends and acquaintances who are obviously ill or who are dying with AIDS.

The effectiveness of antiretroviral therapy in prolonging life and increasing the number of people living with HIV disease has been attended by the additional problem of transmission of drug-resistant virus. Proportions of cases of transmission involving drug-resistant virus in San Francisco increased sharply in 2000; nearly one third of cases involved infection with virus having at least 1 primary resistance mutation for an antiretroviral drug.

In the context of what medical care can do to prevent HIV transmission, it needs to be recognized that although decreased viral load is associated with decreased risk of transmission, and it is tempting to believe that effective antiretroviral therapy can eliminate or reduce risk of transmission on the model of treatment for bacterial STDs, there are limitations to medical treatment as a preventive measure. Unlike bacterial infection, HIV infection is not cured by treatment. Potentially infectious cell-associated virus persists in patients with viremia below detection limits, and patients do not immediately know when they are experiencing viral breakthrough, which is likely to coincide with emergence of drug-resistant virus. Further, it has been

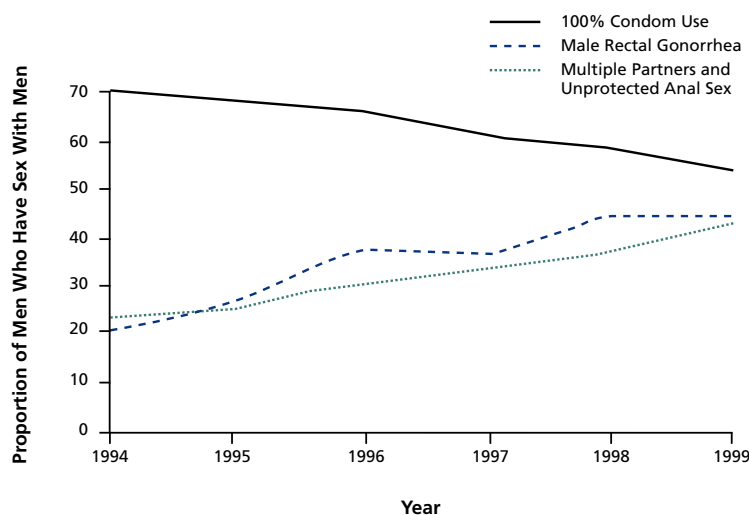


Figure 1. Increase in HIV risk behaviors among men who have sex with men in San Francisco, 1994 to 1999. Adapted from the San Francisco Department of Public Health.

Dr Hecht is Associate Professor of Medicine at the University of California San Francisco and Co-Director, UCSF Center for AIDS Research Behavioral Science Core.

estimated that even a 10% increase in risk behavior on the part of infected people can counteract the preventive effect of current treatment strategies on the community level (Blower et al, *Science*, 2000).

For many years, prevention efforts have been focused on keeping HIV-seronegative people free from infection. There is a pressing need now to renew efforts to address risk behaviors in the HIV-infected population. There is clear potential for instituting prevention efforts in clinical care, since it provides a setting for contact with many HIV-infected individuals and since there is evidence that interventions in this setting can be successful.

Rationale for Preventive Intervention in the Clinic

Clinicians may sometimes despair of being able to effect behavioral change in their patients. Yet there is considerable evidence from the literature that risk behaviors of different types can be reduced with even brief interventions.

In one 1992 study in Los Angeles, a single small group session in an STD waiting room reduced STD reinfection rates (Cohen et al, *Public Health Rep*, 1992). In the Project Respect study, performed by the Centers for Disease Control and Prevention (CDC), 2-session, pre- and post-HIV test counseling reduced the rate of new STDs by 30% (Kamb et al, *JAMA*, 1998). In another study, a 2-session intervention in homosexual men reduced rates of unprotected insertive anal sex (Valdiserri et al, *AIDS*, 1989). Brief counseling sessions by physicians have been shown to increase quit rates in smokers by 5% to 10% (Ockene, *Prev Med*, 1987; Richmond, *Addiction*, 1994), reduce alcohol consumption by 25% to 35%, and reduce the proportion of excessive drinkers by 45% (Richmond, *Addiction*, 1994). More comprehensive interventions involving clinicians have been shown to result in smoking quit rates of 10% to 35% (Wilson, *JAMA*, 1988) and reduce the proportion of excessive alcohol drinkers by 60% to 70% (Richmond, *Addiction*, 1994).

