Abstracts from the Australasian Sexual Health Conference 2007 – 8–10
October 2007, Gold Coast, Australia

1. GOLLOW LECTURE: SEX AND CANCER
R. W. Jones
Department of Preventive and Social Medicine, Otago Medical School, New Zealand.

The evolution of our understanding of cervical cancer as a sexually transmitted disease will be presented. Professor Jones will also acknowledge the contributions made by several Australians in this field.

2. VAGINISMUS, VULVODYNIA AND PELVIC FLOOR MUSCLE ACTIVITY
R. Sapsford
Mater Public Hospital, Australia.

The pelvic floor muscles form the base of the abdominal cylinder and work in synergy with other muscles around the cylinder – the abdominal muscles and the diaphragm. Activity in each muscle group affects the others. Coordinated recruitment of these muscle groups is necessary for generation and maintenance of intra-abdominal pressure, postural support of the trunk, and during functional tasks such as lifting, coughing and nose blowing. Coordinated release of these groups is required for micturition, while defaecation may need activity in some muscles and release in others. Vaginismus and vulvodynia both have a component of over activity of the pelvic floor muscles which impairs normal function, though this over activity may only occur at the time of attempted penetration. Some of the physiological factors that contribute to this overactivity come from outside the pelvic floor muscle complex itself and can be ameliorated by understanding and management of these muscle synergies. An EMG study of muscle activity of the abdominal and pelvic floor muscles during a simulated body posture for female sexual arousal will help to explain how the pelvic floor muscle over activity in vaginismus arises. Treatment programmes that have been used to successfully address these problems will be explained.

3. NON CONSUMMATION
L. Dennerstein
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This presentation will examine the relationship between women’s acceptance of their own anatomy and the clinical condition of non consummation of relationship. The lecturer will utilise case examples from 35 years of clinical experience in treating sexual dysfunction to describe women’s feelings about their own bodies, those of their partner and the sexual act. The resultant vaginismus, apareunia and dyspareunia are well known but the aversive aspects also need to be addressed.

4. UNDERSTANDING VENUS: EXPLORING FEMALE DESIRE
P. Weerakoon
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The female sexual response is highly variable and multifaceted and is a result of interplay of physiological, psychological and interpersonal factors. The advent of technology and non-invasive functional brain imaging has provided a map of the regions of the brain involved in sexual arousal and the neurochemistry that underlies the process. However, this increase in the understanding of the biological basis of female sexuality has only reinforced the role of interpersonal and cultural factor in the sexual response, specially the genesis of sexual desire. An acceptance of this by professionals, has led to the consensus for a more holistic biopsychosocial approach for the management of female sexual concerns.

The presentation will discuss the current research on the neural and hormonal basis for female desire and explore the role of sexual desire as a motivator and a force for sexual activity in the context of the prevailing models of the female sexual response.

There is a need for the recognition of the place and value of sexual desire in the female sexual response and an appreciation that whereas there is a biological ‘drive’, this is tempered by the motivational aspect (individual and relationship psychology) and the cultural and moral overlay of values and attitudes. This will in turn provide the milieu for understanding normal and dysfunctional sexual desire and assist us on the road to discovering a best practice model for the diagnosis and management of ‘female desire disorders’.

References

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5. HIV AND WOMEN: THE AFRICAN EXPERIENCE

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Africa as a continent has been devastated by the acquired immunodeficiency syndrome epidemic caused by the human immunodeficiency virus (HIV). Women are more likely to acquire HIV/AIDS for a number of reasons and incidence studies show that younger women are particularly at risk of HIV acquisition. Biologically, they are more vulnerable and the acquisition of HIV can be influenced by hormonal contraceptives as well as sexually transmitted infections, which are often more asymptomatic than is the case for men. Women in Africa are also more vulnerable because of cultural issues; in some countries polygamy is accepted practice. Women are often economically disadvantaged and disempowered. It is often hard for them to insist on the use of condoms with husbands and regular partners. Physical and sexual abuse of women, including rape, remains a major problem on the continent, particularly in times of civil war. Many women are forced to work as sex workers or be involved in transactional sex in order to survive.

Most countries rely on anonymous antenatal surveys to generate HIV seroprevalence data for women of reproductive age. These data is often used as surrogate markers for HIV prevalence rates in men of a similar age. The seroprevalence of HIV among pregnant women contrasts dramatically around the continent, with the highest rates being seen in Southern Africa, as high as 30%, and much lower rates being seen in West Africa. These reasons underlying these differences are complex and not completely understood.

UNAIDS estimated in 2005 that 470,000 (87%) of the world’s 540,000 newly infected children (<15 years old) reside in Sub-Saharan Africa. Prevention of mother to child transmission (PMTCT) of HIV is thus a national priority in many Sub-Saharan African countries. Despite policies, treatment is sometimes not given at the clinic level for several reasons, and when it is, most commonly it is with single dose Nevirapine. Data from South Africa has shown that both mothers and infected babies rapidly acquire nevirapine resistance. It is likely that this will lead to early failure of first line antiretroviral (ARV) therapy among these mothers once they start their ARVs. In South Africa, for example, either efavirenz or nevirapine form the backbone of the first-line ARV regimens. AIDS defining illnesses (ADIs) in women living in Africa are similar to those observed in men. Tuberculosis is the most common ADI but other life-threatening illnesses such as cryptococcal meningitis are relatively common compared to other parts of the world. Cervical cancer and cervical intra-epithelial neoplasia (CIN) lesions are more common in HIV-infected than in non-infected women. Most countries in Africa do not have cervical screening programmes and, even in richer countries such as South Africa, the national policy is to screen women three times in their lifetime at 30, 40 and 50 years of age. Many HIV specialist centres, with additional donor funds, are now attempting to perform annual cervical screening, at least in South Africa.

6. DYADIC PERSPECTIVES ON SUPPORT FOR WOMEN LIVING WITH HIV/AIDS IN AUSTRALIA: AN EXPLORATORY STUDY

J. Russell
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There are more women than ever living with HIV/AIDS in Australia and this relatively small heterogeneous population has received scant research attention. Women living with HIV/AIDS, face many complex and compelling challenges in managing this stigmatised illness in their everyday lives. This study sought to gain an understanding of these women's support needs. Semi-structured, in-depth interviews were conducted with two groups: women living with HIV/AIDS (Sydney and Melbourne, involved and not in advocacy); and HIV specialists (Sydney and Melbourne) treating women living with HIV/AIDS. There was a consensus view among both specialists and women that women: have limited knowledge of HIV/AIDS; have no collective or historical understanding of HIV/AIDS; are more likely to acquire HIV/AIDS for a number of reasons and incidence studies show that younger women are particularly at risk of HIV acquisition; are more vulnerable because of cultural issues; in some countries polygamy is accepted practice; Women are often economically disadvantaged and disempowered. It is often hard for them to insist on the use of condoms with husbands and regular partners. Physical and sexual abuse of women, including rape, remains a major problem on the continent, particularly in times of civil war. Many women are forced to work as sex workers or be involved in transactional sex in order to survive.

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7. ’THE CHLAMYDIA PROJECT’ IMPROVING KNOWLEDGE OF, AND TESTING RATES FOR CHLAMYDIA AMONG YOUNG PEOPLE IN A REMOTE ABORIGINAL SETTING

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The Kimberley region has some of the highest rates of Chlamydia infection in Australia. NCHS obtained funding to initiate and establish a Chlamydia Project aimed at increasing screening rates amongst indigenous youth aged 15 to 30 in the Fitzroy Valley. Population for the Valley is approximately
3000, predominately Aboriginal, covering more than 40 remote communities and the town of Fitzroy Crossing. The community has a strong belief in traditional values therefore observation of cultural protocols is paramount, especially when working in the area of sexual health. This can present challenges when setting up a sexual health program that is culturally appropriate, accepted and sustainable.

The aim of the project is to encourage young people to attend for STI screening when they are asymptomatic. The project will also endeavour to increase awareness of Chlamydia and other sexual health issues relevant to the age group.

Methods used, include setting up screening clinics in town and remote communities, involving young people in making decisions about how the clinics are run, holding “Feel Good Nights” that promote discussion and information sharing about sexual health, peer education and encouraging young people to participate in resource production.

Anecdotally results so far have shown a greater number of young people are accessing sexual health services and there is an increased knowledge of Chlamydia and sexual health in general amongst the target population. This project will run until May 2008. This paper will present the progress of the project so far, and some of the highlights and challenges of setting up a sexual health program in a remote community setting.

8. ‘STAMP OUT CHLAMYDIA’ PROJECT – BRINGING CHLAMYDIA SCREENING TO TERTIARY STUDENTS IN THE AUSTRALIAN CAPITAL TERRitory

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**Study’s objective:** Stamp Out Chlamydia (SOC) is a pilot research project funded by the Commonwealth Department of Health & Aging to devise and implement a cost effective program for education and chlamydia screening for ACT tertiary students aged 16–26 years at The Australian National University (ANU), University of Canberra and Canberra Institutes of Technology, that may be suitable for national implementation.

**Methodology:** A collaborative clinical outreach project between Canberra Sexual Health Centre, Sexual Health and Family Planning ACT and ANU Medical School, whereby the SOC team attends student-initiated events on ACT tertiary campuses to educate and test young people, using self-obtained urine specimens.

**Summary of Results:** The majority of these outreach events were attended by two Registered Nurses and the Health Promotion Officer. To date they have attended 19 events including Orientation Week activities, BBQ’s, Easter Scavenger Hunt, Gay Pride Week events and sports events. Promoting the SOC project has been through word of mouth, SOC ‘Champions’, convenience and media advertising and a dedicated web site.

By May 2007 the SOC project had:

- Interfaced with 1512 tertiary students and offered them the opportunity to participate in the research
- Screened 445 for chlamydia
- Found a chlamydia prevalence of 1.8%
- Treated eight cases and their contacts

Of those screened:

- Male 240
- Female 205
- Target group 412

**Conclusion:** ACT tertiary students accept this outreach approach. Of students approached, over a quarter agreed to have screening. The high profile of the SOC project is leading to an increased awareness of chlamydia. Many students are unaware of the high incidence and/or the consequences of chlamydia, if left untreated and report that they would not have attended mainstream services for screening.

Ongoing data analysis will determine if this project is cost effective and feasible.

9. DEVELOPMENT AND VALIDATION OF A NOVEL GEL-BASED URINE TRANSPORT SYSTEM FOR USE IN CHLAMYDIA TRACHOMATIS PCR BASED DIAGNOSIS

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**Background:** Chlamydia trachomatis infection rates have increased within Australia over the past several years, including persistently high incidences in known risk groups. The development of novel C. trachomatis detection methods which can be self-collected and mailed in a plain envelope presents significant opportunities for increasing access to urine testing across Australia, particularly those who are geographically or socially isolated and have limited or impeded access to mainstream health services.
Aim: The purpose of the study was to develop a urine transportation system which retains comparable sensitivity to standard sampling methods, is easy and safe to use by the average person within a home setting, and which complies with regulations concerning the transport of biological specimen through regular mail.

Results/Discussion: An expanding-matrix based method was developed in which a small amount of urine is applied to a dry mixture of a super absorbent polymer and nucleic acid stabiliser, yielding a dry gel. The gel can then be subsequently treated in the diagnostic laboratory to release the reconstituted urine, from which nucleic acid can be extracted using standard methods. Once extracted, the sample can be utilised in a nucleic acid amplification based C. trachomatis diagnostic assay.

The clinical sensitivity of the gel-matrix was found to be comparable to that of standard urine transport methods. The applicability of the gel for use by the public in a home collection setting was deemed appropriate due to the non-toxic nature of the matrix materials, ease of use, and the basic packing and postage requirements. The dry gel form of the urine and packaging complied with Australia Post standard postage requirements. Results of the initial development and validation of the gel matrix will be presented.

10. THE CHECK IS IN THE MAIL: A NOVEL APPROACH TO CHLAMYDIA TRACHOMATIS TESTING USING SELF COLLECTED, MAILED SPECIMEN
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Background: The progress in chlamydia testing/management seems to have stalled in Australia over the last years with persistent high prevalences observed in known risk groups. A novel approach is needed to lower the barriers to testing especially in those who are socially isolated and/or live in rural or remote locations.

Aim: To develop, implement and evaluate a novel approach to chlamydia testing in the form of a ‘self-collection testing kit’ that is easily accessible, confidential, free of charge, easy to use, and allows for home self-collection of specimens, their transportation by regular mail and the central management (notification, treatment and follow-up) of results.

Methods: The developed ‘kit’ consists of all necessary items and instructions to obtain a sample. A network of ‘kit’ distribution sites at locations frequented by the target population has been established in urban as well as rural and remote areas. The ‘kit’ can also be requested via an advertised website and a 1800 phone number. Specimens are returned via reply paid mail. A centralised system for the management of results and follow up of individuals has been developed. Test results are conveyed to participants by the method of their choice including email, SMS and phone. Treatment is organised via a network of health care providers in various locations.

Results/Discussion: First promising results and experiences from the implementation phase of this novel approach to chlamydia testing will be presented covering distribution and uptake of ‘kits’, return of specimens as well as management and follow up.

If eventually proves successful, this approach to chlamydia testing will provide significant opportunities for increasing access to testing across Australia especially in rural and remote areas. An extension to gonorrhoea testing is possible.

This project is supported by the ‘National Chlamydia Pilot Program’ funding of innovative chlamydia projects.

11. SEX AND SPORT: A COMMUNITY BASED PROJECT OF CHLAMYDIA TESTING AND TREATMENT IN RURAL AND REGIONAL VICTORIA
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3Key Centre for Women’s Health in Society, University of Melbourne, Melbourne, VIC, Australia.

