

## LETTERS TO THE EDITOR

### Is bacterial vaginosis a sexually transmitted infection

EDITOR,—I have a concern about a reference used in the article “Is bacterial vaginosis a sexually transmitted infection?” in the February issue of *STI*.<sup>1</sup>

I have a particular interest in BV, especially in the potential for BV to be sexually transmitted between women. In the recent article the authors stated that:

“... past studies focusing on concordant BV infections within lesbian couples have failed to produce consistent results.”

To this statement there were two references. One supported concordant BV results in lesbian couples,<sup>2</sup> but the second reference referred to an article about treating urethritis in men in developing countries.<sup>3</sup> It is no wonder they didn't find any evidence of BV transmission between women!

Previous studies have consistently demonstrated higher rates of BV in women who have sex with women.<sup>1,4-6</sup> Further studies are needed to better understand the transmission dynamics of bacterial vaginosis between women.

KATH FETHERS

Alice Springs Sexual Health Unit, Alice Springs  
Australia

Correspondence to: Katherine.Fethers@nt.gov.au

- 1 Morris MC, Rogers P, Kinghorn G. Is bacterial vaginosis a sexually transmitted disease? *Sex Transm Inf* 2001;77:63-8.
- 2 Berger BJ, Kolton S, Zenilman JM, et al. Bacterial vaginosis in lesbians: a sexually transmitted disease. *Clin Infect Dis* 1995;21:1402-5.
- 3 Mabey D. The diagnosis and treatment of urethritis in developing countries. *Genitourin Med* 1994;70:1-2.
- 4 Skinner CJ, Stokes J, Kirlew Y, et al. A case-controlled study of the sexual health needs of lesbians. *Genitourin Med* 1996;72:277-80.
- 5 Edwards A, Thin RN. Sexually transmitted diseases in lesbians. *Int J STD AIDS* 1990;1:178-81.
- 6 Fethers K, Marks C, Mindel A, et al. Sexually transmitted diseases and risk behaviours in women who have sex with women. *Sex Transm Inf* 2000;76:345-9.

Accepted for publication 10 May 2001

### Reply

EDITOR,—I thank Dr Fethers for pointing out the discrepant reference in our paper.<sup>1</sup>

The discussion paragraph referred to conflicting results from studies focusing on the transmission of bacterial vaginosis (BV) in lesbians. A cross sectional prevalence study by Berger *et al* among monogamous sexual partners reported that of 11 index women with BV, eight (72.2%) had partners with BV. This compared with only one (10%) partner with BV of the 10 index women without infection.<sup>2</sup> The high level of concordance was attributed to the probable sexual transmission of BV within lesbian couples.

The evidence against the sexual transmission of BV among lesbians should have referred to a paper by McCaffrey *et al*, though this was not among concordant partners. This study of sexual practices among women

attending a specialist genitourinary medicine clinic in London reported that of 15 exclusively lesbian women, 40% had BV compared with 55% of the 76 women who were not exclusively lesbian.<sup>3</sup> Therefore, the presence of BV did not appear related to sexual practices among lesbians.

I hope that the matter has now been clarified.

MARIANNE MORRIS

PHLS Communicable Disease Surveillance Centre, 61  
Colindale Avenue, London NW9 5EQ, UK  
MMorris@phls.org.uk

- 1 Morris MC, Rogers P, Kinghorn G. Is bacterial vaginosis a sexually transmitted infection? *Sex Transm Inf* 2001;77: 63-8.
- 2 Berger BJ, Kolton S, Zenilman JM, et al. Bacterial vaginosis in lesbians: a sexually transmitted disease. *Clin Infect Dis* 1995;21:1402-5.
- 3 McCaffrey M, Varney P, Evans B, et al. Bacterial vaginosis in lesbians: evidence for lack of sexual transmission. *Int J STD AIDS* 1999;10:305-8.

Accepted for publication 10 May 2001

### Dial 1097 (toll free)

EDITOR,—Even as psychologists the world over ponder over whether computers can be good psychotherapists, computerised AIDS helplines are operating successfully in 35 Indian cities. The strategy behind these helplines is that as AIDS has no cure and prevention is its only remedy, “greater AIDS awareness” is akin to “greater AIDS prevention.”

Chandigarh AIDS hotline is a computerised telecounselling service which is a joint venture of a non-government organisation (NGO) called “Servants of the People Society” and the State AIDS Control Society, Union Territory, Chandigarh. This helpline was started in January 1999 with the motive of “AIDS prevention” through “AIDS awareness.” It is a 24 hour computerised interactive voice response service which is accessible on a 4 digit number (1097) by telephone. Confidentiality and anonymity of the caller are the hallmarks of this service. HIV/AIDS hotline is a toll free service that provides information and counselling on HIV/AIDS related issues in English, Hindi (national language), and Punjabi (regional language). The service consists of two parts—a prerecorded “standard question” option and a “specific inquiry” option. The prerecorded standard coded questions are:

- Code 1: What is HIV/AIDS?
- Code 2: How does it spread?
- Code 3: How is HIV not transmitted?
- Code 4: Prevention of HIV/AIDS
- Code 5: Symptoms of HIV/AIDS
- Code 6: Where is HIV testing done?
- Code 7: Relation of IV drug use and HIV
- Code 8: About STDs and HIV
- Code 9: Other specific queries on HIV/AIDS which get recorded and are replied to within 72 hours

Details of the calls received from January 1999 to December 2000 are as follows:

- Total no of calls: 293 091
- Average calls per month: 12 212
- Average calls per day: 401
- “Language-wise” calls (%):  
Hindi: 53.1  
Punjabi: 30.3  
English: 16.6
- “Code-wise” calls (%)  
Code 1: 18  
Code 2: 27.3

- Code 3: 5.6
- Code 4: 4
- Code 5: 4.8
- Code 6: 2.2
- Code 7: 1.6
- Code 8: 5.4
- Code 9: 31.1

The most frequent specific queries recorded on code 9 related to

- (i) The right way to use a condom
- (ii) How do condoms prevent HIV/AIDS?
- (iii) Masturbation
- (iv) Oral sex
- (v) Anal sex
- (vi) Deep kissing in relation to HIV.

We compared our data with those of the AIDS hotline in the national capital Delhi which is run by an NGO called “Torch.” This hotline has only a “specific query” option and has no provision for a “standard questionnaire.” Since the 4 years of its inception there have been some most frequent “specific queries” on this hotline facility in Delhi which were included in the “standard questionnaire” option of the Chandigarh hotline when it was set up at a later date.