Achieving Behavior Change in the Clinic

Given the ordinary demands on clinicians in many settings, behavioral interventions in the clinic need to be brief. It would be

ideal for clinicians to be recognized for the time spent on intervention, and the Institute of Medicine has recommended that such counseling be considered a billable service. Although such a measure will probably be a key to incorporating counseling intervention in clinical practice, prevention efforts should not await formalization of such an incentive. In practice, expectations for changing behavior need to be realistic. Most medical interventions are not 100% effective; even a 10% or 20% reduction in risk behavior could have an important impact on HIV transmission in the community.

The stages of change model and motivational interviewing, elements of behavior counseling drawn from substance abuse intervention models, may be useful in prevention counseling in the clinic. Stages in the behavioral change process can be considered to consist of precontemplation (not thinking about change), contemplation (unsure about change), preparation (ready for change), action (engaged in change), and maintenance (maintaining change in behavior). People at different stages in this process are likely to benefit from a different focus in intervention.

Components of motivational interviewing interact with the stages of behavioral change. This technique is client-centered, addressing the patient in the context of his or her readiness for change and supporting the idea that the patient is expert in what he or she feels and believes will be useful in daily life. The counselor provides information, feedback, and skill

building to guide the patient in the process of change, with lecturing being avoided to avoid resistance to change. Motivational interviewing consists of 5 elements, which are summarized in Table 1.

Issues in HIV Counseling

Development of rapport with the patient regarding prevention of HIV transmission is an essential first step in intervention. For new patients, the subject of prevention can be initially addressed by asking if they are sexually active, acknowledging that practicing safe sex is hard to do all the time, and asking if they have difficulty in this regard at times. The clinician's concern regarding increases in HIV transmission and drug-resistant virus transmission can be shared with the patient in this discussion. Another way to broach the topic of risk behavior is to incorporate similar questions into screening for other STDs. Responses in these initial interactions should provide some idea of a patient's readiness for change.

Other initial steps that must be taken include identification of barriers to behavior change. Drug or alcohol use should be identified and appropriate counseling or referral provided. Social context should be considered for each patient with the aim of identifying and addressing triggers for risk behavior. An important aspect of current culture in San Francisco is that concordant HIV serostatus is frequently assumed among individuals practicing unsafe sex. Clinicians should emphasize that this assumption frequently is wrong. One

Table 1. Elements of Motivational Interviewing

Element	Description
1. Express empathy	Build rapport with the patient in a nonjudgmental manner
2. Develop discrepancy	Identify what is discrepant between the patient's stated goals and behavior and provide feedback on the discrepancy to the patient in a manner that allows the patient to interpret the discrepancy in his or her own terms
3. Avoid argument	Avoid direct confrontation of the patient regarding negative aspects of behavior
4. Roll with resistance	Move a patient toward insight and decisions using his or her own words (resistance can be a sign of damaged rapport that needs to be repaired)
5. Support self-efficacy	Build the patient's skill and confidence in accomplishing and maintaining behavior change

approach to encourage discussion of serostatus between partners is to promote the idea that by not discussing it, the patient is giving away the power to influence transmission. Discussion of this topic with the patient enables the clinician to identify and highlight discrepancies between behavior and goals. Motivation for change or support for decreased risk behavior can be in part provided by appealing to the self-interest of the patient in reducing risk for other STDs, by supporting the feeling of discomfort that most patients have with putting other people at risk and the benefit of retaining the power to decide whether others will be at risk, by strengthening the patient's knowledge of current increases in HIV and other STD transmission, and by providing feedback on risks of transmission associated with the patient's current practices.

Many patients engaging in risk behaviors are not going to eliminate all such behavior. Behaviors that carry greatest risk (ie, unprotected insertive anal sex with a discordant partner and vaginal sex with a discordant partner) should be identified. Strategies for risk reduction may be identified for patients who are unwilling to practice protected sex on all occasions, including having partners who have disclosed their own HIV-infected status (with acknowledgment that there is still risk for other STDs), having only 1 such partner with whom sex is unprotected, and ensuring that sex is protected with partners of unknown or negative HIV serostatus.

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