Chlamydia is the most common notifiable infectious disease in Australia with the number of notifications increasing 92% over the past 5 years. The “Sex and Sport” Project is piloting a community based chlamydia testing and treatment program reaching young people in a specific community setting, sporting clubs. This multifaceted approach utilises health education, population screening and collection of data on risk taking behaviour as the first steps in enhancing health and shaping future service provisions. The project’s primary aim is to assess the feasibility of an outreach testing and treatment program. Secondary aims are to measure the prevalence of chlamydia and assess sexual risk behaviour in this population.

Strong community collaborations and integration into local health services through the Primary Care Partnerships is important in the project’s sustainability, as particular key community members respected by sporting clubs needed to be identified, capacity developed to deliver effective health promotion messages and improve young people’s access to sexual health services. Additionally, local knowledge has guided overall program
implementation and provides opportunities for capacity building to regionally based services. For example, poor access to sexual health services is being addressed by the participants being able to access services via telephone consultation with Melbourne Sexual Health Centre.

Approximately 1000 Victorians aged 16–25 years from the Loddon Mallee region of Victoria will be tested between June and September 2007. This paper will report on the feasibility, challenges and possible solutions in establishing a community based outreach testing and treatment program.

12. YOUNG PEOPLE GET CLUED UP ABOUT CHLAMYDIA: AN INTERNET BASED RANDOMISED CONTROLLED TRIAL

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Young people (16–25 years) are a target group for the prevention of Chlamydia trachomatis in the Australian national STI strategy. This study is a randomized controlled trial of an innovative internet-based intervention which aims to increase Chlamydia testing and treatment among at risk young people living in Australia. Study participation is via a website developed in consultation with young people and linked to an evaluated health promotion website. Young people in the intervention group receive personalized, confidential emails from a nurse or doctor while those in the control group receive automated emails. Follow up at 6 months will measure self-reported Chlamydia testing and other outcomes. By 5 June 2007, 359 young people of a target sample of 1000 were enrolled (83% female). Mean age is 20 years (range 16–25). Participants reside across all states and territories. Thirty percent of participants in the intervention group are in active email dialogue with the research nurse, e.g. “The research and . . . site was . . . really good . . . it’s kinda scared me into getting a test and just to get over the embarrassment . . . will the test be able to be part of just a normal appointment?” Zero participants in the control group have responded to the automated email. Baseline data and examples of the email interaction will be presented.

13. CAUGHT IN THE WEB: CYBERSEX AND ITS IMPACT ON INDIVIDUALS AND THEIR INTIMATE RELATIONSHIPS

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With the current meteoric expansion in computer technology phonographic magazines and videos are fast being replaced by virtual intimacy and sex on the Internet. The affordability, accessibility and anonymity of the net offer a pseudo-intimacy less threatening and demanding than real life intimacy. The illusion of being in control, of constructing the relationship of your dreams can become quite addictive. This presentation will draw on current research and clinical data to illustrate how clients caught in the web find the compulsive behaviour patterns that emanate extremely destructive. With the passage of time such behaviour patterns can have a negative impact on an individual’s psychological health, social relationships, work performance and most significantly, intimate relationships. The latter is a new factor contributing to distress in and the breakdown of couple relationships. The presentation highlights several ‘warning signs’ of a downward spiral and offers clinicians therapeutic strategies for working with couples caught up in this potential maritiusm. The computer hailed as a communication marvel, which was to facilitate ‘connection’, is fast becoming an instrument of ‘disconnection’ for those who are naive enough to ignore its darker side.

14. GENITAL HERPES ONLINE RISK SURVEY

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Background: Genital herpes is one of the most common sexually transmitted infections (STIs) worldwide. In Australia, a population-based survey revealed that 10% of women and 8% of men over 25 had antibodies to HSV-2. The majority of people infected with HSV-2 are asymptomatic. With increasing availability of web-based technology for use as an information and education tool, we established a web-based survey to determine risk for genital herpes and encourage people who maybe at risk to attend a health care professional for HSV testing.

Methods: A web-based genital herpes risk assessment quiz was established on the AHMF web page. The quiz was based on epidemiological data derived from a national population-based survey and other epidemiological studies and consisted of 16 questions, each with a numerical weighting.
Factors were weighted according to age, country of origin, gender, sexual history, condom use, symptoms suggestive of herpes and whether the individual was of Aboriginal or Torres Strait Islander (ATSI) origin. Scores were added up and individuals allocated a risk score of low, medium or high.

Results: By the 24th May 2007, 2639 questionnaires had been completed, 52% were male and 48% female and 87% from Australia. 18% were classified as low risk for genital herpes, 46% as medium risk and 36% as high risk. Women had a higher mean risk score than men (p < 0.001) and were less likely to report condom use than men (p < 0.001); however, men were more likely than women to have had sex with someone they knew had herpes (p = 0.018). ATSI participants had a higher mean risk score than non-ATSI participants. Detailed analyses of risk scores and comparisons between groups will be presented.

Conclusions: On-line risk surveys are a useful way for individuals to determine their risk of genital herpes. Similar tools should be developed for other STIs.

15. RISKS, CHOICES AND CONSEQUENCES: INTERNATIONAL STUDENTS AND SEXUAL HEALTH PROMOTION

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International students are the 4th most revenue raising industry in Australia bringing in $6 billion in 2006. December 2006 reports show 383,818 international students were enrolled across Australia with 61,019 in Queensland. The vast majority of students come from Asian countries with a high prevalence of HIV/AIDS and STIs combined with minimal sexual health knowledge.

Through workshops and discussion groups with international students they have been identified as a high risk in relation to sexual health problems due to their lack of sexual health knowledge, their tendency to engage in risk behaviour without adequate knowledge of risks, consequences and protection mechanisms. As a result, sexual health issues are increasingly presenting to professionals working directly with international students and health services in claims related to pregnancy, abortion rates, sexual assault, rape and reports of international students from high risk countries found to be HIV+.

Further, international students reported receiving no information prior to arrival and on arrival of risk behaviour, safety issues, health or laws in Australia. In order to promote safe sex behaviour among international students we have formulated various strategies to raise awareness of international students from print material on arrival, to information stalls at O-week, intermittent workshops for international students, student leaders and professionals working directly with international students. The feedback from the students is very positive and new strategies are being developed to target students facing language barriers.

Our program findings demonstrate that the international student population is a high risk group facing sexual health issues where increased education and support must occur to prevent and reduce sexual health related problems.

16. A RANDOMIZED CONTROLLED TRIAL OF THE IMPACT OF EMAIL AND TEXT (SMS) MESSAGES ON THE SEXUAL HEALTH OF YOUNG PEOPLE

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Objective: To trial a novel method of sexual health promotion – sending email and mobile phone text messages (SMS) about safe sex and STI to promote reductions in STI behaviours and increases in STI knowledge and testing.

Methods: Young people (aged 16–29) were recruited at a music festival in Melbourne. They completed a questionnaire about sexual risk behaviour and were randomised to either the intervention arm of the study (to receive messages) or a control group. Text messages were sent every 3–4 weeks for a twelve month period and included catchy STI prevention slogans. Emails were sent monthly and contained detailed information about STI topics and links to related websites. Participants completed follow-up questionnaires online after 3, 6 and 12 months. Clustered weighted estimating equations were used to compare outcomes of the two groups.

Results: 994 people completed at least one questionnaire (507 in the intervention group and 487 in the control group); at baseline 58% were female, the median age was 19 years and 82% had ever had sex. At 12 months, STI knowledge was higher among the intervention group for both males (OR 3.19, 95% CI 1.52, 6.69) and females (OR 2.36, 95% CI 1.27, 4.37). Females in the intervention group were also more likely to have discussed sexual health with a clinician (OR 2.92, 95% CI 1.66, 5.15) and to have had an STI test in the past 6 months (OR 2.51, 95% CI 1.11, 5.69). There were no significant differences in condom use between the groups. Respondents' opinions of the SMS and emails were positive.

Conclusions: Receiving regular sexual health-related SMS and email messages can improve knowledge in young people and health seeking behaviour in young women. SMS and email are low cost, widely available and convenient, which – when combined with their popularity among youth – means that these media have considerable potential for sexual health promotion.
17. PATIENTS’ PERSPECTIVES ON THE BEST WAYS TO TELL PARTNERS ABOUT CHLAMYDIA: HOW ACCEPTABLE ARE THE NEW TECHNOLOGIES?


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As part of a large, combined qualitative-quantitative methods study of partner notification, 40 in-depth telephone interviews were conducted with patients diagnosed with Chlamydia from clinics in Victoria, ACT and Queensland to determine their usage and opinions of different methods partner notification. Overwhelmingly, personal methods such as telling partners face-to-face or over the phone were preferred to impersonal methods such as email, SMS and letter. Face-to-face was considered the “gold standard” in partner notification because it demonstrated courage, care and respect. Phone contact, while considered insensitive and cowardly by some, was often used because it was quick, convenient and less confronting. Email was viewed as only being acceptable in certain circumstances, such as if the partner was overseas, because it was seen as impersonal and uncaring. SMS was considered the least acceptable method for telling partners with most interviewees seeing it as cold, disrespectful and “gutless”. However, interviewees who were fearful of their partner’s reaction or who had high numbers of casual partners were enthusiastic about an anonymous SMS facility. For both emails and SMS, interviewees were concerned that the message could be misunderstood, not taken seriously or shown to others. Letters, both from the patients or from their doctor, while not viewed as unapproachably as the newest technologies were less likely to be used. These findings suggest that people diagnosed with Chlamydia are reluctant to use the new technologies for partner notification, except in specific circumstances, and our efforts in developing partner notification resources may best be focused on giving patients the skills and confidence for personal interaction.

18. INCREASING ACCESS TO SEXUAL HEALTH ADVICE FOR HIGH RISK INDIVIDUALS THROUGH AN AUTOMATED, INTERNET BASED SERVICE

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Objective: It may be difficult for young people to know if they need testing for sexually transmitted infections and some primary care physicians may be unsure about what tests to order for patients with different risk profiles. Our aim was to help overcome these barriers by implementing an automated, internet based service that allowed internet users to receive specific recommendations for STI screening based on their online responses to a series of questions relating to their recent sexual practices (“Check Your Risk” (CYR); available at: www.mshc.org.au). This study evaluated this service and compared the risk profile of individuals using CYR with that of patients attending a sexual health centre in the same city over the same time period.

Methods: An automated and individualised web based algorithm was developed using current recommendations for STI testing. The characteristics of individuals visiting CYR were compared to those attending the Melbourne Sexual Health Centre (MSHC) for the first time over the same 6 month period, from January to June 2006.

Results: There were 2492 (59% men, 41% women) who visited the CYR online service and 2735 (59% men, 41% women) who attended the MSHC in the same period. There were 2131 (41% men, 59% women) who visited the CYR online service and 2735 (59% men, 41% women) who attended the MSHC in the same period. 513 (22%) of the men visiting CYR and 467 (18%) of the men visiting MSHC reported sex with other men, with a median of 6 (SD 26.4) and 6 (SD 29.4) partners in the previous 12 months respectively (p = 0.9). 47 (1.8%) of the women visiting CYR and 54 (2.1%) of the women visiting MSHC reported sex with other men, with a median of 1 (SD 9.3) and 1 (SD 2.1) partners in the previous 12 months respectively (p = 0.5).

Conclusions: This internet based sexual risk assessment tool was accessed frequently by individuals with a high risk profile that was similar to those who attended the sexual health service in the same city. The CYR service cost A$4000 to set up. CYR effectively increased the outreach of the centre’s services substantially, via the internet and was given a positive rating by the majority of its users.
19. INFECTIOUS SYPHILIS ELIMINATION FOR ABORIGINAL PEOPLE IN NSW: CHALLENGES AND OPPORTUNITIES

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Elimination of syphilis within Aboriginal communities is one of the stated goals of the NSW Sexually Transmissible Infections Strategy 2006–2009.

In 2007, a project was undertaken to inform strategy development to achieve the goal of elimination of infectious syphilis in Aboriginal communities. Australian and international literature on elimination strategies for syphilis, STIs and other diseases was reviewed. Surveillance data were accessed through the National Notifiable Diseases Surveillance System and NSW Notifiable Disease Database and analysed to describe the current burden of disease. Key informants were consulted for advice on elimination strategies for infectious syphilis for Aboriginal people and possible barriers to the goal.

Infectious syphilis notifications for Aboriginal people have decreased significantly from 64% of all infectious syphilis cases in 1995 to 3% in 2006. For the rest of the population notifications have increased. Changes in male to female ratios and an increase in metropolitan notifications have been noted in recent years. Improvements in recording of Aboriginality information for infectious syphilis in NSW have allowed greater confidence in interpreting these trends. The role of accurate and complete surveillance information will play an important role in planning and directing the implementation of interventions to achieve the goal of syphilis elimination for Aboriginal people in NSW.

Challenges to the goal of elimination and the feasibility of a disease elimination strategy specific for Aboriginal people include issues of access to services for testing, diagnosis and treatment; cross-border mobility of Aboriginal people; prevalence of syphilis in the wider community; and continued access to accurate information. Lessons learned from international and Australian elimination strategies; burden of disease information; definition of elimination and target rates; challenges and strategies for achieving the goal of syphilis elimination and will be discussed.

20. SEXUAL HEALTH SERVICES & HIV PREVENTION: IMPROVING INTERVENTION OPPORTUNITIES

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Objective: This descriptive study was undertaken to determine the presence of key indicators which might alert clinicians that a Melbourne Sexual Health Centre (MSHC) client is at increased risk of HIV acquisition and, if so, lead to recommendations for changes to clinical practice.

Method: A retrospective, case controlled, study was undertaken in an inner Sydney public Sexual Health clinic between January 2000 and December 2005. Cases were all women with culture proven cervical n.gonorrheae infection in the time period. These were case matched with 20 controls. Quantitative epidemiological and demographic data were collected and analyzed using SPSS software. Qualitative data analysis of annotated entries both pre and post HIV diagnosis included transcription and examination for emergent themes.