With increasing media exposure, there is an increasing curiosity in the general public in India to know more regarding various health related issues such as HIV/AIDS. The pattern of queries on various helplines keeps changing, in keeping with the changing public awareness. Since the government spends ample funds annually on information, education, and counselling (IEC) activities related to HIV/AIDS, we feel that it would be worthwhile to utilise the most common “specific queries” on these helpline services (which are a direct reflection of the layman's quest for information related to HIV/AIDS) to update IEC strategies. Also, questions asked often on the “specific query” option can be incorporated from time to time in the “standard questionnaire” to make it more informative.

RANJU RAI

Department of Dermatology, Venereology and  
Leprosy, Postgraduate Institute of Medical Education  
and Research, Chandigarh, India

AMRITA AHLUWALIA

N M SHARMA  
State AIDS Control Society, UT Chandigarh

INDERJEET KAUR

BHUSHAN KUMAR  
Department of Dermatology, Venereology and  
Leprosy, Postgraduate Institute of Medical Education  
and Research, Chandigarh, India

Correspondence to: Dr Bhushan Kumar, Department of Dermatology, Venereology and Leprosy, PGIMER, Chandigarh - 160 012, India

kumarbhushan@hotmail.com

Accepted for publication 10 May 2001

### Rates of gonorrhoea and chlamydia in black ethnic groups

EDITOR,—In their cross sectional study of patients attending 11 clinics in London, Low *et al*<sup>1</sup> report the incidence of both gonorrhoea and chlamydial infection to be higher in black Caribbeans and black “other” ethnic groups than in black Africans. Neither the authors nor the writers of the accompanying editorial<sup>2</sup> refer to similar findings in black men attending one of the clinics contributing to their study, which we published in 1999.<sup>3</sup>

We compared black African men with black Caribbean men and found that Caribbean men were less likely to be married (odds ratio (OR) = 0.03) and to have non-regular partners (OR = 0.09) but more likely to be from blue collar (OR = 250) or white collar (OR = 25) class and to be smokers (OR = 50). Caribbeans were more likely to have daily vaginal intercourse (OR = 33), begin intercourse before 16 years of age (OR = 50), and have gonorrhoea and/or chlamydial infection (OR = 12.5).

Among Caribbean men, the risk factors for gonorrhoea were being teenaged (OR = 9.5) and commencing intercourse before 16 years of age (OR = 3.3) and for chlamydial infection having had multiple partners (OR = 10.5).

Our conclusion was that the problem should be addressed by the setting up of more ethnically acceptable clinical services before the appearance of HIV infection.

BRIAN EVANS

Department of GU Medicine, Charing Cross Hospital, London

ROBERT BOND

Imperial College School of Medicine, Charing Cross Hospital, London

KEN MacRAE

Postgraduate Medical School, University of Surrey, Guildford

Correspondence to Dr B A Evans

- 1 Low N, Sterne JAC, Barlow D. Inequalities in rates of gonorrhoea and chlamydia between black ethnic groups in south east London: cross sectional study. *Sex Transm Inf* 2001;77:15–20.
- 2 Zenilman JM, Shahmanesh M, Winter AJ. Ethnicity and STIs: more than black and white. *Sex Transm Inf* 2001;77:2–3.
- 3 Evans BA, Bond RA, MacRae KD. Sexual behaviour and sexually transmitted infection among African and Caribbean men in London. *Int J STD AIDS* 1999;10:744–8.

Accepted for publication 22 May 2001

### Human papillomavirus PCR direct sequencing study of cervical precancerous lesions in Quebec children

EDITOR.—Similarly to adult pathology, human papillomavirus (HPV) infection is the most common sexually transmitted disease in adolescent girls, whose prevalence is 16% according to one US study.<sup>1</sup> However, little or no HPV sequencing data from paediatric specimens are available. We used our two tier polymerase chain reaction (PCR) direct sequencing (PCR-DS) approach<sup>2</sup> to study cervical biopsies from 44 adolescent Quebec girls (14–17 years old). They originated from various social and ethnic groups, as well as geographically distinct areas of Quebec. Written informed consent about the use of the specimens was obtained from the ethics committee of this institution. All biopsies were analysed for histological changes and presence of HPV specific DNA. Most of them (n = 36) were diagnosed as cervical intraepithelial neoplasia (CIN), seven as inflammatory changes, and one as “nil.” Among the 36 CIN, 33 (92%) tested HPV positive, including all CIN-II and CIN-III samples.

Sixteen HPV types were detected, four of them in more than two samples: HPV6 (n = 8), HPV16 (n = 7), HPV11 (n = 3), and HPV31 (n = 3). In the group of cervical biopsies from adolescent girls with CIN (n = 36, age 14–17), as well as in the larger control

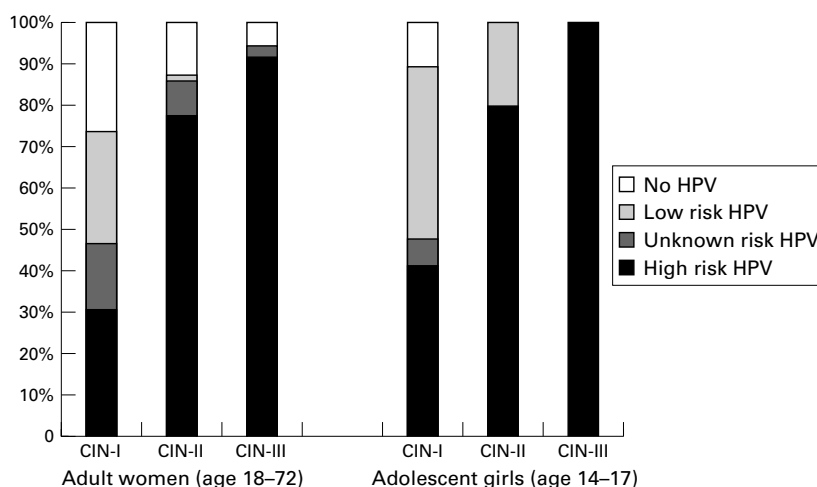


Figure 1 Relative increase of the high risk HPV types in higher grade precancerous lesions, and decrease of low risk HPV types until their full disappearance in CIN-III lesions. Data similar for both age groups—children ≤ 17 year old and adults 18 years and above. The two groups differ in the number of HPV negative cases and the HPV types of unknown cancer risk.

group of adult women (n = 487, age 18–72), the percentage of high risk HPV types increased, and the low risk HPV types decreased with the progression from low grade (CIN-I) to high grade (CIN-II and III) precancerous lesions. High risk HPV represented all but one HPV type (33/34) identified in CIN-III lesions from adult women, and all HPV types from 14–17 year old girls with CIN-III (fig 1).

