The Resurgence, in Israel, of Human Immunodeficiency Virus and Syphilis among Men Having Sex with Men

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In recent years there has been a sharp rise in the incidence of human immunodeficiency virus and syphilis as well as other sexually transmitted infections among men having sex with men, in many big cities in industrialized countries [1-3]. In this issue of *IMAJ*, Mor et al. [4] describe the point prevalence of STIs and Brosh-Nissimov et al. [5] describe the resurgence of syphilis among MSM in the Tel Aviv region. Additionally, in a recent published article in *Clinical Infectious Diseases*, Levy and co-authors [6] describe the recent rise in incidence of HIV and syphilis among MSM in Israel. From these studies a bleak picture arises concerning the rise of HIV and other STIs after their decline in the 1980s and early 1990s.

There are several intriguing questions regarding the reemergence of this current epidemic. The reemergence of unprotected sex due to treatment optimism [7,8], condom fatigue [8], increased use of disinhibiting substances including alcohol and methamphetamines as well as erection-enhancing drugs may explain part of the 'HIV-syphilis' epidemic [9]. As Mor and colleagues [4] show in their article, the Israeli MSM who are infected with HIV and other STIs use more alcohol and/or illicit drugs during or before sex, have more partners, and use condoms less frequently than do uninfected MSM. However, this does not entirely explain why syphilis is more prevalent in those infected with HIV. One explanation may be that MSM with HIV are diagnosed more frequently because they undergo an annual screening for syphilis, whereas MSM who are HIV-negative do not. Since many of the primary chancres may go unnoticed, especially when the infection is acquired per anus or orally, and since the secondary stage may be wrongly diagnosed as a "viral infection" by the unaware physician or patient, the only way to diagnose syphilis is by routine screening or by partner notification.

Another explanation may be serosorting [10] or networking [11]. Recently, Marcus and team [12] found that HIV serosorting among HIV-positive MSM is associated with a higher incidence of bacterial STIs. However, Brosh-Nissimov et al., in this issue of *IMAJ* [5], did not identify in their phylogenetic analysis any tight clusters in the different HIV viruses (among the patients with syphilis), and suggested that most likely they are not from the same source. On the other hand, Levy et al. [6] showed that syphilis was correlated with clustering. Of the 16 MSM with newly diagnosed HIV infection who were found to be co-infected with syphilis during 2007–2009, 11 (69%) were found in multiples in clusters of closely related viruses [6]. Although the numbers are modest, the probability that the observed distribution resulted from random associations is small, but in contrast to the current work the authors did not conduct an epidemiological review with the patients [6]. One explanation for this discrepancy may be that the syphilis epidemic in Tel Aviv is just beginning, and STI outbreaks can take months to develop as transmission is heavily influenced by the density and structure of local sexual networks. Another explanation may be that both research groups (Mor and Brosh-Nissimonov, and Levy) examined MSM in different parts of central Israel. Nevertheless, it is clear that this current epidemic is here to stay if something is not done soon to combat it.

More than 35 years ago an editorial in the *British Medical Journal* [13] was entitled "Never forget syphilis." The authors wrote that their forefathers saw a great deal of syphilis and advised them never to forget it. But, like all rebellious children who do not listen to their parent's advice, we did not take heed and the decline in syphilis incidence helped us forget it. The rise in incidence of syphilis described in this journal reminds us of our forefathers' advice.

This means that the recent guidelines of the Centers of Disease Control [14] regarding annual screening for HIV, syphilis and other STIs among MSM should be implemented in Israel as well, as should more frequent screening among MSM who have multiple or anonymous partners. In addition, MSM who have sex in conjunction with illicit drug use (particularly methamphetamines) or whose sex partners participate in these activities should be screened more frequently. We should also not forget partner notification, which is an important element in the containment of STI epidemics [15], but since a high proportion of anonymous sexual partners and/or those attending a

STIs = sexually transmitted infections
MSM = men having sex with men
HIV = sexually transmitted infections

clinic may restrict the identification and hence the control of emerging local epidemics, screening remains the main tool.

Last, but not least, an epidemic of STIs among MSM may forecast the introduction of the epidemic in other populations as well, such as heterosexuals [16]. It is essential, therefore, that health authorities be super alert with regard to diagnosing HIV, syphilis and other STIs not only among MSM – before it enters the general population.

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References

1. Jaffe HW, Valdiserri RO, De Cock KM. The reemerging HIV/AIDS epidemic in men who have sex with men. *JAMA* 2007; 298: 2412-14.
2. Likatavicius G, Klavs I, Devaux I, et al. An increase in newly diagnosed HIV cases reported among men who have sex with men in Europe, 2000-6: implications for a European public health strategy. *Sex Transm Infect* 2008; 84: 499-505.
3. van de Laar MJ, Likatavicius G. HIV and AIDS in the European Union, 2008. *Euro Surveill* 2009; 14: 5-7.
4. Mor Z, Shohat T, Goor Y, Dan M. Risk behaviors and sexually transmitted diseases in gay and heterosexual men attending an STD clinic in Tel Aviv: a cross-sectional study. *IMAJ Isr Med Assoc J* 2012; 14: 147-51
5. Brosh-Nissimov T, Mor Z, Avramovich E, et al. Syphilis outbreak among men who have sex with men in Tel Aviv, 2008–2009. *IMAJ Isr Med Assoc J* 2012; 14: 152-6.
6. Levy I, Mor Z, Anis E, et al. Men who have sex with men, risk behavior and HIV infection: integrative analysis of clinical, epidemiological and laboratory databases. *Clin Infect Dis* 2011; 52: 1365-72.
7. Sullivan PS, Drake AJ, Sanchez TH. Prevalence of treatment optimism-related risk behavior and associated factors among men who have sex with men in 11 states, 2000-2001. *AIDS Behav* 2007;11 (1): 123-9.
8. Adam BD, Husbands W, Murray J, et al. AIDS optimism, condom fatigue, or self-esteem? Explaining unsafe sex among gay and bisexual men. *J Sex Res* 2005; 42 (3): 238-48.
9. Fisher DG, Reynolds GL, Napper LE. Use of crystal methamphetamine, viagra, and sexual behavior. *Curr Opin Infect Dis* 2010; 23 (1): 53-6.
10. Truong HM, McFarland W, Kellogg T, et al. Increases in "serosorting" may prevent further expansion of the HIV epidemic among MSM in San Francisco. In: Program and Abstracts of the 11th Conference on Retroviruses and Opportunistic Infections, 8-11 February 2004, San Francisco, California. Abstract no. 843.
11. Anderton JP, Valdiserri RO. Combating syphilis and HIV among users of internet chatrooms. *J Health Commun* 2005; 10 (7): 665-71.
12. Marcus U, Schmidt AJ, Hamouda O. HIV serosorting among HIV-positive men who have sex with men is associated with increased self-reported incidence of bacterial sexually transmissible infections. *Sex Health* 2011; 8 (2): 184-93.
13. Never forget syphilis [Editorial]. *BMJ* 1975; 2 (5969): 460-1.
14. Workowski KA, Berman S; Centers for Disease Control and Prevention (CDC). Sexually transmitted diseases treatment guidelines, 2010. *MMWR Recomm Rep* 2010; 59 (RR-12): 1-110.
15. Singh S, Bell G, Talbot M. The characterisation of a recent syphilis outbreak in Sheffield, UK, and an evaluation of contact tracing as a method of control. *Sex Transm Infect* 2007; 83: 193-9.
16. Simms I, Bell G, Hughes G. Infectious syphilis in young heterosexuals: responding to an evolving epidemic. *Int J STD AIDS* 2011; 22: 481-2.