Results: Quantitative data analysis revealed the following: all 20 controls were male and identified MSM behaviour. Median age at diagnosis was 34.5 years (95% CI: 28–37.6 years). The median number of partners in the 3 months preceding HIV diagnosis was 4 (95% CI: 3–9.6; p = 0.005) and in the preceding 12 months 23 (95% CI: 11.4–61.4; p < 0.05). 85% of men reported inconsistent condom use, and one reported no anal sex in the preceding 12 months. None reported a history of IDU and three men reported sex overseas in the preceding 12 months. Qualitative analysis revealed some emergent themes which included histories of mental illness, drug and alcohol use, childhood abuse, HIV transmission relationship and confusion surrounding sexual orientation.

Discussion: Clinicians have an obligation to assist clients, within their scope of practice, to remain HIV negative. Results from this study have implications for the method of identification of clients at risk and also for the utilization of intervention opportunities which impact on risk behaviour. The challenge for MSHC is to adapt our practice in order to maximize these opportunities.

21. GONORRHOEA INFECTION IN SYDNEY WOMEN

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2 Sydney Sexual Health Centre, CBD Sydney, NSW 2000, Australia.

Background: Gonorrhoea is associated with undesirable reproductive health outcomes in women including pelvic inflammatory disease and tubal factor infertility. However there is low prevalence in the general community and some authors have suggested that only those women with risk factors should be tested. But can we predict who will have a positive gonorrhoea result?

Methods: A retrospective, case controlled, study was undertaken in an inner Sydney public Sexual Health clinic between January 2000 and December 2005. Cases were all women with culture proven cervical n.gonorrheae infection in the time period. These were case matched with subsequent women with a negative gonorrhoea culture test. Variables examined included demographics, sex worker status, country of birth, injecting drug user (IDU) status, presence of symptoms and concurrent STIs.

Results: There were 40 women who were n.gonorrhoea culture positive during the study period and 27 cases and 23 controls reported any genital symptoms. (what were the confidence intervals?) The relative risk of having gonorrhoea if discharge was described was 1.75 (p < 0.05). The cases had a high rate of concurrent STI including chlamydia.
Abstracts
Sexual Health 293

Conclusions: The only significant predictor of gonorrhoea in this group was the symptom of vaginal discharge. Thus in our clinic population behaviour, demographic data or cannot be used to determine who gets tested for gonorrhoea.

22. IS HELICOBACTER PYLORI A STI? – A PILOT STUDY
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Background: Helicobacter pylori is responsible for chronic gastritis and peptic ulcer disease and is associated with an increased risk of developing stomach cancer. The seroprevalence of Helicobacter pylori in the Australian-born adult population is about 20% and increases with age. The exact mode of transmission of Helicobacter pylori infection remains unknown and it has been suggested that sexual transmission maybe important. This study is a preliminary investigation into a possible association between sexual risk factors and Helicobacter pylori infection.

Subjects and methods: All patients aged 18 and above, presenting to the Parramatta Sexual Health Clinic and were having blood taken for any other purpose, were eligible for the study. Blood samples were collected for Helicobacter pylori serology using an enzyme-linked immunosorbent assay to detect Helicobacter pylori IgG. Demographic information and data regarding sexual behaviour and risk factors for sexually transmitted infections was obtained. The sample size to detect a 15% difference between the study population and the general Australian population with 90% power was 105. To allow for minor variations we plan to recruit 125 participants.

Results: To date, 65 patients (75.4% males) have been enrolled in the study and 10 (7 males and 3 females) (15.4%) were positive for Helicobacter pylori. One additional result was equivocal. 24.6% of the participants were born outside Australia and out of 8 who belonged to middle and low-income countries, three had positive serology. The full results of the study, including seroprevalence and the demographic and sexual risk factors, will be presented.

23. IMPACT OF TRIAGE ON PATIENT PRESENTATIONS AT A LARGE PUBLICLY FUNDED SEXUAL HEALTH SERVICE
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Introduction/Background: Increasing prevalence of sexually transmissible diseases in Australia has led health authorities to require publicly funded sexual health services to target services to those most in need. Nurse triage has previously been shown to improve efficiency of sexual health services. Nurse triage of all new patients telephoning SSHC for an appointment was implemented in 2004. A priority tool was developed to guide the process that delegated the types of clients and client presentations appropriate for the Centre.

A review was conducted of medical record data in the patient database to ascertain the percentage of patient presentations triaged into SSHC who did not fit the priority categories in the tool. This was conducted for a full year in 2206 and for comparison pre implementation of the triage system in 2001.

Results: In 2001 a total of 23% of 1422 new patients did not fit the criteria of patient presentations appropriate for the Centre. In 2206 this percentage more than halved to 10% of 1039 patient presentations.

Conclusions: Telephone triage has been effective in increasing the percentage of priority presentations at SSHC.

24. ELECTRONIC HEALTH RECORD SYSTEMS IN AUSTRALIA & NEW ZEALAND SH/HIV/HEP C/WOMEN’S HEALTH CLINICS 2006 – A PILOT PROJECT
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2CardData, Parkwood, QLD 4214, Australia.

Objective: This pilot study examined the utility pattern of electronic health record & clinic management systems in the region.

Methods: An anonymous one-paged survey form was sent either by email or facsimile to 100 randomly selected public & private Sexual Health/ HIV/ Hep C/ Women’s Health/ GP (High Case Load ) listed in the Australasian Chapter of Sexual Health Medicine Register of Public SH Clinics 2006 and the ASHM Directory 2006–2007. Responses on the clinics activities & utility for 2006 were collated.

Results: Response rate = 20% N=20 clinics
Mean Occasion of service (OS) = 4812 Median OS = 4150
(Range 162–20000) 25% of clinics provided estimated figures only
Mean No. tests done = 5467 Median = 5474 (Range 224–20000)
Nature of Clinics: SH 81.3% FP/Women’s Health 18.8% GP 6.3% Other 6.3%
Clinic Software: SHIP 50% Other 25% Nil 25%
SOPVs in Melbourne, Australia, aimed to obtain detailed data on the types of sexual practices and frequency of these practices among men who have sex with men (MSM) visiting transmitted infections (STIs) is potentially enhanced. However, the extent to which SOPVs contribute to STI transmission is unknown. This study

**Objective:** Sex On Premises Venues (SOPVs), where men have sex with other men, provide an environment where the transmission of sexually transmitted infections (STIs) may be enhanced. However, the extent to which SOPVs contribute to STI transmission is unknown. This study aims to investigate the role of SOPVs in the transmission of STIs among men who have sex with men (MSM) in Melbourne, Australia.

**Methods:** In a cross-sectional study, MSM visiting 6 Melbourne SOPVs between December 2006 and February 2007 were asked to complete a questionnaire on their sexual practices and STI status. Participants were asked to provide detailed information on their sexual practices, including the frequency and type of sexual acts, and STI symptoms.

**Results:** Among the 355 participants, 1427 HIV-negative men were enrolled. They were tested annually for HIV, for gonorrhoea and chlamydia in the urethra and anus, and for herpes simplex virus types 1 and 2 (HSV-1 and HSV-2) using type-specific ELISA. Participants also reported diagnoses of STIs since their last interview. Detailed information on sexual risk behaviours was collected every 6 months.

There were 49 HIV seroconversions through 2006, an incidence of 0.80 per 100PY. A higher number of episodes of insertive and receptive unprotected anal intercourse (UAI) with HIV-positive or HIV status unknown partners was each significantly associated with HIV seroconversion. In multivariate analysis of behavioural risk factors, HIV seroconversion was significantly associated with a higher number of episodes of receptive UAI with a partner of unknown HIV status (p-trend < 0.001) or with a partner known to be HIV positive (p-trend < 0.001). After controlling for these sexual behaviours, a study diagnosis of anal gonorrhoea remained strongly related to HIV seroconversion (RR = 7.41, 95% CI 1.75–31.75). Most cases of anal gonorrhoea diagnosed were asymptomatic. In addition, there was an independent association with anal warts (RR = 3.43, 95% CI 1.43–8.19), and prevalent HSV-1 infection was of borderline significance (RR = 2.78, 95% CI 0.99–7.80).

**Conclusion:** Certain anal STIs were associated with HIV seroconversion, even after adjustment for UAI. For some anal conditions, in particular anal gonorrhoea, infection was frequently asymptomatic. Screening for anal STIs should be investigated as a potential HIV prevention intervention.

**References:**

1. National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, NSW, Australia.
2. National Centre in HIV Social Research, University of New South Wales, NSW, Australia.
3. Melbourne Sexual Health Centre, Sydney Hospital, Sydney, NSW, Australia.
4. St Vincent's Hospital, Sydney, NSW, Australia.
5. Westmead Millennium Institute, Centre for Virus Research, Westmead Hospital, NSW, Australia.
6. Sexually Transmitted Infections Research Centre, Westmead Hospital and University of Sydney, NSW, Australia.

**Objectives:** Sexually transmitted infections (STIs) are believed to increase the risk of HIV acquisition, but few studies have focused on homosexual men. We examined sexual behaviour and common STIs as independent risk factors for HIV seroconversion in a community-based cohort of homosexual men in Sydney.

**Methods:** Between 2001 and 2004, 1427 initially HIV-negative men were enrolled. They were tested annually for HIV, for gonorrhoea and chlamydia in the urethra and anus (strand displacement amplification, BDProbeTec), and for herpes simplex virus types 1 and 2 (HSV-1 and HSV-2) using type-specific ELISA. Participants also reported diagnoses of STIs since their last interview. Detailed information on sexual risk behaviours was collected every 6 months.

There were 49 HIV seroconversions through 2006, an incidence of 0.80 per 100PY. A higher number of episodes of insertive and receptive unprotected anal intercourse (UAI) with HIV-positive or HIV status unknown partners was each significantly associated with HIV seroconversion. In multivariate analysis of behavioural risk factors, HIV seroconversion was significantly associated with a higher number of episodes of receptive UAI with a partner of unknown HIV status (p-trend < 0.001) or with a partner known to be HIV positive (p-trend < 0.001). After controlling for these sexual behaviours, a study diagnosis of anal gonorrhoea remained strongly related to HIV seroconversion (RR = 7.41, 95% CI 1.75–31.75). Most cases of anal gonorrhoea diagnosed were asymptomatic. In addition, there was an independent association with anal warts (RR = 3.43, 95% CI 1.43–8.19), and prevalent HSV-1 infection was of borderline significance (RR = 2.78, 95% CI 0.99–7.80).

**Conclusion:** Certain anal STIs were associated with HIV seroconversion, even after adjustment for UAI. For some anal conditions, in particular anal gonorrhoea, infection was frequently asymptomatic. Screening for anal STIs should be investigated as a potential HIV prevention intervention.

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1. National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, NSW, Australia.
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3. Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW, Australia.
4. National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, NSW, Australia.
5. Westmead Millennium Institute, Centre for Virus Research, Westmead Hospital, NSW, Australia.
6. Sexually Transmitted Infections Research Centre, Westmead Hospital and University of Sydney, NSW, Australia.
A substantial number of men who did not report any anal sex engaged in practices potentially capable of transmitting infections. Notably, 44 men (29%) reported unprotected rubbing or touching of their penis (“nudging”) onto another man’s anus without actual anal penetration with a total of 71 other men (median 1 act per man, range 1–10). When specifically asked, 17 (39%) of these men reported that they had not engaged in “anal sex”. In addition, 32 men (21%) reported being the recipients of “nudging” with 40 other men. Fourteen (44%) of these men reported not having had any “anal sex”. Oro-anal sex, whether “active” or “passive”, was reported by 57 (38%) of men, while 84 (56%) men reported anal penetration using fingers, whether receptive or insertive.

A significant minority (11%) of men reported that their ability to have safe sex was compromised by the use of drugs or alcohol. Of note, 58 (39%) men reported having a regular male partner, with whom 23 (40%) had unprotected anal sex. And 13 (9%) reported having a regular female partner, with whom 10 (77%) reportedly had unprotected vaginal or anal sex.

Conclusions: The potential for STI transmission between men visiting Melbourne SOPVs and to their partners outside these venues is high. The contribution of what might be perceived as “safer” sex practices to the transmission of STIs among MSM may have been underrecognised.

27. CAN UNPROTECTED ANAL INTERCOURSE WITH REGULAR AND CASUAL PARTNERS EXPLAIN THE DIVERGING TRENDS IN HIV EPIDEMIC IN AUSTRALIA?

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Introduction: Worldwide, increases in unprotected anal intercourse have been linked to the resurgence in HIV and STI in gay men. We assessed whether changes in UAI within regular and casual relationships may explain the diverging trends in HIV in three Australian states – NSW, Victoria and Queensland.

Methods: We used the data from the annual cross-sectional Gay Community Periodic Surveys conducted annually in Sydney since 1996 and in Melbourne and Queensland since 1998. A short self-administered questionnaire asks about HIV serostatus, sexual health testing and behaviours relevant to HIV epidemic. We present time trends in seroconcordance and unprotected sex with regular and casual partners.

Results: Currently, about one third of gay men report being in monogamous regular relationships, and this proportion has been slowly increasing everywhere. The self-reported UAI with regular partners (UAIR) was highest among men in seroconcordant positive relationships, lower among seroconcordant negative partners and lowest in non seroconcordant relationships. From 1998 to 2006, the rates of UAIR consistently increased by 10% in all three states and in all relationships by serostatus. The rates of UAI with casual partners (UAIC) were historically highest in NSW. From a peak in 2001, UAIC rates have consistently declined in NSW, but continuing increases were observed in Victoria and Queensland. Higher rates of non-disclosure of HIV were also observed in the context of UAIC in the latter two states.

Conclusion: Changes in unprotected sex with casual partners may be responsible for the slowing of HIV epidemic in NSW. Sustained investment in policies and programs are important in achieving behavioural change.

