Away from home: travel and sex

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Travellers often smile, listen with disbelief, or feel that their moral integrity has been impugned when clinicians offer advice on sexual risks (especially the recommendation to carry condoms). However, a review[1] of travel and sexually transmitted infections (STIs) showed that 20% of travellers have casual sex, and half of these travellers had unsafe sex. In *The Lancet Infectious Diseases*, Alberto Matteelli and colleagues[2] report that 974 of 112 180 (0·9%) ill travellers who consulted a GeoSentinel travel or tropical centre had an STI diagnosed.

Few studies of the relation between STIs and travel have been done because it is difficult to establish a relation between diagnosis and travel. Some STIs have a long incubation, and travellers who have unsafe contacts abroad might also have unsafe contacts in their home country, making it difficult to link diagnosis to travel. Thus, sexual risk behaviour abroad—a prerequisite to the acquisition of an STI abroad—is usually studied as a measure for risk.

It should be noted that the proportionate morbidity in Matteelli and colleagues' study is not closely related to the incidence of STIs in travellers. First, travellers who have STI symptoms often consult a family physician or an STI clinic rather than a travel clinic, because STIs are not usually deemed a tropical disease.[3,4] Second, several STIs (eg, asymptomatic HIV, hepatitis B virus and herpes simplex virus infections, genital warts) were not included because their relation with travel was tenuous. Finally, travellers with asymptomatic STIs were not included even though as much as 70% of women and a substantial proportion of men with gonococcal or chlamydial infections or some other STIs are asymptomatic and only diagnosed by screening.[5] Thus, we agree with the authors that their data probably underestimate the true burden of STIs in international travellers.

The range of STIs described by Matteelli and coworkers is different from that noted in travellers who visit general or STI clinics.[3,6] Perhaps travellers with fever and general symptoms are more inclined to visit a travel clinic than are those with genital symptoms only (or perhaps they are referred). Thus, a tropical centre will have a higher proportion of patients with STIs associated with fever and general symptoms (eg, acute HIV, secondary syphilis) and more complications (eg, epididymitis, acute pelvic inflammatory disease) than will a general practice.

Matteelli and colleagues conclude that their data suggest target groups for pretravel interventions and that preventive strategies should be particularly targeted at men and travellers visiting friends and relatives. We do not think that pretravel interventions should be different for women and men, because the difference in acquisition of STIs might be less than that noted in this study. The most common diagnosis in men during travel was unspecified and non-gonococcal urethritis. Such infections are often caused by *Chlamydia trachomatis*, which usually results in symptoms after a short incubation in men but is often asymptomatic and only detected by screening in women, which makes the link with travel less clear.[7–9] Furthermore, the long-term effects of *C trachomatis* can be more severe for women, who risk infertility.[10]

Several studies about sexual risk behaviour during travel show a higher risk for people visiting friends and relatives. We noted[11] an odds ratio (OR) of 2·2 for business travellers and people visiting friends and relatives and of 2·1 for men. However, travelling without a partner (OR 14·4) and expectation of casual sex while travelling (9·0) were better predictors of unsafe casual travel sex and therefore probably of acquisition of STIs abroad.[11] Unfortunately, Matteelli and coinvestigators' study provides no data for the association of these factors with the acquisition of travel-related STIs. Thus, we think that the results of this analysis of the GeoSentinel database should be combined with the results of studies of risk behaviour to identify high-risk groups for special interventions.

It is unclear which interventions effectively prevent STIs in travellers. In Matteeli and colleagues' study, a lower risk of STIs was noted in travellers who had pretravel health consultation than in those who did not have such consultations. Whether specific advice about STIs was offered is unclear. The only clinical trial[12] about the effect of specific STI interventions so far showed that neither a motivational brief intervention nor the provision of free condoms (nor the combination of the two) modified risky sexual behaviour in young travellers compared with a control group of travellers who got standard pretravel information.

While awaiting the results of further studies, we recommend providing standard advice about STIs and condom use to every person planning to travel who does not have a steady partner.

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HIV surveillance and prevention in transgender women

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In *The Lancet Infectious Diseases*, Stefan Baral and colleagues[1] report the results of their systematic review and meta-analysis of the burden of HIV infection in transgender women. They compared the HIV prevalence identified in studies of transgender women with the prevalence estimates in adult male and female populations of reproductive age in countries for which both types of data were available. Their analysis shows that transgender women have almost 50 times the odds of HIV infection than did the reference population.

These findings come as we approach the fourth decade of the AIDS epidemic, and do not reflect well on the sensitivity and specificity of previous case reporting. From the onset of the epidemic, transgender women have not been included as a separate case-reporting category, and cases have probably been classified as homosexual men.[2] Similarly, in the ensuing HIV surveillance, transgender women were rarely included as a separate risk category, and data were usually merged with men who have sex with men (MSM).[1] These arbitrary decisions have long masked the burden of HIV infection in transgender women and have had a negative effect on prevention research and programming. For example, postoperative transgender women who did not practise anal intercourse have been excluded from participation in biomedical HIV-prevention trials. A history of neovaginal intercourse (ie, intercourse involving the surgically created vagina) was not sufficient for enrolment in any of the antiretroviral chemoprophylactic HIV-prevention studies that have been done in men and women around the world so far.[3] Hence, our present knowledge of the prevention of neovaginal acquisition and transmission of HIV infection in the event of pre-exposure prophylaxis, post-exposure prophylaxis, and antiretroviral treatment for prevention is almost non-existent.

The exclusion of transgender women from these trials is a lost opportunity to identify effective HIV-prevention strategies in a population for which implementation could be universal. Baral and colleagues[1] identified similar risks for HIV infection and equally high HIV prevalence in transgender women from vastly different cultural, legal, and socioeconomic contexts. Exclusion in HIV-prevention trials not only hampers adequate infection prevention efforts in transgender women, but it also leaves some unique scientific research questions unanswered. For instance, the neovaginal compartment and its close anatomical proximity to the rectum allow study of differential and cross-compartmental penetration and protection by oral and topical formulations of antiretroviral chemoprophylactic drugs. Such studies cannot be done in men and, for various reasons, have not been done in women with respect to the vagina and the rectum. Answers to these questions could help to understand the immunological and immunohistological processes explaining the different levels of efficacy of antiretroviral chemoprophylaxis in preventing vaginal and rectal acquisition and transmission of HIV infection.[3] To our knowledge, no new compartment has been added to human anatomy since Leonardo da Vinci established