The informative value of HPV testing in CIN, hence its clinical relevance, depends on whether there is an increase of the high risk HPV types in more advanced grades of precancerous lesions. The currently available data are conflicting. Some groups reported an increased frequency of high risk HPV from CIN-I to CIN-III, at the expense of the low risk HPV types,<sup>3</sup> but others insisted that the high risk HPV rates in CIN-I, CIN-II, and CIN-III were similar.<sup>4</sup> Our results indicate that the high risk HPV types are significantly increased from less than 50% in CIN-I to almost 100% in CIN-II and III, and this is valid for the adolescent and adult patients alike (fig 1). We hypothesise that the reasons for the discrepancies in the detection rate of various HPV types in CIN-I, II, and III may be due to the fact that some groups used the method of PCR with single pair of primers, MY09/11, which may be underrepresenting the most frequent low grade HPV types, up to a complete lack of detection for HPV6 and HPV11.<sup>5</sup>

This study indicates that a mass prophylactic HPV vaccine should be targeted at cohorts younger than 14–17 years, because at that age some girls already develop high grade precancerous cervical lesions with possible long term integration of the viral oncogenes in the host cell genome. We believe that a PCR direct sequencing approach to HPV testing will provide treating physicians and pathologists with precise HPV typing information, and may be used in vaccine design, application, and monitoring in children and adults.

Supported in part by the Canadian Institutes of Health Research (CIHR), grant number MOP-37874, Les Fonds de la recherche en santé du Québec (FRSQ), and La Fondation de l'Hôpital Ste-Justine (to WVY). WVY is a chercheur-boursier (scholar) of the FRSQ.

Contributors: LLO, PB, and PS performed the histological evaluation of the samples and signed the

pathological reports; JCF-F and SF studied the HPV at DNA level; WVY provided supervision and wrote the manuscript with the help of the others.

LUC L OLIGNY

JUAN CARLOS FEOLI-FONSECA

PIERRE BROCHU

PIERRE SIMARD

Département de Pathologie, Hôpital Ste-Justine, Montréal, Québec, Canada

SARAH FALCONI

Programme de Biologie Moléculaire, Faculté de Médecine, Université de Montréal, Montréal, Québec, Canada

WAGNER V YOTOV

Département de Pathologie, Hôpital Ste-Justine, Montréal, Québec, Canada; Département de Pédiatrie, Université de Montréal; Département de Biochimie, Université de Montréal, Québec, Canada  
wagner.yotov@umontreal.ca

Correspondence to: Dr Wagner Yotov, Hôpital Ste-Justine, Local 4731, 3175 Côte Ste-Catherine, Montréal, Québec H3T 1C5, Canada

yotovw@ere.umontreal.ca

- 1 Jamison JH, Kaplan DW, Hamman R, et al. Spectrum of genital human papillomavirus infection in a female adolescent population. *Sex Transm Dis* 1995;22:236–43.
- 2 Feoli-Fonseca JC, Oligny LL, Filion M, et al. A two-tier polymerase chain reaction direct sequencing method for detecting and typing human papillomaviruses in pathological specimens. *Diagn Mol Pathol* 1998;7:317–23.
- 3 Kalantari M, Karlsen F, Johansson B, et al. Human papillomavirus findings in relation to cervical intraepithelial neoplasia grade: a study on 476 Stockholm women, using PCR for detection and typing of HPV. *Hum Pathol* 1997;28:899–904.
- 4 Adam E, Berkova Z, Daxnerova Z, et al. Papillomavirus detection: demographic and behavioral characteristics influencing the identification of cervical disease. *Am J Obstet Gynecol* 2000;182:257–64.
- 5 Vernon SD, Unger ER, Williams D. Comparison of human papillomavirus detection and typing by cycle sequencing, line blotting, and hybrid capture. *J Clin Microbiol* 2000;38:651–5.

Accepted for publication 7 June 2001

### Substantial increase in gonorrhoea among homosexual men attending an STD centre in Toulouse, France

EDITOR.—A substantial increase in cases of gonorrhoea in an STD centre in Toulouse, France, was noted between October 1999 and September 2000. It was associated both with predominant transmission in a homosexual

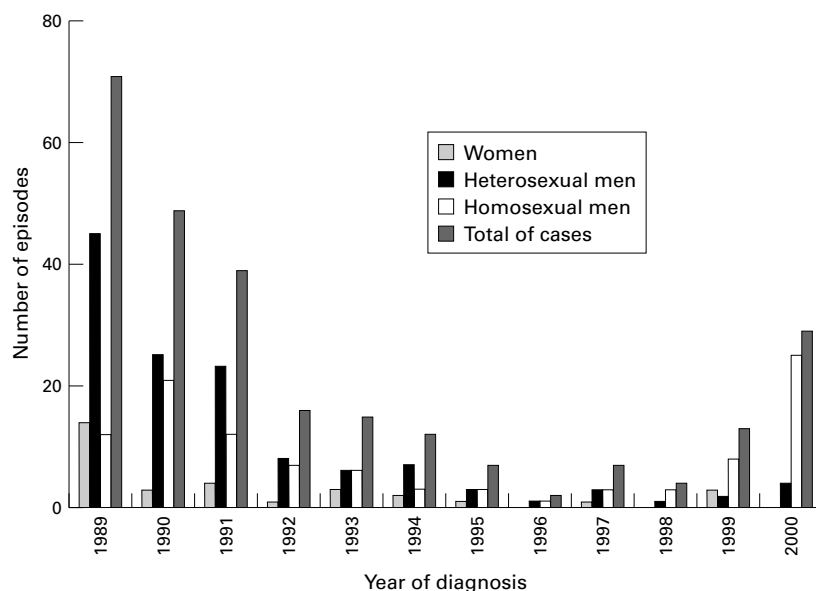


Figure 1 Cases of gonorrhoea.

population with oral sex practices and high HIV seroprevalence.

Approximately 8500 patients are seen annually at the Hospital La Grave STD centre; this number has remained stable in the last 10 years. Almost 20–25% of patients complain of STD symptoms and 5–6% of the men are defined as homosexual.

Between October 1999 and September 2000, 41 gonorrhoea episodes in 33 patients were diagnosed. Thirty (81%) cases were male; among the male population, 25 (83.3%) patients described homosexual contact. There were three cases of acute anal gonorrhoea, two of asymptomatic gonococcal pharyngitis, and 28 gonococcal typical acute urethritis giving a total of 33 episodes.

Twenty one (84%) of the 25 homosexual men described oral sex with an occasional partner without anal intercourse. Five patients were HIV seropositive, 10 were negative at the entry, 10 refused HIV testing. There was no HIV in the heterosexual population.