28. RISK TAKING AND SAFER SEX PRACTICES IN CASUAL RELATIONSHIPS BETWEEN MEN

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1National Centre in HIV Social Research, UNSW, Sydney, NSW, Australia.
2National Centre in HIV Epidemiology and Clinical Research, UNSW, Sydney, NSW, Australia.

Introduction: Universal condom use in casual sex is unlikely. We explored whether gay men lower the risk of HIV transmission during unprotected anal intercourse with casual partners (UAIC) by disclosing HIV serostatus and engaging in lower risk practices such as strategic positioning and/or withdrawal.

Methods: We used data from the annual cross-sectional Sydney Gay Community Periodic Survey. A short self-administered questionnaire collects information about HIV serostatus of the respondents, sexual practices with other men and other HIV-relevant behaviours. We present the prevalence of and time trends in disclosure of serostatus and the use of strategic positioning and withdrawal with casual partners.

Results: In 2006, 2568 men reported having had a casual partner in the 6 months before the survey. Disclosure was higher among men engaging in UAIC (68.4%) compared to those who always used condoms (49.7%). This relationship was more apparent amongst HIV-positive than negative men, of whom 83.5% and 63.9%, respectively, reported any disclosure. Over time, HIV-positive and negative men have increasingly reported disclosing to ‘all’ of their casual partners (p < 0.001). HIV-positive men were less likely to report insertive-only positioning during UAIC (6.9%) compared to HIV-negative men (39.2%), with no changes emerging since over time. Significant increases were also noted in the proportion of HIV-positive men reporting withdrawal during insertive-UAIC (p < 0.001) and HIV-negative men reporting withdrawal during receptive-UAIC (p < 0.001).

Conclusion: In the context of UAIC, gay men appear to be employing a range of risk-reduction strategies. Increasing levels of disclosure and/or practices such as strategic positioning and withdrawal demonstrate the complexity of gay men’s construction of, and engagement with, risk associated with HIV transmission. A more thorough understanding of these practices is essential for ongoing education and prevention.
296. WHAT DO ANAL CYTOLOGY RESULTS MEAN?

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Background: Between 1970 and 2000 in Australia, anal cancer rates have increased over fourfold. Furthermore, the prevalence rate of anal cancer in MSM is approximately 35 cases/100,000, comparable to that of cervical cancer in women prior to the introduction of the national cervical screening program. These observations have led to calls for the introduction of targeted anal cytological screening program for MSMs. Our study examined the effectiveness of anal cytological testing in detecting histologically proven high grade anal intraepithelial neoplasia (HGAIN, also known as AEN2 & 3).

Methods: A retrospective case note review of people attending an anal dysplasia clinic from July 2002 to May 2007 was performed. Cytological results of anal swabs were compared to results of biopsies obtained through high resolution anoscopy.

Results: 436 anal cytological results were identified. Of these, 5% were unsatisfactory, 51% showed low grade changes and 44% showed high grade changes. 185 cases were then paired with corresponding histological results.

Analysing the data from the perspective of diagnosing histologically proven HGAIN, anal swab cytological abnormalities revealed a sensitivity of 54% and specificity of 90% for the most recent cytological test and 83% and 39% respectively, when analyzed according to most serious cytological grade changes.

Conclusion: The majority of men report STI testing in the previous year, and this testing has become more comprehensive, with men receiving a broader range of STI tests over time. Men at higher risk for STIs tested at increased rates.

Background:

Between 1970 and 2000 in Australia, anal cancer rates have increased over fourfold. Furthermore, the prevalence rate of anal cancer in MSM is approximately 35 cases/100,000, comparable to that of cervical cancer in women prior to the introduction of the national cervical screening program. These observations have led to calls for the introduction of targeted anal cytological screening program for MSMs. Our study examined the effectiveness of anal cytological testing in detecting histologically proven high grade anal intraepithelial neoplasia (HGAIN, also known as AEN2 & 3).

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Analysing the data from the perspective of diagnosing histologically proven HGAIN, anal swab cytological abnormalities revealed a sensitivity of 54% and specificity of 90% for the most recent cytological test and 83% and 39% respectively, when analyzed according to most serious cytological result ever.

Conclusion: The majority of men report STI testing in the previous year, and this testing has become more comprehensive, with men receiving a broader range of STI tests over time. Men at higher risk for STIs tested at increased rates.

30. TESTING FOR SEXUALLY TRANSMISSIBLE INFECTIONS AMONG GAY MEN IN SYDNEY, AUSTRALIA

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2National Centre in HIV Social Research, UNSW, Sydney, NSW, Australia.

Introduction: Recently, rates of sexually transmitted infections (STIs) have been increasing among gay men in Australia and elsewhere. We explored trends in STI testing among gay men in Sydney.

Methods: We used behavioural data from the six-monthly Sydney Gay Community Periodic Survey (SGCPS). Men are recruited through gay community venues, clinics and events in Sydney. Since 2003 men were asked whether they had received the following tests in the previous year: Anal swab, throat swab, penile swab, urine sample, and blood test for STIs other than HIV. Men recruited from clinics were excluded from the following analyses.

Results: In 2006, 3145 completed questionnaires were received from non-clinic sites, with 40.9% of respondents reporting having received an anal swab, 45.4% a throat swab, 34.6% a penile swab, 52.7% a urine sample, and 56.1% a blood test for STIs other than HIV. The majority (67.2%) reported at least one test for STIs, with 25.5% having received all five forms of STI test. Although there was no increase during 2003–2006 in having any STI tests, the proportion of men having received all five types of test increased. The largest increase was in the proportion reporting anal swabs: from 23.8% in 2003 to 40.9% in 2006. Among men reporting unprotected anal intercourse with casual partners (UAIC), as well as among men with more than ten casual partners in the previous six months, rates of STI testing were higher but the time trends were similar.

Conclusion: The majority of men report STI testing in the previous year, and this testing has become more comprehensive, with men receiving a broader range of STI tests over time. Men at higher risk for STIs tested at increased rates.

31. WHY HAS TRICHOMONAS VAGINALIS DECLINED DRAMATICALLY AMONG VICTORIAN WOMEN (1947–2005)?

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Trichomonas vaginalis (TV) diagnosis rates have decreased considerably in some countries during the last two decades. It is unclear why TV has decreased only in some countries. This study investigated the relationships between: 1) TV diagnosis rates among women attending the Melbourne Sexual Health Centre (MSHC), and among Pap smears screened by Victorian Cytology Services (VCS); 2) the use of nitroimidazoles in Australia and; 3) gonorrhoea notification data for Victoria to assess changes in sexual behaviour.

TV diagnosis rates among women attending MSHC rose from under 5% in the 1940’s, to 20% to 30% in the 1960’s and then declined 5% to 10% during the 1970’s. From 1970 onwards, TV diagnosis rates fell progressively to below 1% by 1991, with 0.1% in 2004. A similar pattern was seen in TV at VCS, but with lower absolute percentages. Metronidazole was introduced into Australia in 1961 and tinidazole in 1976 and by 1987 there...
were 400,000 nitroimidazole prescriptions per year. Pap smear screening in Victoria began in 1965, only including 20% of women per year (aged 15 to 69) by the mid 1980s. Post 1980, screening rose until 2000, stabilising at 35% of women per year. Gonorrhoea notification rates peaked during times TV was experiencing its greatest falls.

The initial decline of TV seen in Victoria was associated with the introduction of effective antibiotics. The further decline to less than 1% was seen when Pap smear screening participation increased during the 1990's.

32. EXPERIENCE OF EARLY MEDICAL ABORTION IN A REGIONAL CENTRE

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Access to abortion services is often severely limited in parts of regional Australia, including north Queensland. In December 2005 one of the authors made a joint application to the Therapeutic Goods Administration (TGA) for approval to prescribe and supply the drug mifepristone (RU486) for the purpose of induced abortion. This was successful, and to date 10 medical abortions using a combination of mifepristone and misoprostol have been carried out.

Clinicians at the Cairns Sexual Health Service have been unable to prescribe mifepristone, but since April 2006 have been using a combination of methotrexate and misoprostol to perform medical abortions up to 9 weeks’ gestation. To date 16 have been performed. The mean age of patients undergoing the procedure was 25 (range 17–36) with the indications being for mental health and/or psychosocial reasons. The gestational age at abortion ranged from 4 to 8 weeks. One woman required a surgical abortion for an unsuccessful medical abortion.

The procedure, whether using mifepristone of methotrexate, is generally well-tolerated and has been shown to be safe. The clinical outcomes will be presented in detail.

33. WHAT WOMEN WANT WHEN FACED WITH AN UNPLANNED PREGNANCY

J. Michelson1

1Operations Manager, Marie Stopes International.

Objective: To collect data in regards to:
- women’s experience of desire for emotional support and information when faced with an unplanned pregnancy;
- women’s desire for counselling to support their decision-making, and the kind of counselling they want.

Methodology:
- 6593 women received an email invitation to complete the online survey.
- 2003 responded.
- 1022 had experienced an unplanned pregnancy, therefore qualifying.
- Participating women were of reproductive age, drawn nationally.
- Key findings published in November 2006.

Summary of results:
- At any given time amongst a sample of women of reproductive age, just over half (51%) have experienced an unplanned pregnancy.
- 75% of women did not wish to speak to a counsellor before making a decision on how to proceed with an unplanned pregnancy.
- Parenting was the most (56%) and adoption the least (2%) popular choice for resolving an unplanned pregnancy.
- 81% of women said it was important that a pregnancy counsellor refer for all three options – abortion, adoption and parenting.
- 21% of women sought information to assist their decision-making from their spouses/partners/biological father, while their local GP was the port of call for 17% of women facing an unplanned pregnancy. 13% of women stated that they did not need to seek any additional information to assist with their decision-making.

Conclusion:
- Unplanned pregnancy is a key health issue for Australian women.
- While pregnancy counselling should be available to women, it would be mistaken to see it as desired or required in all circumstances and it should be regulated.
- There is a need for increased resources to be directed towards lowering contraceptive failure rates, and greater access to sexual health services.

34. PATTERNS OF CONTRACEPTIVE USE AFTER REPRODUCTIVE EVENTS: FINDINGS FROM THE AUSTRALIAN LONGITUDINAL STUDY OF WOMEN’S HEALTH

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This paper examines changes in young women's contraceptive use over nine years in relation to a range of reproductive life events using longitudinal data from the Australian Longitudinal Study on Women's Health (ALSWH).

Little previous research has examined changes in young women's contraceptive use after significant reproductive or health life events. Some research has examined the reasons that women might discontinue contraceptive use in general and there has been some work investigating contraceptive
use after the birth of a child and after the termination of a pregnancy. However other events may also cause a woman to re-evaluate her contraception, for example, the diagnosis of an STD, or having an abnormal pap test.

The Australian Longitudinal Study on Women’s Health is a broad-ranging project which examines relationships between many biological, physiological, social and lifestyle factors and women’s physical health, emotional well-being, and use of and satisfaction with health services. Women were selected from the Medicare database which includes all citizens and permanent residents using stratified random sampling, with systematic oversampling of women from rural and remote areas.

This paper presents data from 6,716 women who completed a self-report survey in 1996 when they were aged 18–23, and again in 1999, 2002 and 2005. Multinomial analysis is used to explore patterns of contraceptive use before and after events related to pregnancy and birth (pregnancy, live birth, miscarriage and termination of pregnancy) and health (diagnosis with a sexually-transmitted infection and abnormal Pap test) and the factors associated with changes in contraceptive use. The ALSWH provides an exciting opportunity to examine patterns of contraceptive use over time among reproductive age women.

33. OUT OF THE SPOTLIGHT: AN AUDIT OF FIVE YEARS OF IMPLANON® USE IN QUEENSLAND

C. E. Harvey

Family Planning Queensland, 100 Alfred St, Fortitude Valley 4006, Brisbane, QLD, Australia.

The progestogen contraceptive implant – Implanon® was launched into the Australian marketplace in May 2001, with intense marketing and extensive training programs for doctors. However, negative media focused on removal problems and unexpected pregnancies, followed by increased medical indemnity requirements for providers, resulted in restricted access for Australian women as many GPs ceased providing insertions.

To date there is no published data on the use of this contraceptive implant in Australia. To identify trends in usage, continuation rates, side effects and acceptability of this method, a retrospective chart audit of clients attending Family Planning Queensland (FPQ) clinics for implant insertion and/or removal over a 5 year period was conducted. The audit examined 1,800 implant users from the two busiest FPQ clinics, one in a regional setting.

Preliminary results from the audit indicate:-

- All age groups across the reproductive years are represented in the group.
- The major reason for removal is unacceptable bleeding patterns.
- Many women have the device removed because they no longer require contraception.
- There have been no pregnancies identified with implants.
- The last 2 years have seen significant numbers of women presenting for implant replacement, with these women providing valuable information on factors contributing to longer term acceptability of the method.

This presentation will provide an analysis of the audit findings, particularly in relation to duration of use and implications for client acceptability of this contraceptive method. The information about Implanon® use in a clinical setting will be used to make recommendations on improvements in the appropriate selection and counselling of women considering this contraceptive method.

36. VULVOVAGINAL CANDIDIASIS IN AUSTRALIA: LET’S TAKE A LOOK ‘DOWN UNDER’

S. C. Hilmi, J. McCloskey, P. Tenni and J. Hughes

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2Department of Sexual Health, Royal Perth Hospital, Perth, WA, Australia.
3School of Pharmacy, University of Tasmania, Hobart, Tas., Australia.
4School of Pharmacy, Curtin University, Perth, WA, Australia.

Objectives: To determine: 1) The accuracy in patient self-diagnosis and medical diagnosis of vulvovaginal candidiasis (VVC) in Western Australia; 2) The contributing factors for self-diagnosing rather than seeking a medical diagnosis.

Methods: A cross-sectional cohort community-based study, over a 13-month period, was conducted. All women wishing to purchase a topical antifungal product for their personal treatment of presumed VVC, from participating community pharmacies within a nominated division of general practice in Perth, Western Australia, were invited to participate in the study. Participants completed a detailed questionnaire prior to their immediate referral for evaluation or examination by an experienced medical practitioner, and underwent a range of laboratory tests to determine the cause of their symptoms. Chi-square testing for association was performed for univariate comparisons with that of culture proven VVC.

