

## S15.2 SOCIAL NETWORKING AND DIFFUSION OF RISKS AND INTERVENTIONS AMONG YOUTH

doi:10.1136/sextrans-2013-051184.0071

S D Young. University of California, Los Angeles, Los Angeles, CA, United States

Use of online social networking technologies has been growing rapidly, especially among groups at risk for sexually transmitted infections (STIs), such as men who have sex with men (MSM), homeless youth, and African American and Latino populations. International studies are beginning to suggest a number of important relationships between social networking technologies, at-risk populations, and risk for sexually transmitted infections: (1) At-risk populations are using social networking technologies to meet sexual partners, (2) Although at-risk populations who use social networking technologies are engaging in high rates of sexual intercourse, they are engaging in prevention behaviours that might mitigate their risk, and (3) Social networking technologies can be used as platforms for scaling and diffusing STI prevention and testing interventions. Online social networks are tools that can be used to rapidly spread information and social norms. These same technologies that can be used to potentially spread STI transmission must also be implemented as tools for preventing transmission. Recent research is discussed.

## S15.3 MODIFICATION OF SEXUAL NETWORKS AND SEXUAL RISK FOR MEN HAVING SEX WITH MEN (MSM) BY THE INTERNET

doi:10.1136/sextrans-2013-051184.0072

<sup>1</sup>U Marcus, <sup>2</sup>A J Schmidt. <sup>1</sup>Robert Koch-Institut, Berlin, Germany; <sup>2</sup>Sigma Research, Department of Social & Environmental Health Research, London School of Hygiene and Tropical Medicine, London, UK

The Internet provides new opportunities for sexual minorities to communicate and interact. Access to internet may facilitate coming-out for young MSM, sexual identity formation, and community building. On the other side the internet partly substitutes social and sexual venues where MSM congregate. Population and individual level aspects of internet communication among MSM were analysed based on data collected in the European MSM Internet Survey (EMIS).

EMIS was a large collaborative project of public health, academia and community based organisations from 35 European countries. The survey was online from June through August 2010, advertised on a large range of MSM websites. The questionnaire anonymously collected data from MSM across Europe. Among others, detailed information on the last sexual intercourse with a non-steady partner was collected.

The analysis is based on 174,209 eligible respondents. Participation rates in 38 countries with more than 100 respondents varied considerably (0.3 – 6.8/10,000 inhabitants) and correlated with internet access. A comparison of self-reported new diagnoses of HIV and national surveillance data suggests different relative sizes of MSM populations in different countries. Among men reporting a non-steady sex partner in the last 12 months, 58% had met this partner on the internet. Compared with partners met in venues, serostatus communication with internet partners was more frequent, respondents more often already had sex with their internet partners before, and partners were more often presumed HIV seroconcordant. Contrastingly, refraining from anal sex was less often an option for partners met on the internet.

Improved access to internet may increase the relative size of MSM populations by involving a larger number of individuals into sexual networks. With broadening access to internet risk reducing aspects like increased communication before sexual encounters become more pronounced. Promoting protective and preventive behaviours can counter adverse effects of the internet on the HIV epidemic.

## S.16 - Challenging clinical conditions

### S16.1 RECURRENT AND PERSISTENT URETHRITIS IN MEN - A STRUCTURED EVIDENCE BASED APPROACH TO MANAGEMENT

doi:10.1136/sextrans-2013-051184.0073

P Horner. University of Bristol, Bristol, UK

This occurs in 10–20% of men treated for acute NGU. Its aetiology is multifactorial, an infectious agent being identified in < 50% cases. *Mycoplasma genitalium* has been identified in 20–40% and *Chlamydia trachomatis* in up to 20%. *Ureaplasma urealyticum* may also play a role. *Trichomonas vaginalis* is identified in up to 10% in populations where it is endemic.

Until recently azithromycin 1grm and doxycycline 100 mgs bd 7days were considered equally effective in treating men with acute NGU. However this is not the case. The microbiological failure rate of azithromycin 1 grm is 13 – 30% for *M. genitalium* and associated with 23S rRNA gene macrolide antimicrobial resistance mutations, which it can induce. This has also been demonstrated to occur women. A prolonged course of azithromycin for 5 days appears to be effective but not always, possibly because of prior macrolide resistance. Up to 20% of men with Chlamydia will also fail azithromycin 1grm but do not develop antimicrobial resistance mutations. Doxycycline 100 mgs bd 7 days has a failure rate > 50% with *M. genitalium* but probably < 5% with Chlamydia. It does not induce antimicrobial resistance mutations. Ofloxacin is probably effective against Chlamydia but has a high failure rate (~50%) against *M. genitalium* and may result in quinolone antimicrobial resistance mutations. Moxifloxacin is effective against both micro-organisms.

Any treatment of recurrent/persistent NGU should cover *M. genitalium* and *T. vaginalis*. As there is a significant risk of macrolide and quinolone resistance developing in *M. genitalium*, an infection for which there is no commercial test, the most sensible strategy would be to use doxycycline 100mgs bd 7dys as first line treatment and when using azithromycin to restrict prescribing to a five day course for both index cases and partners. The use of quinolones should be limited to moxifloxacin in those who fail azithromycin 5dys treatment.

### S16.2 RECURRENT BV

doi:10.1136/sextrans-2013-051184.0074

J Marrazzo. University of Washington, Seattle, WA, United States

Bacterial vaginosis (BV) is a common cause of vaginitis and increases women's risk of pelvic inflammatory disease, adverse pregnancy outcomes, and risk of STD/HIV acquisition. The aetiology of BV is unclear, though it is believed to involve loss of vaginal hydrogen peroxide-producing lactobacilli and acquisition of complex bacterial communities that include many fastidious BV-associated bacteria (BVAB) that have recently been detected using PCR methods. Treatment failure (persistence) is common, and may be facilitated by unprotected sex. Potential contributions to BV and BV persistence include (1) sexual partners as a reservoir for BVAB; (2) specific sexual practises, including male partners' condom use; and (3) the composition of the vaginal microbiota involved in BV. Specific BVAB in the Clostridiales Order may predict BV persistence when detected pre-treatment, and have been detected in men whose female partners have BV. BVAB may be associated with unprotected sexual behaviour and failure of BV to resolve in women, supporting the hypothesis that BVAB colonisation of male genitalia may serve as a reservoir for re-infection of female partners. Moreover, specific sexual practises may favour vaginal colonisation with certain BVAB that have been associated with persistence. This session will provide background on BV, and discuss the epidemiologic and microbiologic