Between 1989 and 1996, the total number of patients with gonorrhoea attending in La Grave STD centre fell from 71 to two cases per year; in 1999 and 2000, this number was multiplied by more than 6, to rise to 31 cases in 2000.

The number of cases in the homosexual population fell between 1989 and 1993, to stay stable at three cases a year until 1998; in 2000 the rate was multiplied by 8 (fig 1).

HIV seroprevalence in patients diagnosed with gonorrhoea remained steady at 6–11% throughout 1989–94 and declined from 7% to 0% between 1995 and 1999. In 2000, this prevalence dramatically increased to rise by 33% of total cases; all were men having sex with men.

This recent rise in total cases of gonorrhoea is notable because it concerns a very limited subgroup of homosexual men with high HIV seroprevalence and it is now well established that sexually transmitted diseases facilitate HIV transmission.<sup>1</sup>

A recent increase in gonococcal infections was also noted in England and Wales, the Netherlands, and France.<sup>2,3</sup>

Our results suggest that the predominant mode of transmission is the practice of “safer sex” in a homosexual population, participating in only oral sex practices with occasional

partners. Asymptomatic pharyngeal carriage may facilitate this epidemic course.

High HIV seroprevalence in homosexual patients with gonorrhoea became a real problem during the last year of the serosurvey. All knew their serostatus, no one was found to be positive at the first visit, but 10 patients (50%) refused the HIV test.

Among seropositive men, all participated in only oral sex practices, suggesting that they thought they were having safe sex.

In New York City a longitudinal incidence study conducted in one of the STD clinics identified a history of gonorrhoea as a predictor of HIV seroconversion<sup>4</sup> and recent features suggest that oral sex is an independent risk factor of HIV transmission.<sup>5</sup>

Our study represents only a few cases in a limited cohort of patients attending an STD centre. It may not reflect the tendency in the general population but may shed light on a new epidemic mode of transmission of gonococcal disease in a core group of highly HIV positive homosexual men practising oral safe sex. More studies must be done to determine if gonococcal asymptomatic carriage in oral sex can facilitate HIV oro-genital transmission with follow up for HIV serology in seronegative patients.

N SPENATTO  
R VIRABEN

STD Center (CDMST), Hopital La Grave, Place Lange, 31052 Toulouse Cedex, France

Correspondence to: Dr Spenatto

- Cohen MS. Sexually transmitted diseases enhance HIV transmission: no longer a hypothesis. *Lancet* 1998;351 (Suppl 3):5–7.
- Hughes G, Andrews N, Catchpole MA, et al. Investigation of the increased incidence of gonorrhoea diagnosed in genitourinary medicine clinics in England, 1994–6. *Sex Transm Inf* 2000;76:18–24.
- Goulet V, Sednaoui P, Laporte A. Augmentation du nombre de gonocoques identifiés par le réseau RENAGO. BEH no 26/1999.
- Torian LV, Murill CS, Makki HA, et al. High HIV seroconversion in nonwhite bisexual men making repeat visits to a New York City sexually transmitted disease clinic 1994–1995: results of a blinded longitudinal survey. (Submitted)
- Rothenberg RB, Scarlett M, del Rio C, et al. Oral transmission of HIV. *AIDS* 1998;12: 2095–105.

Accepted for publication 26 June 2001

### Adverse reaction to antimycobacterials administered as a combination tablet with no reaction to the same drugs in isolation

EDITOR.—A 37 year old Portuguese man presented to the genitourinary (GU) medicine department with constitutional symptoms. He had a history of injecting drug use and had been identified as positive for the human immunodeficiency virus (HIV) antibody in Portugal 5 years previously. He had not been in contact with medical services for a year. Confirmatory HIV antibody testing was positive. The CD4 lymphocyte count was  $50 \times 10^3/l$  and the viral load below the limit of detection (<40–80 copies/ml). He was admitted for further investigations including a chest x ray and excision biopsy of an enlarged axillary gland. All tests were initially negative, and he improved on combivir (one tablet twice daily), nevirapine (200 mg once daily increasing to twice daily after 2 weeks), and co-trimoxazole 960 mg thrice weekly. However, the night sweats failed to fully abate and 2 months later *Mycobacterium tuberculosis*, sensitive to all four first line antimycobacterial agents, was cultured from the axillary lymph node biopsy. He was therefore commenced on “Rifitah” (combination tablet of rifampicin, isoniazid, and pyrazinamide) five tablets daily and ethambutol (after visual acuity testing) 800 mg daily. Nevirapine dosage was increased accordingly. On this treatment his condition improved and he became asymptomatic.

After 2 months antimycobacterial therapy was simplified to “Rifinah 300” a combination tablet of rifampicin and isoniazid. Other medications were continued unchanged. Four days later he developed a widespread macular, erythematous, and intensely pruritic rash. This resolved within 4 days of stopping Rifinah. Rifampicin 600 mg once daily and isoniazid 300 mg once daily were sequentially reintroduced uneventfully.

The sequence of events indicates that the patient suffered an adverse drug reaction (ADR) to a constituent in the Rifinah tablets not present in the Rifitah, rifampicin, or isoniazid tablets. The manufacturers of Rifinah were consulted and to our knowledge such a reaction has not been described before. The Committee on Safety of Medicines was informed via the grey card system.

Co-infection with HIV and *Mycobacterium tuberculosis* is a problem increasingly encountered by physicians caring for individuals with HIV. A recent study in London found that 24.8% of patients commencing antituberculous chemotherapy were also HIV antibody positive.<sup>1</sup> HIV positive individuals are known to be at increased risk of adverse drug reactions, particularly those with advanced immunosuppression. One study documented a frequency of adverse drug reactions of 32% in HIV positive patients receiving drug therapies.<sup>2</sup>

Physicians should remain alert to the possibility of ADRs and warn HIV positive patients of their increased risk, even when such a reaction would not have been anticipated, as in this case.

No conflict of interest to declare.

MARGARET KINGSTON  
KATE CHILDS  
ELIZABETH CARLIN

Department of Genitourinary Medicine,  
Nottingham City Hospital, Hucknall Road,  
Nottingham NG5 1PB, UK

Correspondence to: Dr Kingston



- 1 Marshall BG, Mitchell DM, Shaw RJ, *et al.* HIV and tuberculosis co-infection in an inner London hospital—a prospective anonymized seroprevalence study. *J Infect* 1999;38:162–6.
- 2 Gonzalez-Martin G, Yanez CG, Gonzalez-Contreras L, *et al.* Adverse drug reactions in patients with HIV infection. A prospective study. *Int J Clin Pharmacol Ther* 1999;37:34–40.