Results: Ninety-four symptomatic women aged between 19 and 79 years were recruited. Of the 88 women who completed all aspects of the study, 41 (47%) were confirmed to have VVC by culture. The remaining 47 (53%) women either had another infectious cause (10 [11%]: urinary tract infection [4], bacterial vaginosis [2], chlamydia [2], or genital herpes [2]) or their symptoms were not secondary to an infection (37 [42%]). Sixty-three percent of presumptive diagnoses made by medical practitioners were concordant with laboratory proven VVC.

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Conclusions: Over half of the study population self-diagnosed VVC incorrectly. The proportion of correct presumptive diagnoses made by medical practitioners was only slightly greater. Diagnosis based on presenting signs and symptoms alone could result in an incorrect diagnosis and a proportion of STIs being missed. Improving the management of VVC will be dependent on addressing factors influencing women’s reluctance to seek medical advice and in addressing the current diagnostic processes. Over-the-counter antifungals, whilst convenient, may well compromise women’s health.
37. MONITORING HIV TRANSMISSION AMONG MEN SEEN AT METROPOLITAN
SEXUAL HEALTH CLINICS IN AUSTRALIA, 1996–2005
A. McDonald and J. M. Kaldor

National surveillance for newly diagnosed HIV infection indicates an increasing trend in Queensland, South Australia and Victoria but not in New South Wales. It was not clear if trends in newly diagnosed HIV infection were due to different patterns of HIV antibody testing. We report the pattern of HIV antibody testing among people seen through a network of sexual health clinics in Australia.

Six public metropolitan sexual health clinics (Sydney Sexual Health Centre (SSHC), South West Sexual Health Centre (SSWSHC), NSW; Brisbane Sexual Health Clinic (BSHC), Gold Coast Sexual Health Clinic (GCSSH), QLD; Clinic 275, SA, Melbourne Sexual Health Centre (MSHC), VIC) provide annual tabulations of the number of people seen, the number tested for HIV antibody, and the number with newly diagnosed HIV infection, broken down by sex, exposure category and testing history.

The number of men seen at the clinics ranged from 17,138 in 1996 to 19,184 in 2005. Among men seen, the percentage who were tested for HIV declined from 62% in 1996 to 50% in 2001 and increased to 56% in 2005. HIV prevalence remained stable in 1996–2005 at 0.5% and was highest at SSHC (0.7–1.1%) and among homosexually active men (1.8% in 1996 and 1.6% in 2005). The percentage of men retested within 12 months of a negative test increased from 41% in 1996 to 44% in 2005. At SSHC, retesting among homosexually active men declined from 56% in 1996 to 44% in 2001 and increased to 58% by 2005. At Clinic 275 and MSHC, 50–60% and around 50% of homosexually active men were retested in 1996–2005 and in 2004–2005, respectively. HIV infection was newly diagnosed in 0.4% (8) in 1996 and in 0.8% (26) in 2005.

While HIV antibody testing patterns vary between the clinics, incidence of newly diagnosed HIV infection has remained low.

38. GIVING HIV RESULTS: IS IT TIME TO CHANGE OUR THINKING?
L. M. Healey and C. C. O’Connor

Sydney’s Inner West has the second highest number of new HIV diagnosis in NSW. This paper describes a cross-sectional audit of 200 HIV tests performed by the Sexual Health Service. How many people returned in person specifically for their HIV results? What were the risk factors of those who attended for their result? Were those who returned for their result first-time patients or those having repeat tests? What procedures were followed for those with a positive result? Given the demands on staff to efficiently utilise their time, a more individually tailored approach to giving HIV results including giving results over the telephone, may be a better way to manage the increasing number of HIV tests being performed at an inner city sexual health service.

39. MAYISHA NZ: TOWARDS AN EVIDENCE BASE TO INFORM HIV PREVENTION INTERVENTIONS
IN NEW ZEALAND’S MIGRANT AFRICAN COMMUNITIES
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The second social group most affected by HIV in New Zealand is that of the migrant African communities. As is the case in many resource-rich countries, the number of new HIV diagnoses assumed to have occurred through heterosexual sex has now caught up with those new diagnoses assumed to have occurred through men who have sex with men (MSM). While there is good behavioural surveillance of HIV-related knowledge, attitudes and behaviour (KAB) in New Zealand’s MSM population (the GAPSS Surveys), there is very little data available on African migrant communities to provide an evidence base with which informed decisions can be made regarding HIV primary and secondary prevention interventions within these communities.

The Mayisha I and II Projects in the UK have been successful in developing community based research collaborations that have resulted in valuable HIV-related KAB data being obtained from their migrant African communities. Such a model of working is now being developed within New Zealand.

This paper reviews the UK Mayisha models and how such behavioural surveillance data is being utilised by HIV prevention stakeholders in the UK. It then describes how the model is being modified and developed within the New Zealand context.

40. AN INCREASE IN HIV CASES REPORTING HETEROSEXUAL EXPOSURE IN WESTERN AUSTRALIA
B. G. Combs1, C. M. Giele1 and P. Van Buynder1

1Communicable Disease Control Directorate, Department of Health, WA, Australia.

Introduction: In Australia, men who have sex with men (MSM) constitute the majority of newly diagnosed HIV cases. After a decline in the late 1990s, several Australian states have reported increases in HIV mainly attributed to MSM. There has also been an increase in HIV in Western Australia (WA), however recently, a larger proportion have been attributed to people who acquired the infection through heterosexual contact.
41. CIRCUMCISION AND RISK OF HIV SEROCONVERSION in the HIM COHORT OF HOMOSEXUAL MEN IN SYDNEY

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4National Centre in HIV Social Research, University of New South Wales, NSW, Australia.

Objectives: We examined circumcision as a risk factor for HIV seroconversion in a community-based cohort of homosexual men in Sydney.

Methods: Between 2001 and 2004, 1427 initially HIV-negative men were enrolled. Circumcision status was self-reported at baseline, and self-report was validated by clinical examination during study visits in a sub-sample of approximately 300 participants. All participants were tested annually for HIV and offered testing for other sexually transmitted infections (STIs). Detailed information on sexual risk behaviours was collected every 6 months.

Results: At baseline, 66% of participants reported being circumcised; mostly as infants. The proportion circumcised ranged from 83% in those aged 45 or more to only 50% in those aged less than 25 (p < 0.0001). There were 49 HIV seroconversions through 2006, an incidence of 0.80 per 100 person years (PY). Anorectal gonorrhoea and anal warts were independent risk factors for HIV infection. Overall, being circumcised was not related to HIV infection (relative risk (RR) = 0.99, 95% CI 0.45–2.06). After controlling for non-concordant unprotected anal intercourse (UAI), anorectal STIs and age, there remained no association with circumcision (RR = 0.88, 95% CI 0.45–1.74). Only nine of the 49 seroconversions occurred among men who reported no receptive UAI; an incidence of 0.53 per 100PY. In this group, circumcision was also not associated with HIV seroconversion (RR = 0.99, 95% CI 0.25–3.36).

Conclusion: Overall, circumcision status was not associated with HIV seroconversion. In addition, analyses limited to those men who reported no receptive UAI, who are more likely to have been infected through insertive sex, suggest that circumcision may not reduce HIV risk even for insertive anal intercourse. Other preventive strategies are required to reduce HIV incidence in homosexual men.

42. PILOT OF NON-INVASIVE (ORAL FLUID) TESTING FOR HIV WITHIN A COMMUNITY SETTING

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3Division of Immunology, Queensland Health Pathology Services, Royal Brisbane & Women's Hospital, Brisbane, Qld, Australia.
4Communicable Diseases Branch, Queensland Health, Brisbane, Qld, Australia.

An anonymous HIV surveillance study was conducted to determine the prevalence of HIV amongst patrons attending gay recreational venues, the level of undiagnosed HIV infection and to identify sexual risk behaviour associated with HIV positive, HIV negative and unknown serostatus.

427 men who have sex with men were recruited over a period of one week in various sex on premises venues and gay bars within the inner city of Brisbane. Oral fluid testing for HIV antibodies was undertaken using the Orasure collection system and assay. Each participant was invited to complete a brief behaviour questionnaire and submit an oral fluid specimen. Participants were also asked their HIV status. Surveys and specimens were linked using an anonymous numerical code. Surveys were analysed using Epi-info. Oral swabs were tested for the presence of HIV antibodies and any reactive specimens were confirmed using an Orasure western blot. Confirmed serology results were linked to reported sexual behaviours, testing patterns and HIV status. The results of this study - sexual and testing behaviour correlated with serostatus- and implications for HIV prevention programs will be presented. As well as that, discussions will be held regarding the community response to the project.
The World Health Organization’s Global strategy for the prevention and control of sexually transmitted infections (STIs): 2006–2015 highlighted the need for STI surveillance as a cornerstone for national programmes. Yet, in many countries of the world, little or no surveillance exists and, when it does, it is often clinical in nature. Much of the world’s resource-poor areas use the syndromic management approach, which includes a recommendation for periodic surveillance of antimicrobial resistance in Neisseria gonorrhoeae. It is also important to perform aetiological surveillance, to assess the common causes of the main STI syndromes, such as genital ulceration (GUS), male urethritis syndrome (MUS) and the vaginal discharge syndrome (VDS). This allows observation of trends and ensures that the drugs used in the syndromic management flow chart as still valid.

South Africa started to build a national microbiological and clinical surveillance programme in 2004. Prior to that, microbiological data came from surveillance among particular core groups, such as miners, that could not be extrapolated to the general population. 30 sentinel sites (primary healthcare facilities) were set up in each of the country’s nine provinces for the purpose of enhanced clinical surveillance. Data were collected on all the main syndromes in terms of episodes per year. At the same time, microbiological surveillance was initiated in the following provinces: the Northern Cape, Mpumalanga, the Western Cape and Gauteng. Plans are to conduct further surveillance in the Free State and possibly the Eastern Cape in 2007.

Within each province, one primary health care facility was chosen on the criteria of a large STI caseload and proximity to the laboratory doing the initial culturing of N. gonorrhoeae. Consecutive patients were recruited using informed consent and anonymous specimens collected. Patients were treated syndromically in the normal manner according to national STI management guidelines. Gonococcal isolates, obtained from men with urethral discharge, were tested for ciprofloxacin and ceftriaxone resistance using E Tests. In addition, swabs were collected from MUS patients and VDS patients for multiplex polymerase chain reaction (M-PCR) based testing for the following four pathogens: N. gonorrhoeae, Chlamydia trachomatis, Trichomonas vaginalis and Mycoplasma genitalium. Ulcer swabs were also tested by M-PCR for herpes simplex virus (HSV), Haemophilus ducreyi and Treponema pallidum. A separate PCR was used to test the extracted DNA for C. trachomatis L1–L3. Serum was taken from all participants and tested for syphilis (RPR plus TPHA), HSV-2 and HIV antibodies.

Key findings have confirmed the decline of chancroid to below 1% of genital ulcers and the predominance of genital herpes as the major cause of genital ulceration in South Africa. Gonorrhoea continues to be the major cause of urethritis in men and prevalence far exceeds Chlamydial infection. Approximately 10% of men with MUS are also infected/colonized with T. vaginalis. Only about one third of VDS cases appear to be caused by sexually transmitted pathogens. HIV infection rates exceed those recorded in the annual antenatal surveys and are highest among genital ulcer patients (70%). RPR seropositivity in non-ulcer patients is around 5% and antibodies to HSV-2 occur in about 50–60% of patients overall. The surveillance has also demonstrated alarming rises in the prevalence of ciprofloxacin resistant gonorrhoea since 2004.

43. MEASURING TRENDS IN STI SYNDROME AETIOLOGIES AND ANTIBiotic RESISTANCE PATTERNS: THE SOUTH AFRICAN EXPERIENCE

D. A. Levett
Sexually Transmitted Infections Reference Centre, National Institute for Communicable Diseases, South Africa.

The prevalence and aetiology of sexual transmitted infections (STIs) vary in different regions and have changed in recent years. In parts of South Africa the prevalence of genital ulceration syndromes (GUS) has increased while the prevalence of non-ulcer STIs like Chlamydia trachomatis and Neisseria gonorrhoeae have decreased. In response to this, an enhanced surveillance system was introduced in 2004 to collect surveillance data in 30 sentinel sites.

The surveillance data demonstrated a decline of gonorrhoea and an increase in the prevalence of Chlamydia. At the same time, ciprofloxacin resistance has increased from 2% to 15% of gonococcal isolates in South Africa. The surveillance system has allowed the monitoring of drug resistance patterns and the introduction of new syndromic management guidelines for the treatment of STIs.

Recent data from sentinel sites have shown an increase in the prevalence of syphilis, with seropositivity rates reaching 15% in some areas. The surveillance system has also been used to monitor the prevalence of HIV in the general population, with seropositivity rates reaching 20% in some sentinel sites.

The surveillance system has been instrumental in guiding the development of national STI control programmes and has allowed for the identification of emerging trends in STI aetiology and drug resistance. It has also allowed for the evaluation of the effectiveness of different syndromic management guidelines and the introduction of new interventions to control STIs. The surveillance system continues to play a critical role in the control of STIs in South Africa.

44. SEX AND SEXAGENARIANS

L. Dennenstein and J. Guthrie
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This paper will describe the sexual function of postmenopausal women in their seventh decade and contrast this with their sexual function some 13 years earlier when the women were premenopausal.

The presentation uses data obtained from the Melbourne Women’s Midlife Health project, a longitudinal population based study of women’s health. Australian-born women aged 45–55 and resident in Melbourne were eligible for the initial telephone interview. All those who were still menstruating and not using the oral contraceptive pill were invited to take part in a longitudinal study.

