

## Diagnosing, Preventing and Managing Sexually Transmitted Diseases in Persons Living with HIV/AIDS

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Sexually transmitted diseases represent a major public health problem because their sequelae are serious and they facilitate transmission of human immunodeficiency virus [1]. Yet their exact incidence and prevalence is difficult to determine. There are several reasons for this. Although STDs are reportable diseases in most countries including Israel, reports are very inaccurate, due to physicians' failure to report and to patients' failure to seek treatment. In a national survey that included 7300 American physicians [2], case-reporting was found to be much lower than mandated by law: it was the lowest for Chlamydia (37%), intermediate for gonorrhea (44%), and higher for syphilis, HIV, and AIDS (53-57%). At the same time, reporting was even lower among military doctors [3]. In Israel, no study has been done to examine the rate of STD reporting by physicians, but it is reasonable to assume that it is not much higher than the rate reported for other developed countries.

Physicians' barriers to report STDs to the public health authorities can be classified as either administrative or clinical. Administrative barriers include lack of time, lack of recognition of the importance of such reporting, fear of the need for partner notification, and reliance on laboratory reporting [4]. Clinical barriers include inadequacies in physician knowledge and attitudes, lack of competence in taking a sexual history, and lack of laboratory facilities for aiding diagnosis of STDs. In a study conducted in the United States it was found that among 541 family practitioners 89% said that they feel comfortable discussing with their patients issues regarding STDs, but 70% claimed that they do not feel capable of doing so; 48% said that medical education on STDs at medical school was not enough, and most did not have any formal or informal training during their residency [4]. In Israel, many physicians from many specialties (primary care physicians, dermatologists, urologists, infectious disease specialists, gynecologists, etc.) treat patients with STDs. Regrettably, there are many practitioners but few teachers. There is no uniform curriculum and the STD clinic is not a part of any of the rotations in any of the specializations. In addition, modern laboratory tools such as DNA probes for gonorrhea and Chlamydia are not available for most of these physicians, and they have no choice but to offer symptomatic treatment without a definite diagnosis.

Barriers exist also on the patients' side; that is, they are reluctant to approach the medical health system for help when they have genitourinary symptoms. Sub-clinical disease (especially among women), embarrassment, and fear of the need for partner notification all contribute to the fact that many patients do not seek medical help [6].

Although the significance of STDs in the context of HIV infection is even more serious, the incidence and prevalence of STDs in HIV-positive patients is even more difficult to assess. Routine screening for STDs among HIV patients is still not established in most HIV clinics, and most physicians treating patients with STDs do not screen these patients for HIV. Another aspect is that many patients who are HIV-positive will not inform their primary AIDS physician about genitourinary symptoms because of their fear of being judged for having unprotected sexual encounters when they know they are HIV-positive. Yet, they will consult another physician about their STD symptoms without telling him or her about their HIV status.

In most areas of the world the prevalence of various STDs is much higher among HIV-positive patients compared to HIV-negative controls [7,8]. In this issue of IMAJ, the study by Joffe et al. [9] is the first attempt to evaluate STD prevalence among HIV-positive patients, but there are some problems inherent to the specific situation in Israel, a country of massive immigration from Africa and the former Soviet Union. Due to this immigration the HIV epidemic in Israel can be considered as three different sub-epidemics, and the prevalence of STDs is not the same for each. The three sub-epidemics refer to men having sex with men, most of whom carry HIV-1 clade B; men and women who immigrated from Africa, mainly Ethiopia, most of whom carry HIV-1 clade C; and men and women who immigrated from Russia and Ukraine, most of whom use opiates intravenously and carry HIV-1 clades A and E. There are major differences between these groups regarding sociodemographic parameters, cultural and religious characteristics, and sexual behavior. From studies conducted in various parts of the world it can be seen that each one of these groups may have a different spectrum of STDs. For example, in people of African origin, ulcerative STDs and especially syphilis, lymphogranuloma venereum, chancroid and herpes virus type 2 were the most prevalent STDs [10,11], whereas among male homosexuals in the developed countries the most prevalent diseases were syphilis, gonorrhea, Chlamydia, and human papillomavirus [12,13]. Among Russian HIV-positive

HIV = human immunodeficiency virus  
STDs = sexually transmitted diseases

patients, syphilis and gonorrhea were the most common STDs [14]. In addition, the clinical presentation of the same disease can be different in each of the groups. For example, whereas in many Africans syphilis presents as condyloma latum, among HIV-1-positive homosexual men oral ulcer is one of the most common symptoms of the disease. Due to these limitations it is very difficult to compare the prevalence of STDs in HIV-positive patients and HIV-negative patients as if all HIV-positive patients are the same. Even so, the article by Joffe and colleagues [9] is important because it is the first attempt to explore the situation of HIV-positive patients in Israel. One should remember that the bulk of patients attending the HIV clinic at the Rambam Medical Center, where this study was done, are patients of Ethiopian and Ukrainian origin, a fact that may bias the results of the study. It is probable that if screening were to cover all HIV patients in Israel the results might have been somewhat different.

There is no doubt today that diagnosing STDs among HIV-positive patients can optimize individual patient outcomes and contribute to public health control of STDs. For the individual, the prognosis for many of the STDs (especially syphilis, herpes and human papillomavirus) is worse than among HIV-negative controls, and since the immune system is more depressed the prognosis is even worse. Early diagnosis and treatment in these patients may prevent a dire prognosis as well as morbidity and even mortality. From the public health point of view, treating STDs among HIV-positive patients may decrease the infectivity capability of the patient and it is an opportunity for the physician to intervene in patients' behavior. The physician should define the target behaviors that reduce the risk of STDs and enhance HIV prevention, assess the patient's readiness to adopt this behavior, and use a counseling strategy that matches the patient's stage of readiness.

I believe it is time to adopt the U.S Recommendations of the Advisory Committee for HIV and STD Prevention [15], which state:

Persons already infected with HIV should be screened routinely for STDs. Early STD detection and treatment in this subpopulation could be particularly effective and cost-beneficial in reducing HIV transmission for three reasons: most STDs promote increased shedding of HIV; the number of HIV-infected persons is smaller than the number of persons at risk for becoming infected; and HIV infected persons often are receiving regular medical care. Specifically, all HIV-infected persons who might be at risk for STD acquisition should be screened regularly for curable STDs, including gonorrhea, chlamydial infection, syphilis, and – among women – trichomoniasis. In addition, person with HIV/AIDS should be assessed for genital herpes, educated about symptoms of herpes, and counseled to particularly avoid sex during periods with symptoms of reactivation of genital herpes, which are associated with higher rates of HIV viral shedding. Screening frequency should depend on the person's risk behavior, the potential risk behavior of the person's partner(s), and the incidence of STDs in the local population, but generally should occur at least yearly if any potential risk exists for STD acquisition. It should be performed more frequently if any incident STDs are detected by symptoms or

screening. These services should be provided as part of and at the site of routine, quality HIV care.

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