Accepted for publication 26 June 2001

### Increasing HIV prevalence in STD clinic attendees in Delhi, India: 6 year (1995–2000) hospital based study results

EDITOR.—The association between the occurrence of HIV infection and the presence of other STDs has been strongly established. STDs act as important co-factors that promote HIV transmission. The trend of HIV infection in STD clinic attendees, one of the high risk groups, may reflect the trends of HIV epidemic in the community. To estimate the frequency of HIV infection among various STD patients over a period of 6 years from January 1995 to December 2000 and to observe the interrelation between HIV infection and different other STDs, we analysed the HIV status of 1504 STD clinic attendees (M:F ratio 1:0.1, average age of 25.2 years) in Dr RML Hospital, a centrally located major tertiary care centre in Delhi. The breakdown in the number of STD attendees tested for HIV voluntarily out of total STD attendees was as follows: 180 out of 407 (44%) in 1995, 261 out of 513 (51%) in 1996, 245 out of 414 (59%), in 1997, 280 out of 363 (77%) in 1998, 235 out of 368 (63%) in 1999, and 296 out of 442 (67%) in 2000. This variation of percentage from year to year is due to the voluntary nature of testing. HIV testing was done with one of the ELISA/rapid/simple tests. Any reactive serum sample was retested using a different assay. A sample that was positive in both the tests was considered HIV positive. The other STDs were diagnosed clinically and using appropriate laboratory tests.

Out of 1504 STD patients screened for HIV infection, 42 (2.8%) were found to be seropositive (40 males out of 1354 and two females out of 150). Annual breakdown revealed a slow but gradual increase in HIV prevalence (1.7% in 1995, 2.2% in 1996, 2.1% in 1997, 2.5% in 1998, 2.7% in 1999, and 3.4% in 2000). The cumulative prevalence of HIV seropositivity in different STDs is shown in table 1.

HIV positivity was observed in 4.5% patients with GUDs, in contrast with only 1.7% HIV positivity among non-ulcerative

STD patients, which is statistically significant ( $p > 0.002$ ). All but one male HIV positive patients gave a history of sexual contact with at least one commercial sexual worker. Out of two HIV positive women, one possibly was infected by her husband and the other from her regular sexual partner; both were not pregnant at the time of HIV testing. Five (19%) HIV seropositive patients had more than one STD.

HIV sentinel surveillance in India shows the HIV epidemic at different stages of evolution in different states of India.<sup>1</sup> Six out of 32 states have HIV prevalence of more than 1% in antenatal clinics (ANC) and are classified as high prevalence states including Maharashtra and Tamil Nadu. In seven other states the ANC rates are less than 1% but prevalence among STD clinic attendees is more than 5% classified as moderate prevalence. The remaining 19 states including Delhi are low prevalence states because HIV prevalence among STD attendees is less than 5%.<sup>1, 2</sup> The HIV sentinel surveillance data of Delhi show 1.6% and 3.2% HIV infection in 1998 and 2000, respectively, among STD attendees from four other major STD clinics in Delhi, where anonymous HIV testing was done from VDRL blood samples.<sup>3</sup> These data as well as ours are comparable and support the belief that Delhi is still in a low level epidemic category.

From the experience of the Mwanza trial in Tanzania and the Rakai trial in Uganda, it is speculated that the effect of STD control on HIV transmission may decrease with the maturation of the HIV epidemic.<sup>4</sup> Therefore, it is high time to extend vigorous intervention programmes in all high risk groups as well as the general population of this city which is still in the early epidemic phase to ensure this cost effective opportunity is not missed.

H K KAR  
R K JAIN  
P K SHARMA  
R K GAUTAM  
A K GUPTA  
S K SHARMA  
CHARU HANS  
VEENA DODA

Department of Dermatology, STD,  
Microbiology and Blood Bank, Dr RML Hospital,  
New Delhi - 110001, India

Correspondence to: Dr H K Kar, DII/A-71, South  
Moti Bagh, New Delhi - 110021, India  
hkkr\_2000@yahoo.com

- 1 Saikat M. *HIV sentinel surveillance in India*. XIII International AIDS Conference, Durban, July 2000. Abstract No Mo Pe C 2416.

Table 1 Frequency of HIV seropositivity in different sexually transmitted diseases

Type of STDs	No of patients having same STD	No of patients found HIV seropositive	Seropositivity rate (%)
<b>Group I, ulcerated STDs</b>			
Syphilis	222	10	4.5
Chancroid	200	10	5.0
Genital herpes	162	7	4.3
Donovanosis	4	0	0
Lymphogranuloma venereum	17	0	0
All ulcerative STDs	605*	27	4.5
<b>Group II, non-ulcerative STDs</b>			
Non-gonococcal urethritis	102	2	2
Condylomata acuminata	291	7	2.4
Gonococcal urethritis	191	3	1.6
Vaginosis	77	1	0.5
Balanoposthitis	226	2	0.9
All non-ulcerative STDs	899*	15	1.7
All STDs	1504*	42	2.8

\*The discrepancy in total number of patients in both groups is due to the presence of more than one STD in some patients.

- 2 *Country scenario 1997–98*. Delhi: National AIDS Control Organisation. Ministry of Health and Family Welfare, Government of India, 1998.
- 3 *HIV surveillance data, 2000–2001*. Delhi: National AIDS Control Organisation, Ministry of Health and Family Welfare, Government of India, 2001 (unpublished data).
- 4 Grosskurth H, Gray R, Hayes R, *et al.* Control of sexually transmitted diseases for HIV-1 prevention: understanding the implications of the Mwanza and Rakai trials. *Lancet* 2000;355:1981–7.

Accepted for publication 20 July 2001

### Genital piercing and sexually transmitted infections

EDITOR.—An interesting observation was noted about patients with genital piercing in our clinic. We looked at 12 case notes of patients retrospectively who attended our clinic for sexual health screening in the past 12 months. There were seven males and five females in the age group 22–36. Looking at the results of their screening tests for STIs, none of the males had chlamydia. Interestingly, four out of six female contacts of these males, who also attended for screening, were found to be positive for chlamydia detected by enzyme immunoassay (EIA). None had gonorrhoea. It was also noted that none of these female contacts had their genitals pierced. Of the five females who had their genitals pierced, three had chlamydia, one had genital warts, and one was found to have bacterial vaginosis. Their corresponding male contacts again with no genital piercing also had chlamydia and genital warts. Two other contacts did not attend but were said to be asymptomatic. The method of genital piercing in males was with the so called Prince Albert ring (famously worn by Prince Albert) where the metal ring is inserted through the external urethra and glans penis (fig 1). In the females, however the urethra is not involved and the piercing is mostly through the clitoris or vulva. We wondered whether this involvement of the urethra in males was significant. It appeared that there was a protective effect in males despite having chlamydia positive female sexual partners. Possible mechanisms could be slow release of metal ions having an antibacterial effect, the presence of epithelial metaplasia or a chronic inflammatory process contributing to a local immune response. We do acknowledge that this is a very small cohort and these findings may be by chance or can be explained by the low sensitivity of EIA.