At follow-up, a similar proportion of the women had a sexual partner at mean ages of 51 (81%) and 63 (83%). A marked decline in sexual function was evident. The percentage of partnered women who became sexually inactive increased from 17 to 23%, the percentage who had sex less than once a week increased from 15% to 20%, while the percentage having sex more than once a week declined from 20% to 4%.

The presentation will describe the sexual function of partnered women aged 63–76 years, using the Sexual Encounter Questionnaire (SEQ). The SEQ is a self-completed questionnaire that provides information on the domains of sexual function, such as arousal, lubrication, desire, and orgasm. The presentation will describe the changes in sexual function over the 13-year period and contrast the sexual function of postmenopausal women with that of their premenopausal counterparts.

The presentation will also describe the relationship between sexual function and other factors such as age, menopause, hormone therapy, and chronic illness. The presentation will highlight the importance of longitudinal research in understanding the sexual function of older women and the potential impact of interventions to improve sexual function in this group.
Sexuality in older adults especially the sexual behavior of older women has been shrouded in discreet silence distaste and ignorance (Oppenheimer, 2002). Recent literature however has demystified sexuality and revealed that men and women continue to be sexually active well into old age. A recent study from US reported in the New England Journal of Medicine (Lindau et al. 2007) reports that 73% of those 57–64 age, 53% of those 65–74 years of age and 26% of those 74–85 years of age reported to being sexually active (defined as any mutually voluntary activity with another person that involves sexual contact, whether or not intercourse or orgasm occurs). In all groups, sexual activity for men was higher. It is interesting that 55% of all women and 13% of all men interviewed said “sex was not at all important”.

It is recognized that leading an active and fulfilling sexual life is related to physical health, ability to function sexually, availability of a partner and perceptions of self esteem and body image (Lindau 2007; Clarke 2006) (2, 3). Overalying all of these is the personal knowledge, attitude and perceptions of the role of sexuality and sexual behaviors in wellbeing.

With the ‘Baby Boomer’ generation coming of age as ‘Older Adults’, this presentation will explore whether the discourses of positive ageing have created the sexy ageless consumer as a personally and socially responsible citizen. Is the availability and apparent popularity of adult on-line dating for relationships; gyms and health fads for the healthy body; drugs and devices (sex toys such as the Eros clitoral device, and ben-wa balls); cosmetic treatments (Clarke 2006); and new surgical procedures for the body beautiful (Goodman et al. 2007) indicative of a need for assistance in sexuality? Or a use of the ‘Baby Boomer’ demographic bulge in the population as a marketing target?

References

46. INNOVATION AND DESIGN: IMPROVING CONTACT TRACING IN SEXUAL HEALTH CLINICS
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2 Gold Coast Sexual Health Clinic, Miami, QLD, Australia.

Contact tracing (CT) is an integral part of sexually transmitted infection (STI) management. Although routinely conducted in most sexual health clinics (SHCs), the methods used may vary. To improve CT required novel approaches.

First, we audited the outcomes of current contact tracing methods. A major finding of this audit was that while CT was routinely recommended, outcomes were poorly recorded. We developed a sticker to be placed in the chart of clients with a traceable STI. This indicated the number of contacts requiring notification, and how many had been notified and treated at our clinic. This enabled a standardised approach to CT records and improved ability to audit outcomes. It also focused clinicians on the need to ensure follow-up of CT and to offer assistance when CT had not been done.

Next, a brochure was developed to give to clients when diagnosed with a traceable STI. This brochure mentioned the reasons for contacting partners, dispelled some myths that have been found in previous studies about telling partners and provided ideas about how to tell partners.

In conjunction with this a SMS was developed, that could be sent to index cases; mobile phones, allowing them to forward the SMS to partners. It was seen as an ideal method for young people who frequently had mobile numbers of past partners but little other contact details. It was also able to be simple and quick.

The next step will be reauditing the CT outcomes once the SMS and brochure are in established use.

47. NON-CHLAMYDIAL NON-GONOCCOCCAL URETHRITIS – MANAGEMENT AND FOLLOWUP DILEMMAS
N. Edmiston and C. Ooi
Newcastle Sexual Health Clinic, Newcastle, NSW, Australia.

Aim: To audit the management of non chlamydial non gonococcal urethritis (NCNGU) for 2006.

Method: A clinic database search for cases of non-specific urethritis was conducted. Charts were reviewed and cases subsequently diagnosed with Chlamydia or gonorrhoea at the visit were excluded. One person reviewed the charts for diagnosis, microscopy, treatment, contact tracing and follow up.

Results: There were 38 recorded of cases of NCNGU. The mean age of cases was 28.8 years (SD 10.8), all were male;15.8% identified as MSM.

Microscopy was performed in 60.5% of cases and PMNLs were detected in 36.8% of all cases (63.6% of cases where microscopy was performed).

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Treatments were with azithromycin in 63.2% of cases, doxycycline in 28.9% of cases, tetracycline in 20.3% of cases, and no treatment was given in 8.4% of cases.

Patients with PMNLs on microscopy were significantly more likely to be treated with azithromycin than those without PMNLs on microscopy or with no microscopy done (93.8% vs 50.0%, p < 0.01, χ² test).
Contact tracing (CT) was recommended in 17 cases (55.3%) with confirmation of partner treated in 7 cases. There was no significant difference in contact tracing recommendation between those with PMNLs on microscopy and those without or microscopy not done (56.3% vs 36.4%, p = 0.2, z test).

Clinical follow up at the clinic occurred in 25 cases. 80% (95% CI 60.9–91.1%) of those followed up had resolution of symptoms, with the remainder having a recurrence or failure of resolution.

Discussion: NSU management should include antibiotic cover for possible undetected Chlamydia. Azithromycin was more likely to be used if PMNLs were detected. Chlamydia treatment occurred in all but two cases, with one of the two cases having had adequate treatment previously.

New Australian CT guidelines recommend CT M. genitalium but not for NSU. We would recommend CT current or most recent partners in all cases of NCNGU.

48. TREPONEMA PALLIDUM PCR: APPLICATION AND DIAGNOSTIC VALUE IN 2 CASES OF PRIMARY SYPHILIS

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Epidemics of infectious syphilis have been ongoing in large cities in industrialised countries since the turn of the millennium. These epidemics have almost exclusively involved homosexually active men, with a disproportionately high rate among HIV infected individuals. Genital ulcerative disease, including syphilis, has a strong correlation with onward transmission of viral and bacterial sexually transmitted infections.

Due to the lack of a culture system for Treponema pallidum, the causative organism of syphilis, other direct test methods are needed in the evaluation of skin lesions possibly due to syphilis. Dark ground microscopy was once commonly used by sexual health clinicians, but skills in this method have waned in recent years. Polymerase chain reaction (PCR) assays are being increasingly used in the diagnosis of infectious syphilis.

We describe the use of a nucleic acid amplification assay for Treponema pallidum, which targets the 47 kilodalton gene, in the diagnosis of primary syphilis in 2 patients with genital lesions. The first patient was an HIV infected man who presented with an ulcer typical of a chancre but who denied any recent risk behaviour. The second was an HIV negative homosexually active man with an atypical genital lesion. In both cases, Treponema pallidum PCR was positive and serology was consistent with the diagnosis of primary syphilis.

Conclusion/Recommendation: Appropriately validated Treponema pallidum nucleic acid amplification assays could replace dark ground microscopy and direct fluorescent antigen tests as a direct test for early infectious syphilis. It could be particularly useful in individuals who have treponemal skin lesions of atypical appearance.

49. SYPHILIS SCREENING PROFILE AT SEXUAL HEALTH CLINIC, ST GEORGE HOSPITAL & SUTHERLAND HOSPITAL

H. Tran, P. Konecny and C. Carmody
South East Sydney and Illawarra Health Service, Sydney, NSW, Australia.

A retrospective analysis was conducted to describe the cases of Syphilis identified and managed at Short Street Centre and The Sutherland Sexual Health Centre, in South Eastern Sydney and Illawarra Area, from January 2000 to June 2007. Syphilis serology is routinely offered as part of an STI screen to new and follow-up patients as appropriate. Information on the diagnoses, demographic and other variables was extracted from the clinical database Sexual Health Information Program (SHIP) and analysed in SPSS v11. Information on age, gender, relationship status, country of birth, presenting symptoms, stage of Syphilis, type of treatment and subsequent RPR levels were confirmed from patient records. An analysis of the relative frequency of the stages of Syphilis from over 130 patients will be presented and their relationship to a number of demographic and behavioural factors.

50. THE MANAGEMENT OF MEN WITH ACUTE CHLAMYDIA-NEGATIVE NON-GONOCOCCAL URETHRITIS: A LACK OF CONSENSUS AMONG AUSTRALIAN SEXUAL HEALTH PHYSICIANS

R. Teague1, C. K. Fairley1, D. Newton1, C. Bradshaw2, B. Donovan3, F. J. Bowden1, R. Cummings1 and M. Y. Chen1
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2Sydney Sexual Health Centre, Sydney Hospital, Macquarie St, Sydney NSW 2000, Australia.
3Canberra Sexual Health Centre, ACT, Australia.

Objective: In clinical practice, chlamydia-negative non-gonococcal urethritis (NGU) is a common but poorly understood condition. The purpose of this study was to determine how Australian sexual health physicians manage men with this condition.

Methods: In July 2006, a survey was mailed to all members of the Australasian Chapter of Sexual Health Medicine.

Results: Of 166 surveys mailed out, 111 (67%) were returned completed. The majority of sexual health physicians (73%, n = 81) indicated that they believed that female partners of men with acute chlamydia-negative NGU were at risk of adverse reproductive health outcomes. However, only 19% (n = 21) routinely tested men with acute NGU for pathogens other than Neisseria gonorrhoeae and Chlamydia trachomatis. Most commonly, this was for M. genitale (n = 16). While 68% of respondents believed that M. genitale was a cause of acute NGU, only 27% had access to testing
for this organism. Other pathogens that were sometimes tested for included herpes simplex virus, Trichomonas vaginalis, and adenovirus. Over half of sexual health physicians indicated that they would usually initiate notification of female sexual partners of men presenting with acute NGU, even before confirmatory test results were available.

Conclusion: There are substantial differences in how acute, chlamydia-negative NGU is managed by Australian sexual health physicians. In part, these may relate to differences in beliefs around which pathogens are responsible for this condition and the availability of testing for particular pathogens. Notification of female partners is commonplace, even though the underlying cause of urethritis in affected men appears to be poorly defined.

51. PATTERNS OF TREATMENT AND RESOURCE UTILISATION IN THE TREATMENT OF GENITAL WARTS IN AUSTRALIAN SEXUAL HEALTH CLINICS


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The introduction of the quadrivalent vaccine (HPV types 6, 11, 16, 18), GARDASIL, in the National HPV Vaccination program has the potential to eliminate a substantial proportion of the health burden of genital warts, currently the most common sexually transmitted viral disease in Australia. Although there are an estimated 10,000 cases per year managed through sexual health clinics in Australia, there is very limited data on treatment practices and resource use in this setting. A clinical audit was undertaken in five sexual health clinics in different states of Australia. A total of 500 cases (100 consecutive cases per clinic) were identified of patients aged 18 to 45 years with a first ever diagnosis of genital warts between 1 January 2004 and 31 December 2004. The average age of cases was 27 years for females and 31 years for males with 43% cases female. There was an average of 2.7 visits per case (range 1–22). Ablative measures (cryotherapy, laser or diathermy) were the most common form of treatment applied in 58% cases (mean per case = 2.4, range 1–16); topical treatments were prescribed in 44% cases (mean per case = 1.5, range 1–8) and topical treatments were applied by the health care provider in 22% cases (mean per case = 1.5, range 1–8). Additional analyses including type of treatment, variation in treatment practices by sexual health clinic and duration of cases will be presented.

This study confirms the considerable individual and clinical burden of this common disease.

52. THE AUSTRALIAN WOMEN'S HEALTH SURVEY: ASSESSING THE PSYCHOSOCIAL BURDEN OF HPV RELATED ILLNESS AND PREVENTIVE INTERVENTIONS


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There is increasing recognition of the psychosocial impact of cervical cytology screening programs as well as of the treatment of screening-detected human papillomavirus (HPV) - related disease. The HPV Impact Profile (HIP) includes 29 items with standard response categories representing nine psychosocial impact domains: "worries and concerns, emotional impact, sexual impact, self image, health perception, cognition, partner and social relations, interaction with doctors and sleep". Higher scores (0–100) are associated with higher disease burden. The HIP and other generic quality of life instruments such as the Sheban Disability Scale were administered to women who had experienced and were aware of an HPV related diagnosis in the past 3 months (total n = 333): 103 women with normal Pap test results (N. Pap), 111 with abnormal Pap test results (38 low grade squamous intraepithelial lesions (LSIL) and 53 high grade SIL (HSIL)), 80 women with biopsy confirmed cervical intraepithelial neoplasia (CIN) (36 CIN1 and 44 CIN 2/3) and 39 women with external genital warts (EGW). In univariate analyses, estimated HIP scores (95% CI) were lower for N. Pap than for all other groups (p = 0.0001). N. Pap: 25.8 (22.6–29.0); LSIL: 38.9 (34.6–43.1); HSIL: 41.7 (37.2–46.2); CIN1: 41.7 (36.3–47.1); CIN 2/3: 46.6 (41.6–51.5) (p = 0.013 vs LSIL). EGW: 44.6 (39.4–49.8). The effect was maintained after adjusting for age, race and occupation.
On the Sheehan scale, CIN 2-3 and EGW demonstrated increased interference with work and social activities. Results demonstrate: a) HPV infection and disease are associated with significantly increased psychosocial burden, beyond that of the Pap test experience; b) The HIP instrument can adequately distinguish between different HPV conditions; c) Despite their non life threatening nature, the psychosocial impact of genital warts is similar to that of potentially life threatening high grade cervical lesions.