Genital piercing is becoming more fashionable in the Western world and is performed to enhance sexual pleasure and also for cosmetic effect. It was traditionally practised in the tribal population of India and Africa, mostly for ritual and cultural reasons. Metal or ivory studs or rings or bars are commonly used. The metals can be made of steel or various other alloys containing iron, copper, zinc, and



Figure 1 A Prince Albert ring inserted through the external urethra and glans penis.

even gold or silver. Currently, there are very few data in the literature about STIs and genital piercing but it has been postulated that there can be an increase in the risk of transmission of blood borne viruses as well as other STIs because of damage to condoms caused by these objects. A recent study<sup>1</sup> also did not find any association between body piercing and genital infections in general; however, we wondered whether genital piercing should be included in the KC 60 data collection. We would welcome observations from the readers of *STI* on this subject.

RAVINDRA GOKHALE  
MARY HERNON  
AJIT GHOSH

Department of Genitourinary Medicine, Arrove Park  
Hospital, Wirral CH49 5PE, UK

Correspondence to: Dr Gokhale  
ravindragokhale@yahoo.com

1 Willmott FE. Body piercing: lifestyle indicator or fashion accessory? *Int J STD AIDS* 2001;12:358-60.

Accepted for publication 20 July 2001

### Safer sex in HIV infected patients in London: practices and risks

EDITOR.—Recent figures from the Public Health Laboratory Service (PHLS) report<sup>1</sup> have shown the largest number ever of new cases of HIV infection (2868 cases) during 2000 in the United Kingdom. The majority of HIV infected individuals attending clinics for their treatment and care will have been counselled and strongly advised to practise safer sex. Specific risks of unsafe sex will be summarised, including the risk of transmission of HIV to their partners, as well as their own risk of acquiring new sexually transmitted infections, and the spectre of multidrug resistant HIV variants.

The overall effect of such safer sex messages were called into question by Dodds *et al*<sup>2</sup> who recently reported evidence of an increasing incidence of high risk sexual behaviour among homosexual men in London. The accompanying editorial by Grulich<sup>3</sup> called for improved data on risk behaviours, specifically in HIV infected individuals. We can present data on this from a questionnaire survey of patients attending the largest HIV outpatient centre in London.

The questionnaire was distributed to 500 consecutive individuals attending the Kobler HIV outpatient clinic at the Chelsea and Westminster Hospital during spring 2000. The confidential questionnaire could be completed anonymously if the patient wished. Data were gathered concerning the individuals' sexual behaviour over the past year in terms of number of sexual partners and episodes of unprotected sex. Further data were collected on whether individuals had sexually transmitted infections (STIs) diagnosed in the past year and/or attended for sexual health screening (table 1). We also asked them how they had acquired HIV infection.

A total of 494 legible questionnaires were suitable for analysis. Anonymous questionnaires were received from 240 respondents, whereas 254 (50.8%) disclosed their identity, and 35 (7%) were female. Although 317 patients (64%) reported engaging in only protected sex in the previous 12 months, 173 (35%) individuals had unprotected penetrative sex in the past year. This figure for HIV infected individuals has a remarkable concordance with the data for unprotected

intercourse in a sample of homosexual men which reported a prevalence of 38%.<sup>2</sup> On further analysis of this group, it was revealed that a substantially higher proportion, 93 (54%), had unprotected sex with more than five partners, of which 40% had more than 10 sexual partners in the past 12 months.

Only 252 patients had a sexual health check up in the past year. There was a significant association between having a check up and reporting having unprotected sex. However, of those who had unprotected penetrative sex in the past year, 67 (39%) did not have a sexual health screen. A sexually transmitted infection had been diagnosed in 41% of respondents in the past year, which was significantly<sup>4</sup> associated with their increasing numbers of sexual partners.

We believe that major efforts to encourage sexual health check ups must be targeted to the key population of HIV infected individuals. The majority (76.2%) of our patients who had a sexual health check up in the last year, did so at the GU medicine clinic in the same building, contrary to the popular belief that HIV patients do not use local services for sexual health check ups.

Oral sex causing HIV transmission is biologically plausible though it is considered a less risky activity compared with unprotected vaginal and anal intercourse<sup>5</sup>. However, the frequency of its occurrence may serve to increase its relative contribution to overall HIV transmission. Inflammation or ulceration of the oral mucosa due to mouth ulcers, gingivitis, periodontal disease, pharyngitis, bleeding gums after tooth brushing or flossing could potentially lead to the increased risk of HIV transmission.

Six per cent of our studied population believed they acquired HIV infection through unprotected oral intercourse only. On reviewing the notes of the identifiable patients we concluded that five out of these 15 patients had no other risk factor other than unprotected oral sex recorded at any time during their counselling or management records, which can account for their HIV transmission. The remaining 10 patients' notes did not have enough evidence to support their claim that they acquired HIV disease through oral sex only. Three out of five of these patients had never engaged in anal sex and the remaining two always used protection.

Following this observation we have further identified six patients who have probably acquired HIV through unprotected oral sex, and we can summarise data from all 11 patients. They were all homosexual men. Eight out of 11 never practised anal sex and the remaining three always used protection. Five of them were living with long term HIV positive partners and were fully aware of

Table 1 Reported incidence of sexually transmitted infections (STI) over past year by respondents

STI	Diagnosed with an STI in the past 12 months (n = 102)
Gonorrhoea	36 (35.3)
Chlamydia/NSU	22 (21.6)
Syphilis	4 (3.9)
Herpes (first episode)	20 (19.6)
Warts (first episode)	29 (28.4)
Others	13 (12.7)
Combination of STIs	22 (21.6)
Gonorrhoea + chlamydia/NSU	8 (3.8)

safer sex issues. However, all of the five considered unprotected oral sex as a safer activity. Six out of 11 were reported to have recurrent infections of the mouth; two had pharyngeal gonorrhoea, one had herpes simplex stomatitis, two had idiopathic ulcerative stomatitis, and the remaining one had his tongue pierced 10 weeks before his seroconversion. Although oral sex is a lower risk activity for HIV transmission, in compromising situations where the mucosal barrier of the mouth is not intact, it can play a larger part in HIV transmission and can possibly be the sole cause of transmission.