53. GENITAL WARTS AND ASSOCIATED HEALTH CARE USE IN GENERAL PRACTICE IN AUSTRALIA

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The introduction of the quadrivalent vaccine (HPV types 6, 11, 16, 18), GARDASIL, in the National HPV Vaccination program has the potential to eliminate a substantial proportion of the health burden of external genital warts (EGW), currently the most common sexually transmitted viral disease in Australia. Approximately 60% of cases of EGW are managed in general practice. In this study both new and existing EGW cases were identified in the BEACH (Bettering the Evaluation and Care of Health) database from April 2000 to September 2006. Extrapolating to the Australian population, there are approximately 34,000 new cases of EGW each year managed in general practice, accounting for 96,000 GP visits. Incidence extrapolated from new cases showed a peak in females in the age groups 15–19 and 20–24 years (5.6 and 6.6 per 1000 annually respectively) and a later peak in males in the age group 20–24 and 25–29 years (4.8 and 5.7 per 1000 respectively). Ablative therapies were the most common form of treatment applied at 33–40% visits for females and 30–64% visits for males (new and repeat visits respectively). Topical medications were prescribed in ~14% of cases. Assigning average costs, the direct health care costs, including GP visits, medications, other treatments and referrals, are at least ~$290 per case.

This study confirms the considerable individual and clinical burden of this common disease.

54. CAPITALISING ON THE UNIQUE OPPORTUNITY OF THE HPV VACCINE, FOR A CERVICAL SCREENING PROGRAM

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The medical advancement of the human papilloma virus (HPV) vaccine and it’s swift addition to the National Immunisation Program, caused a sudden surge in the public’s awareness and interest in HPV. The challenge was capitalising on the unique opportunity that the vaccine created.

PapScreen pre-empted that the vaccine would have a huge impact on the current program, and undertook an educational journey to identify issues. The program sought expert opinions, formulated new partnerships in the immunisation sector and examined the current research.

The challenge was capitalising on the unique opportunity that the vaccine created.

Developing and implementing strategies quickly was paramount in the program’s success on capitalising this interest. Across three main areas – community, communications and research – the program implemented a range of strategies, including new resources, media opportunities, formative research and education, among others. PapScreen’s aim was to remain the prime source of information for the prevention of cervical cancer in Victoria.

The success of these strategies has been profound and immunisation messages are now included in all program messages across a range of sectors.

55. HIGH EFFICACY OF A HPV-16/18 L1 VIRUS-LIKE PARTICLE (VLP) VACCINE ADJUVANTED WITH AS04 AGAINST CIN2+ CAUSED BY HPV-16/18 INFECTION IN A BROAD POPULATION OF YOUNG WOMEN

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Objectives: Previous studies with the HPV-16/18 L1 VLP AS04 vaccine have shown 100% efficacy against HPV 16/18 associated persistent infection and CIN in women with no previous exposure to oncogenic HPV. This interim analysis of a phase III, randomized, controlled trial
assessed vaccine efficacy against HPV 16/18 associated CIN2+ and persistent infection with oncogenic HPV types in a broad population of women.

Methods: Healthy women, aged 15–25 years, with ≥6 sexual partners and no previous colposcopy were eligible and were randomly allocated to 3 doses of HPV or hepatitis A (control) vaccine at 0, 1, 6 months. Serum antibodies for HPV 16/18 were assessed by ELISA. HPV DNA was detected by PCR on cervical cytology and biopsy. Vaccine efficacy was assessed in women who received at least one vaccine dose, had normal or low-grade cytology and were HPV 16/18 sero- and DNA negative at entry. Additional analyses were undertaken to assess causality where multiple HPV types were present. Immunogenicity was evaluated in a subset of women and safety was assessed in the entire vaccinated cohort.

Results: 38259 women from Asia Pacific (34%), Europe (34%), North (16.5%) and Latin America (14.9%) were enrolled. 38252 were included in the cohort for vaccine efficacy analysis. Mean age was 20 years and mean follow up 15 months from dose 3. Most HPV 16/18 infections were detected prior to dose 3 in this analysis. Of 23 CIN2+ lesions associated with HPV, 16/18, 14 contained multiple oncogenic HPV types: three showed no preceding infection or E4 gene expression for the relevant HPV vaccine type. Vaccine efficacy according to HPV DNA detected in the lesion was 99.4% (95% CI 53.4–99.3), after additional analyses for causality assignment, efficacy was 100% (95% CI 74.2–100). Cross-protection against 6-months infection with HPV-45, -31, -52, and broad protection against 12-month persistent non-16/18 oncogenic HPV infection was also demonstrated. Seroconversion was 99.5% after dose 2 and 3. Safety profiles were comparable between groups.

Conclusions: In a broad cohort of women, high vaccine efficacy was observed against CIN2+ caused by HPV-16/18.

56. TAKE THE SEX OUT OF STI SCREENING! VIEWS OF GPS AND YOUNG WOMEN ON IMPLEMENTING CHLAMYDIA SCREENING IN AUSTRALIA

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In-depth face to face interviews were carried out with a randomly selected sample of 20 General Practitioners (GPs) and 24 young women from across Victoria. We aimed to determine the attitudes of GPs and young women to chlamydia screening; what systems and education would be required to support chlamydia screening in general practice in Australia and in particular to explore how young women feel about being asked to test for chlamydia when they attend a GP for any reason.

Both GPs and young women accept age-based screening for chlamydia and screening during a sexual health related consultation in general practice. Both feel that a large scale public education program, encompassing the high prevalence of chlamydial infection in young people in Australia, the asymptomatic nature of infection and the potential consequences of untreated, will be essential in ensuring the success of a chlamydia screening program in Australia. For the women, trust in their GP was a major factor in the acceptability of chlamydia screening. They also felt chlamydia screening should be offered to all young women rather than targeted at “high risk” women based on sexual history and they particularly emphasised the importance of normalising chlamydia screening. Women were clear that they did not want to be asked to provide a sexual history as part of being asked to have a chlamydia test. This finding has not been widely published in the literature and is worthy of comment. There is considerable evidence suggesting that GPs also regard sexual history taking as a barrier to STI testing in general practice.

Chlamydia is a STI and notification and treatment of sexual partners is important. Understanding these concepts promotes young women’s acceptance of chlamydia screening. However, is a detailed sexual history really an important precursor to a chlamydia test? Our study suggests may be not.

57. GENOTYPING OF UROGENITAL CHLAMYDIA TRACHOMATIS IN REGIONAL NEW SOUTH WALES, AUSTRALIA

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Background: Chlamydia Trachomatis is one of the most common sexually transmitted infections in Australia and worldwide. This study was undertaken to map the frequency of Chlamydia genotypes in regional New South Wales (NSW) Australia, to explore the potential utility of genotype analysis in defining local sexual networks, and to investigate whether patterns of genotype frequency are correlated with demographic factors, including age and gender.

Methods: We studied 204 urine samples infected with Chlamydia trachomatis, as determined by PCR analysis using the COBAS Amplipcr system. Samples were collected from wide geographic area of regional New South Wales (Hunter, New England, Northern Rivers, South Eastern New South Wales). Sequencing and genotyping were performed after nested PCR of the omp1 gene.

Results: Genotype E was found in 42.6% of infections, with genotypes F (23.5%) and G (16.7%) other common causes of infection. Mixed infection occurred in only 3 cases. There was no significant difference in genotype frequency based on gender or geographic location. There was a
significant difference in gender frequency based on patient age, with older patients significantly more likely to demonstrate infection with genotype G (mean age (years) 23.7+/-7.29 ad, E: 21.7+/-5.7 ad, G: 28.9, ad 10.18, p = 0.022).

Conclusions: There was no significant difference in genotypic frequency in the various regions of New South Wales, suggesting genotype analysis is of limited use in defining sexual networks in regional NSW. The finding of a higher frequency of genotype G in older patients raises the possibility that genotypic variation may be driven by immune responses to genotypes that occur more frequently at a younger age. These results may have implications for the future design of a chlamydial vaccine.

58. CHLAMYDIA SCREENING OF ANTENATAL WOMEN IN MELBOURNE BETWEEN 16–25 YEARS

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Objective: Routine chlamydia screening of pregnant women is not widely practiced in Australia and limited data are available on the prevalence of infection in this population. This cross-sectional study sought to determine the prevalence of genital chlamydial infection among pregnant women aged 16–25 attending antenatal clinics in Melbourne.

Methods: Consecutive women attending 4 major maternity services covering northern, western, eastern and south-eastern Melbourne were approached between October 2006 and May 2007. Of 931 eligible women (those aged 16–25) who had not already been tested for chlamydia, attending the clinics at the time of recruitment, 882 (95%) were approached and 845 (96%) agreed to participate. Participants completed a questionnaire which was translated into Chinese, Vietnamese and Arabic, and provided first-void urine which was tested for C. trachomatis using polymerase chain reaction.

Results: Eighteen percent of women had a preferred language other than English. Of the 826 tests which were non-assessable, 30 were positive representing a prevalence rate of 3.6% (95% CI: 2.5-5.1%). However, among women aged 16–20, 14 of 203 women were infected, representing a prevalence rate of 6.9% (95% CI: 3.8–11.3%). All infected women received treatment with azithromycin and all who have had repeat chlamydia tests to date have been negative.

Conclusion: In this study of a wide cross-section of pregnant Melbourne women, chlamydial infection was common, particularly among teenagers. Screening was highly acceptable, with the great majority of women approached agreeing to be screened.

59. PATIENT DELIVERED PARTNER THERAPY FOR CHLAMYDIAL INFECTION: WHAT WOULD BE MISSED?

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The number of contacts of STIs who are tested and treated is generally low. Patient delivered partner therapy (PDPT) has been proposed in order to increase the number of sexual partners of the index case that are treated. PDPT does not require the contact to be clinically assessed and tested. We sought to determine whether PDPT for chlamydial infection would result in missed diagnoses of other STIs or of the complications of chlamydial infection.

The Sydney Sexual Health Centre database was accessed to identify patients who presented as contacts of chlamydia and chlamydia associated conditions and to determine whether other STIs were diagnosed at the time of presentation. Those who were contacts of more than one bacterial STI or HIV were excluded. In the 3 years from June 2003 to June 2006, 626 individuals presented as contacts of chlamydia, NGU or PID. Of these, 212 (34%) tested positive for Chlamydia trachomatis by PCR. Of the 442 heterosexual patients, 36% had chlamydial infection diagnosed. Of the 104 men who had sex with men (MSM), 29% had chlamydial infection diagnosed. Of the heterosexuals who presented as contacts, 13 were diagnosed with other bacterial STIs or complications of chlamydia. Of these, 2 women and 2 men had gonococcal infection (9.9%), 1 woman had syphilis of unknown duration, 6 women (5%) were diagnosed with PID and 2 men (0.8%) with epididymitis. Of the MSM, 9 (19%), were newly diagnosed with HIV infection, 15 (8%) with gonococcal infection and none with syphilis.

PDPT would result in a missed opportunity to diagnose other STIs in MSM. In heterosexuals a small number of cases of PID and epididymitis would be inadequately treated and a small number of gonococcal infections would be missed.
60. THE RIGHT THING TO DO: PATIENTS’ VIEWS AND EXPERIENCES OF TELLING PARTNERS ABOUT CHLAMYDIA


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Partner notification for patients diagnosed with chlamydia is recommended to assist in controlling the increasing incidence of this often asymptomatic but treatable infection. Few studies, however, have ascertained the views on partner notification from those who are often expected to perform it – the individuals who have been diagnosed with chlamydia. As part of a larger combined qualitative-quantitative methods study of partner notification, 40 in-depth telephone interviews were conducted with people diagnosed with chlamydia from clinics in Victoria, ACT and Queensland. Reactions to chlamydia diagnosis, as well as reasons for, and feelings about, telling their sexual partners about this infection were explored. Common reactions to initial diagnosis were surprise, shock and shame, as well as relief about being able to put a name to symptoms. Many spoke of relief on learning the condition was treatable. Both men and women commonly saw partner notification as a social duty, and cited concerns about their own health and the health of others as a reason for telling partners and ex-partners about the diagnosis. An infrequent reason offered for partner notification was to confront a partner to clarify fidelity. Reasons for not contacting a partner were typically fear of reaction, or a lack of contact details. Although participants reported sexual partners exhibiting a variety of reactions when told of the diagnosis, results showed that for almost everyone, the experience of notifying their partner was better than they had expected. Views about taking antibiotics to the partner varied according to the currency of the relationship, with some feeling it could be offered as appeasement, and others feeling it might be seen as intrusive. Overall, the findings from this study suggest that partner notification by people diagnosed with chlamydia is achievable, with many of these results likely to be transferable to other settings.

61. GP PERSPECTIVES ON PARTNER NOTIFICATION FOR CHLAMYDIA

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As part of a larger, combined qualitative-quantitative study of partner notification, 40 semi-structured in-depth telephone interviews were conducted with General Practitioners (GPs) from Victoria, ACT and Queensland, who had diagnosed at least one case of chlamydia in the last year. Rural doctors and those who had experience working with Aboriginal patients were over-sampled to ensure their views were represented in the study. The interviews explored GPs’ current practices with regard to partner notification for chlamydia, barriers they perceived to partner notification for chlamydia in the general practice setting and what resources/incentives they felt would improve partner notification for chlamydia. The GPs in our study primarily ask the index patient to carry out partner notification themselves. It was relatively rare for GPs to have experience of notifying partners on the patient’s behalf. Half of the GPs report that they only encourage notification of the patient’s current/immediate past partners. There was considerable confusion amongst the GPs interviewed as to the role of government partner notification officers. Many thought that support from a government agency would allow partner notification to occur more effectively. Some were under the impression that this process is automatically activated when they “notify” that they have diagnosed someone with chlamydia. Some of the main barriers perceived include confusion about issues of privacy and confidentiality with regard to partner notification and the sense that there is a lack of clarity as to what is expected of them in terms of partner notification for chlamydia. Most GPs feel that access to decision support tools and clear guidelines would be helpful. Financial incentives for doing partner notification were seen as particularly important to fund allied health workers’ time rather than to pay GPs themselves e.g. for practice nurses and Aboriginal health workers. GPs were enthusiastic about computer based resources to aid in partner notification.