Despite the recent EAGA report,<sup>6</sup> while such uncertainties about the contribution of oral sex to new HIV transmission exist, the delivery of clear safer sex messages to this and other groups will remain difficult to implement.

Our department is now developing a fast track service to enable HIV infected individuals to more easily combine sexual health screening with their HIV outpatient appointment. Efforts by both statutory services and advocacy and support organisations for HIV infected people need to be coordinated to promote these initiatives.

WAHEED A KHAN  
CELIA RICHARDSON  
SUNDHIYA MANDALIA  
SIMON E BARTON

Department of HIV/GUM Medicine, Chelsea and Westminster Hospital, London

- 1 CDSC. AIDS and HIV infection in the United Kingdom: monthly report. *Commun Dis Rep CDR Wkly* 15 February, 2001
- 2 Dodds JP, Nardone A, Mercey DE, *et al*. Increase in high-risk sexual behaviour among homosexual men, London 1996-8: cross sectional, questionnaire study. *BMJ* 2000;320:1510-1.
- 3 Grulich A. HIV risk behaviour in gay men: on the rise? *BMJ* 2000;320:1487-8.
- 4 Cohen MS. Sexually transmitted diseases enhance HIV transmission: no longer a hypothesis. *Lancet* 1998;351 (suppl III):5-7.
- 5 Dillon B, Hecht M, Swanson M, *et al*. Primary HIV infection associated with oral transmission (The options project UCSF). Poster presentation San Francisco January 2000, Seventh conference on retroviruses and opportunistic infection.
- 6 Department of Health. *Review of the evidence on risk of HIV transmission associated with Oral Sex*. June 2000. Report of a Working Group of the UK Chief Medical Officers' Expert Advisory Group on AIDS. London: DoH.

Accepted for publication 17 August 2001

## BOOK REVIEWS

**Sexually Transmitted Diseases, Vaccines, Prevention and Control.** Ed Stanberry LR, Bernstein DI. Pp 457; \$119.95. New York: Academic Press, 2000. ISBN 0-12-663330-4.

It has become increasingly clear that STIs cannot be controlled simply by diagnosis and treatment of the relevant pathogens alone. This new volume on STI prevention is especially relevant as we struggle to provide access for those already infected with sexually transmitted organisms. My first thought when I looked at this book was influenced by the cover illustration of a herpes simplex virion. It looked like another worthy tome



about vaccine laboratory development spiced up with some phase I and II trial data. However, I am willing to admit that I have been pleasantly surprised by the clinical relevance of much of the book's contents, and that my initial prejudice was unjustified.

The book consists of 18 chapters written by key authors from around the world, such as Lawrence Stanberry, Jonathan Zemilman, and Adrian Mindel who will be well known to readers of this journal. The chapters are divided into three sections dealing with epidemiology, physiology and immunology; non-specific strategies for control (such as behavioural interventions and barrier methods); and pathogens and vaccines. This final section makes up the meat of the book and comprises 11 chapters, which each provide an expert review on vaccine development for specific pathogens including herpes, HPV, hepatitis B, and chlamydia, as well as on gonorrhoea, syphilis and, of course, HIV. While it is inevitable that any book on this rapidly evolving subject will run the risk of becoming out of date, each author has attempted to ensure that relevant previous vaccine strategies and lessons learnt have been included. I felt this was particularly helpful as I believe that the book will be a valuable single reference source, even when the reviews of current vaccine development pass their "sell-by" date. For me, this is the justification in buying this book rather than saving a collection of journal articles.

Highlights from the first two sections of the book included the chapter on vaginal microbicides which incorporated the International Working Group recommendations on development as part of an appendix. The first chapter on global epidemiology of STIs was particularly well written and referenced and includes a concise section on the HIV epidemic. I did however wonder why HHV-8/KSHV was omitted from such a comprehensive review. In a later chapter, I found the 13 or so pages on genital anatomy poorly illustrated and dispensable. I feel that the chapter on the Russian experience and the factors which led to the massive outbreak of syphilis should be compulsory reading for every sexual health clinician and public health specialist. It is too easy to ignore lessons from the past and from other settings.

Stanberry and Bernstein's multi-author volume provides a timely antidote to those important, but often dry, editions which are divorced from the realities of routine clinical practice. I feel able to recommend this book to the many of us who have endured tedious presentations and never quite got round to actually reading those articles on STI prevention and control which are gathering dust on desks, or worse still put away into filing cabinets "for later reference." And one final plea to the publishers—could they find something a little more human to replace the cover electron micrograph? The whole point of this book is to review ways of ensuring that sexually transmitted pathogens do not gain the upper hand over their human hosts.

RAK NANDWANI

*Clinical Director, Genitourinary Medicine Services,  
The Sandyford Initiative, 6 Sandyford Place,  
Glasgow G3 7NB*

**Clinical Risk Management.** 2nd ed. Ed Charles Vincent. Pp 583; £47.50. London: BMJ Books, 2001. ISBN 0727913921.

It is a fact of life that people make mistakes. In the NHS the cost of human error runs into billions of pounds a year through lost bed days and the consequences of serious litigation. More importantly, errors distress and harm patients, undermining their confidence in the organisation and their doctors.

The natural approach to discovering any error is to apportion blame, with its associations of moral weakness. But error management that focuses on any one individual's lapses and mistakes will not reduce the incidence of error. In the short term a scapegoat may be convenient, but measures to reduce mistakes need to aim at redesigning systems so that they are acknowledged, detected, intercepted, and mitigated.

Highly reliable organisations, such as nuclear power plants and airlines, have a less than the expected number of accidents because they recognise human frailty. Errors are seen as consequences rather than causes. These organisations concentrate on the conditions under which individuals work and try to build defences averting errors before they happen or reducing their effects. Their motto has to be "Safety is everyone's responsibility."

The focus of any organisation exposed to risk, including the NHS, therefore, needs to be on the constant possibility of failure and how to prevent it. The second edition of *Clinical Risk Management*, edited by Charles Vincent, addresses in detail this problem. It covers the evolution of risk management, its expansion beyond its roots in litigation, and the benefits reaped from the study of safety in high risk organisations. His aim is to highlight the need for clinical risk management to focus on patient safety and quality of care, and not on simplistic prevention of litigation. It is a practical book full of illustrations of how errors arise, risk, and the good and bad management of their consequences.

The book is divided into four parts. The first, on the principles of risk management, contains a particularly revealing chapter by James Reason, "Understanding adverse events: the human factor." It opens the theme around which the book is constructed, the interrelation between the individual and the organisation. In the second part, "Reducing risks in clinical practice," the authors discuss and illustrate the circumstances which lead to errors and accidents that are inherent in specific "high risk" specialties, such as obstetrics and anaesthetics. Part III, "Conditions of safe practice," discusses the relationship between patient and staff, organisation and environment—for example, in work overload, fatigue, and training. Part IV, "The implementation of risk management" describes the importance of "no blame" culture of reporting incidents, investigating and analysing errors, and of the manner in which adverse events are handled. Included in the chapter are two aspects of error management often overlooked—continuing patient care and support of the staff involved.

This is an important, well written, readable book which all involved in clinical care should keep on their desks, not on the bookshelf.

FIONA DAVIDSON

*Department of Genitourinary Medicine, St George's Hospital, London SW17 0QT*

## NOTICES

### International Herpes Alliance and International Herpes Management Forum

The International Herpes Alliance has introduced a website ([www.herpesalliance.org](http://www.herpesalliance.org)) from which can be downloaded patient information leaflets. Its sister organisation the International Herpes Management Forum (website: [www.IHMF.org](http://www.IHMF.org)) has launched new guidelines on the management of herpesvirus infections in pregnancy at the 9th International Congress on Infectious Disease (ICID) in Buenos Aires.

### Pan-American Health Organization, regional office of the World Health Organization

A catalogue of publications is available online ([www.paho.org](http://www.paho.org)). The monthly journal of PAHO, the Pan American Journal of Public Health, is also available (subscriptions: [pubsvc@tsp.sheridan.com](mailto:pubsvc@tsp.sheridan.com)).

### 6th Seminar of the European Society of Contraception, "Why are teenagers still getting pregnant?", University of Coimbra, Coimbra, Portugal, 8-9 October 2001

Further details: ESC Central Office, Orgamed, Essenestraat 77, B-1740 Ternat, Belgium (tel: +32 2 582 08 52; fax: +32 2 582 55 15; email: [orgamed@village.uunet.be](mailto:orgamed@village.uunet.be)).

### The Theory of Obstetric Medicine for obstetricians, physicians, and GPs, the Royal College of Physicians, Regents Park, London, 9-11 October 2001

Further details: The Symposium Office, Division of Paediatrics, Obstetrics and Gynaecology, IRDB, Imperial College School of Medicine, Hammersmith Campus, Du Cane Road, London W12 0NN (tel: + 44 (0)20 7594 2150; fax: + 44 (0)20 7594 2155; email: [sympreg@ic.ac.uk](mailto:sympreg@ic.ac.uk)).

### MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 1, Epidemiology of STIs and Bacterial Infections, 22-25 October 2001

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

### MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 4, Sexual Health and Sexuality, 26 October 2001

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

### 10th Congress of the European Society for Gynaecological Endoscopy, Lisbon, Portugal, 22-24 November 2001

Further details: Susana Afonso, R Dr Antonio Loureiro Borges, 2 Arquiparque - Miraflores, 1495-131 Algés, Portugal (tel: +351 21 4128 203; fax: +351 21 4120 111; email: [martincm@wai.wyeth.com](mailto:martincm@wai.wyeth.com); congress website: [www.esge-congress-lisbon.com](http://www.esge-congress-lisbon.com)).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 2, Viral Infections other than HIV, 26–27 November 2001**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 3, HIV Infections, 28–30 November 2001**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**41st St Andrew's Day Festival Symposium on Therapeutics, 6–7 December 2001, Royal College of Physicians of Edinburgh**

Further details: Ms Eileen Strawn, Symposium Co-ordinator (tel: 0131 225 7324; fax: 0131 220 4393; email: e.strawn@rcpe.ac.uk; website: www.rcpe.ac.uk).

**International Conference on HIV/AIDS 16–19 December 2001, Mumbai, India**

Further details: Dr Chander P Puri, President, Indian Society for Study of Reproduction and Fertility, Institute for Reserach in Reproduction, Jehangir Merwanji Street, Parel, Mumbai 400012, India (Tel: 4137730 (Direct), 4132111-2-6-7; fax: 091-022-4964853 or 091-022-4139412; email: vichin@bom4.vsnl.net.in OR dirirr@vsnl.com).

**Second International Conference on Sexual Health, to be held in Bangkok, Thailand on 23–28 February 2002**

Further details: European Secretariat, Dr Richard Burack (tel: +44 (0) 20 8599 8029; email: siamcare@aol.com).

**7th Congress of the European Society of Contraception, "Changing attitudes to contraception and reproductive health," Genoa, Italy, 10–13 April 2002**

Further details: ESC Central Office, Orgamed, Essenestraat 77, B-1740 Ternat, Belgium (tel: +32 2 582 08 52; fax: +32 2 582 55 15; email: orgamed@village.uunet.be).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 1, Epidemiology of STIs and Bacterial Infections, 22–25 April 2002**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 2, Sexual Health and Sexuality, 26 April 2002**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 3, Viral Infections other than HIV, 20–21 May 2002**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**MSSVD course in STIs and HIV, at the Institute for Materials, 1 Carlton House Terrace, London, Module 4, HIV Infections, 22–24 May 2002**

Further details: Sue Bird, MSSVD STIs and HIV Course Secretariat, PO Box 77, East Horsley, KT24 5YP (tel: 01372 454210).

**10th International Symposium on Human Chlamydial Infection, 16–21 June 2002, in Antalya, Turkey**

The scientific programme will encompass the breadth of chlamydial research from clinical and epidemiological studies to molecular and cell biology of all species of *Chlamydia*. Further details: Professor A Demir Serter, Department of Clinical Microbiology and Infectious Diseases, Ege University, Faculty of Medicine, 35100 Bornova, Izmir, Turkey (Fax: 90 232 343 71 30; e-mail: ISHCIX@itsa.ucsf.edu).

**10th International Congress on Behçet's Disease, Berlin 27–29 June 2002**

Further details: Professor Ch Zouboulis (email: zoubbere@zedat.fu-berlin.de).

**20th World Congress of Dermatology, Paris, 1–5 July 2002**

Further details: P Fournier, Colloquium, 12 rue de la Croix St Faubin, 75011 Paris, France (tel: +33 1 44 64 15 15; fax: +33 1 44 64 15 16; email: p.fournier@colloquium.fr; website: www.derm-wcd-2002.com).

Want to extend your search?

**Cross journal searching**

If you can't find what you are looking for in *Sexually Transmitted Infections* you can extend your search across many of the more than 200 journals available for selection. You can restrict your search to specific subject areas (eg, clinical medicine, basic research), or select specific journals, or search all available titles.

**www.sextransinf.com**