Abstracts
62. SEXUAL COMPETENCE AT FIRST SEXUAL INTERCOURSE: FACTORS ASSOCIATED WITH SEXUAL COMPETENCE IN A SAMPLE OF NEW ZEALAND TERTIARY STUDENTS

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It has been proposed that the manner in which people experience their first sexual intercourse has implications for the development of subsequent sexual health. Sexual competence, as utilized by the UK NATSAL 2000 Study, was defined as being willing and autonomous, lacking regret, not being intoxicated, and using a reliable method of contraception.

This study explored the construct in an opportunistic sample of 247 students at Otago University and Otago Polytechnic in 2006. Participants were aged between 17 and 21, and completed a self-report questionnaire. Data suggested that, of the 85% who reported having had sexual intercourse, the mean age of first sex was 16 years old. Seventy percent had not decided to have sex or discussed its occurrence with their partners prior to the event. Sexually competent first sexual intercourse was more likely with females than males, was more likely to occur the older they were at the time, was associated with more positive affective responses, and was associated with higher levels of sexual and emotional satisfaction.

The manner in which sexual competence at first sexual intercourse was associated with subsequent sexual satisfaction and sexual health will be explored.

The implications of these findings will also be discussed in terms of how sexual health promotion interventions should be developed, with particular focus on the age and circumstances under which young adults first experience sexual relationships.

63. A FEMINIST EXPLORATION OF WOMEN’S EXPERIENCES OF HAVING A SEXUALLY TRANSMITTED INFECTION

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Background and objectives: Sexually transmitted infections (STIs) affect millions of people worldwide and are capable of causing significant physical and psychological harm to individuals and communities. Although STIs can affect any sexually active individual they have more severe consequences for women compared to men, and are capable of causing infant death, infertility, and reproductive cancer. Despite the increasing prevalence of STIs, issues associated with the mental health consequences of these infections remain largely unexplored. However, the negative impact on self-esteem and the stigma associated with STIs have been identified as important factors affecting the psychological wellbeing of individuals.

This study aims to explore women’s experiences and perceptions of having an STI from a feminist perspective. This paper will present initial findings.

Methodology: This study utilised a feminist methodology. Data was obtained through qualitative open-ended interviews with the women participants either in person or online and all data was subjected to feminist narrative analysis.

Results and conclusion: Data collection and analysis is in progress at the time of abstract submission. It is anticipated that preliminary results will be presented at this sexual health conference. Initial analysis has revealed that stigma, condom negotiation, self-blame, and acceptance/empowerment are major themes within the women participants’ stories. This research will contribute to the existing body of literature and provide information to facilitate appropriate care provided by healthcare personnel through gaining insights and understanding into the needs of these women.

64. DOES CIRCUMCISION MAKE A DIFFERENCE TO THE SEXUAL EXPERIENCE OF GAY MEN? FINDINGS FROM THE HEALTH IN MEN (HIM) COHORT

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The relevance of circumcision in preventing HIV male-to-male sex transmission is poorly understood, in particular because any potential effect could be obscured by sexual practice as a mediating or confounding factor.

Using data from the Health in Men (HIM) cohort of 1426 HIV-negative homosexually active men in Sydney, we compared the sexual practices and sexual experiences of circumcised and uncircumcised men. After adjusting for age and ethnicity, we found no difference between circumcised and uncircumcised men in anal sexual practices, difficulty using condoms, or sexual difficulties (e.g. loss of libido). Among the circumcised men, we compared those circumcised at infancy (n = 81) with those circumcised after infancy (n = 854) with those uncircumcised after infancy (n = 81). The majority cited phimosis (i.e., an inability to fully retract the foreskin) and parents’ decision as the main reasons for circumcision after infancy. After adjusting for age and ethnicity, men circumcised after infancy were more likely to practise receptive anal sex (88% vs 75%, p < 0.05) and to experience erection difficulties (52% vs 47%, p < 0.05), but less likely to practice insertive anal sex (79% vs 87%, p < 0.05) and to experience premature ejaculation (13% vs 23%, p < 0.05) than those circumcised at infancy.
Our data suggest that overall circumcision status does not affect HIV-negative gay men’s anal sexual practices, experience of condom use or likelihood of sexual difficulties. However, there is some suggestion of differences between circumcised men depending on the age at circumcision.

65. CIRCUMCISION STATUS AND RISK OF SEXUALLY TRANSMITTED INFECTIONS IN THE HIM COHORT OF HOMOSEXUAL MEN IN SYDNEY, AUSTRALIA

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Objectives: To examine circumcision status as an independent risk factor for prevalent and incident sexually transmitted infections (STIs) in the community-based Health in Men (HIM) cohort of homosexual men.

Methods: Between 2001 and 2004, 1427 initially HIV-negative men were enrolled. Circumcision status was self-reported at baseline and validated by clinical examination in a sub-sample of participants. All participants were tested annually for HIV and offered testing for other STIs including nucleic acid amplification tests (NAAT) for urethral gonorrhoea and chlamydia, and serology for syphilis and herpes simplex virus (HSV). Demographic information and past history of STIs was collected at baseline and detailed information on sexual risk behaviours was collected every 6 months. At annual face-to-face visits, participants reported diagnoses of STIs made in the previous 12 months.

Results: At baseline, 66% of participants reported being circumcised, mostly as infants. Uptake of STI testing was high with over 90% of participants tested each year. On multivariate analysis, controlling for age and sexual risk behaviour, circumcision was not associated with baseline seropositivity to syphilis (p = 0.34), HSV1 (p = 0.33) or HSV2 (p = 0.92), nor with a history of self-reported genital warts (p = 0.18). There was also no association with incident bacterial urethral infections (p = 0.67) or HSV-2 (p = 0.89) for gonorrhoea and chlamydia, respectively, self-reported incident genital warts (p = 0.35), incident HSV1 (p = 0.70) or incident HSV2 (p = 0.36). However, circumcision was associated with a significantly reduced risk of incident syphilis after controlling for age, number of casual partners in the previous 6 months and unprotected anal intercourse according to partners’ HIV status (HR = 0.35, 95% CI 0.14–0.87, p = 0.024).

Conclusion: Circumcised men had a reduced risk of incident syphilis in this cohort. Although most STIs were not associated with circumcision, these data suggest that circumcision may have an effect on syphilis acquisition in homosexual men.

66. M´ENAGE A TRIORS: SEXUAL HEALTH, SEXUAL ASSAULT AND FORENSIC MEDICINE

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Objectives: Small jurisdictions often require clinicians to work in more than one specialty. The aim of this paper is to explore the commonalities between sexual health, sexual assault and forensic medicine that make this possible.

Methods: Exploration of (1) common attributes of clinicians who provide these services, (2) characteristics of the client groups, (3) administrative aspects and (4) gains for participating clinicians.

Results: Clinicians in all three specialties practice within a public health model of care, have a good understanding of confidentiality, sexual wellbeing, other intimate concerns and social justice issues. They have experience working with non-medical groups and are experienced in teaching students and non-clinicians.

Clients attending all three of services are commonly victims, vulnerable, marginalised, poor and less able to access traditional medical services. They commonly exhibit high-risk behaviours pertaining to sex and drug and alcohol use. Administrative systems commonly found in sexual health centres such as independently held and secured files and coded filing systems and protocols and practices concerning confidentiality and appropriate interactions with other services allow clinical forensic medicine to be easily incorporated.

Clinicians gain from participating in these services by refreshing and developing specialist skills in the management of simple injuries, acute drug and alcohol withdrawal and in the law (forensic evidence collection, minors and custody issues).

Conclusions: The similarities between the practice of sexual health, sexual assault and forensic medicine make the transition between the specialties smooth and relatively easy. Indeed the practice of one enhances the other two for clients and clinicians alike.

67. HIPPOCRATES APPRENTICES ON EARTH: MEDICAL STUDENTS EXPERIENCES AND CONSENT FOR VAGINAL EXAMINATIONS OF ANAESTHETISED PATIENTS

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Vaginal examinations (VEs) are an essential sexual health examination skill. Reports of students having difficulties getting experience with VEs are matched by reports of patients being examined without consent. This study prospectively aimed to find out what was happening when medical students sought consent for VEs of anaesthetised patients.
All 66 2005 5th year medical students at OU, WSM & HIS were asked to prospectively complete a 14 item questionnaire about their experience of gynaecology operating sessions. Chi-squared test determined significance.

Student response rate was 78%. 141/184 patients were asked if the student could attend the operation. Students asked 101 patients. Consultants were more likely ask on the student’s behalf for males than females. \( p > 0.001 \).

All male students sought consent within 2 hours of operations. Some female students sought consent 5 or more hours beforehand, a significant gender difference \( p > 0.001 \).

Five patients declined student attendance at their operation. When asked 96 patients \( (86.6\% + 3.4\%) \) agreed and 16 \( (13.3\% + 3.4\%) \) declined permission for the student conducting a VE under anaesthesia, with no statistical gender difference in refusal rate.

VEs were done on 82 patients, including 2 without consent. In 19 instances a student had consent but no examination was done. Eleven students \( (3 \text{ male}, 6 \text{ female}) \) did no examinations.

The value of the examination for student learning was rated \( \frac{4}{5} \) by 73% students: with no statistical difference by gender or age.

The implications of these findings for teaching sexual health skills to medical students are discussed.

### 68. SEXUALLY TRANSMITTED INFECTIONS [STIs] AND PREGNANCY

- **S. Garland**
  - Director of Microbiological Research and Director of Clinical Microbiology and Infectious Diseases, Royal Women’s Hospital, VIC, Australia.
  - Professor, Department of Obstetrics & Gynaecology, University of Melbourne, Melbourne, VIC, Australia.

Routine antenatal screening tests currently recommended in Australasia and endorsed by the Royal Australian and New Zealand College of Obstetrics and Gynaecology (RANZCOL) include rubella, varicella-zoster, group b streptococci (GBS), asymptomatic bacteriuria, as well as the following STIs: *Treponema pallidum* (syphilis), Human immunodeficiency virus (HIV), Hepatitis B virus (HBsAg), *Chlamydia trachomatis* (adolescent pregnancies) and oof of hepatitis C virus (HCV).

Infections can infect the foetus or neonate by various routes (intrauterine, intrapartum and/or postnatal) and cause potentially serious disease. Such infections in the mother may be mild or commonly subclinical, yet can result in miscarriage, preterm birth, foetal damage, or even death, depending on the pathogen and stage of pregnancy. Consequently, diagnoses should be made definitively by instituting appropriate laboratory tests to ensure effective treatment and follow-up of the woman and her infant, as well as her contact(s). Specific treatment of the mother, where applicable, can prevent most of the impact on the fetus and newborn. The principles for the use and choice of screening tests are (1) if maternal infection occurs, there is a significant risk of fetal or neonatal infection and damage, or other adverse pregnancy outcome; (2) there are sensitive, specific, and inexpensive screening and confirmatory tests; (3) there is a safe, effective intervention and/or treatment regimen which can reduce morbidity and mortality in the fetus and/or the mother.

### 69. LABORATORY CONTRIBUTION FOR CONTROL OF CHLAMYDIA

- **S. Tahiri**
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Infection with *Chlamydia trachomatis* may present a wide spectrum of clinical symptoms in patients. Diagnosis based on presenting symptoms however may be of limited value in asymptomatic patients. Therefore, laboratory tests are utilized, in particular nucleic acid amplification technology (NAAT)-based assays. In the recent years, NAAT testing has improved diagnosis of chlamydia to a great degree. The increased sensitivity of NAAT assays has also allowed for better detection of chlamydia in extragenital samples, diagnosis of lymphogranuloma venereum and has made the use of non-invasive self-collected samples possible. Chlamydia genotyping and sequence based comparisons are also increasingly being used in investigation of types present in the population as well as providing possibility of differentiating a new infection from re-infection. Such methods continue to play a major role not only in patient diagnosis but also in epidemiology and public health.

### 70. A NEW SPIN ON “FOOTY TRAINING” – TAKING SEXUAL ASSAULT TALKS TO THE AFL

- **A. Williams**
  - Victorian Institute of Forensic Medicine, Melbourne, VIC, Australia.

RESPECTFUL BEHAVIOURS: PEOPLE IN SPORT – ADULT SEXUAL ASSAULT – was a presentation that was developed by Dr Angela Williams and Patrick Tidmarsh in conjunction with the Statewide Steering Committee to Reduce Sexual Assault, (established by the Chief Commissioner of Police in Victoria, Christine Nixon), to address the issue of sexual assault in the broader community. The education package was the first element to be implemented of a broader policy to be announced later this year.

The package was designed to best educate men in our community whilst identifying specific needs of AFL elite players. It aimed to air the topics of sexual assault, violence against women and respectful behaviours. The education package was delivered to every club from May through to August 2005.
Education of our community on these issues is extremely important and essential to cultural change. This discussion will address one effective way of educating our community as it looks more specifically at educating men on these topics.

Style and content of education package
What the education package covers
Identifiable risk factors and scenarios
Assessments and evaluations
WHERE TO FROM HERE?

71. IS VULVAL CANCER PREVENTABLE?

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The incidence of vulval cancer is increasing especially in women under 50 years where the proportion of cases has doubled in the past 25 years. There are two forms of vulval cancer. The first is seen in younger women and is associated with high risk HPV infection (vulval intraepithelial neoplasia, VIN) and has many similarities with cervical cancer. The second is non-HPV related, seen in older women with chronic skin scarring, most commonly in long standing lichen sclerosus.

The changing prevalence, clinical features, natural history and the influence of treatment on the precursor lesions will be presented.