

# "STI: Obstacles and Chalenges"



## 16th INTERNATIONAL UNION AGAINST SEXUALLY TRANSMITTED INFECTIONS (IUSTI)

ASIA PACIFIC CONFERENCE MAY 4 - 6, 2010 BALI INDONESIA

Bali International Convention Centre The Westin Resort, Nusa Dua, Bali

Table of Content	1
Velcoming Message IUSTI 2010	2
Executive Comitte Members	-
usti Asia Pacific	-
Drganizing Comitte	
General Information	
Map and Stand Lay Out	14
Scientific Program IUSTI 2010	20
_egend to Abstract	28
Plenary Lecture Abstracts	29
Symposium Reproductive Tract Infrection Abstracts	36
Symposium Abstracts	<b>46</b>
Joint Symposium WHO (WHO-CDC) Abstracts	79
Norkshop Abstracts	86
Spesial Lecture Abstracts	106
Dral Presentation Abstracts	108
Poster Presentation Abstracts	130
Acknowledgement	212

TABLE OF CONTENT

#### WELCOME MESSAGE FROM THE ORGANIZING COMMITTEE

Dear colleagues,

It is our pleasure to welcome you and have you here at the 16th International Union Against Sexually Transmitted Infections (IUSTI) Asia Pacific Conference. This conference is brought to you by the IUSTI Asia Pacific region in conjunction with the Indonesian Society for Dermatology and Venereology (PERDOSKI). The theme of the conference, "STI: Obstacles and Challenges", aims to promote, develop and advance education, research and care of sexually transmitted infections (STI). It also offers exchange of information between physicians and health professionals in the field of STI.

The 16th IUSTI Asia Pacific Conference will address the need of new ideas and strategies to overcome obstacles and challenges in STI with a scientific program that covers the latest topics on STI. We would like to thank all the speakers who have kindly accepted our invitation to share their experience and knowledge with us. In addition to a full scientific program, we also offer you the opportunity to visit breath-taking sights and enjoy the hospitality of the island of Bali. We wish all speakers and delegates a wonderful stay in Bali and enjoy the conference.

Sincerely yours,



Dr. Titi Lestari Sugito, Sp.KK(K) General Chairman



Prof. Dr.Sjaiful Fami Daili, Sp.KK(K) Chairman of IUSTI Conference

### WELCOME MESSAGES



### Message from the Regional Director, IUSTI Asia Pasific and Branch Chairman, IUSTI Asia Pasific

### Dear Colleagues,

It is a great pleasure to welcome you to the 16th IUSTI Asia Pacific Congress. IUSTI Asia Pacific is the largest of five branches of the International Union against Sexually Transmitted Infections and was founded in 1975. The parent organization was founded in 1923 as the International Union against the Venereal Diseases and Treponematoses (IUVDT), and admitted into official relations with the World Health Organization in 1948. It remains on the roster of the United Nations Economic and Social Council.

For the 16th Asia-Pacific Congress we have tried to build on the evolving and successful models of previous regional Congresses, which aim to deliver high quality local and regional content, scientific updates of an international standard, and training modules for local health-care providers. We are very grateful to local, regional and international colleagues for the latter part of the program. We have tried to add current, challenging, and often controversial issues facing the egion. For example, the themes of gender, sexuality and youth address the difficult issues of female empowerment, men who have sex with men (MSM), and adolescents.

As is customary, world bodies such as WHO and CDC have contributed to our scientific programme, including a satellite session that addresses the growing resistance of gonococci to antibiotics.

Most of all, we wish to acknowledge a very close and collaborative relationship we have had with the local organizing committee, unparalleled in our experience.

We hope you enjoy the sessions, make many new friends, take in the beauty and culture of Bali, and come to future meetings of IUSTI-Asia Pacific.





Dr. Brian P Mulhall Chairperson IUSTI Asia pasific



**Prof Roy Chan** Regional Director IUSTI Asia Pasific

### **IUSTI Excecutive Committe Members**

#### Greetings,

I am pleased to welcome you to the 16th IUSTI Asia Pacific Conference in beautiful Bali. Indonesia is rich with culture and tradition. I encourage you take some time to enjoy the great food, beautiful art and lively entertainment available here.

Prevention and correct diagnosis and treatment of sexually transmitted infections are essential components of improving global health. Through meetings such as this we can share our knowledge and broaden our understanding of the interrelatedness of STIs, regional culture, and global health. Advances in science and technology, and in clinical and public health approaches, remain essential to effective control of STIs.

The meetings organizers have assembled leading scientists in the fields of STI and HIV/AIDS and hope the workshops on diagnostics, prevention, treatment, and vaccines are exciting, enlightening, and helpful. For example, our special WHO/CDC symposium on gonnoccal antimicrobial resistance brings perspectives from all over the world on confronting this emerging threat.

We hope this gathering will provide you with new insights, collaborations and hope for the future of STI research as well as the health of the world.



Prof. King K Holmes IUSTI President 2009-2011

### **IUSTI Excecutive Committe Members**

This international STDs/AIDS Diploma Course was established since 1991 through the collaboration of a variety of Thai training institutes for STDs/AIDS. Nowadays, there were at least 374 alumni graduated from the course. The course aims to provide medical practitioners with an opportunity to gain sound knowledge and achieve a high level of competence in STDs and AIDS through both theoretical and practical training. The course covers a syllabus to diploma level, with emphasis on clinical experience and laboratory correlation.

Consortium of Thai Training Institutes for Sexually Transmitted Diseases and AIDS (COTTISA) was established in 1996 with the collaboration of nine medical centers: Bangrak Hospital, Bamrasnaradura Institute (HIV Hospital), Central Chest Hospital, Chulalongkorn Hospital, King Phramongkut Hospital, Queen Sirikit National Institute of Child Health, Ramathibodhi Hospital, Siriraj Hospital, and Sonklanagarind Hospital. At present, the secretary of COTTISA and deputy course director is Assoc. Prof. Dr. Verapol Chandeying, Prince of Songkla University: E-mail: verapol.c@psu.ac.th while the course director is Dr. Chavalit Mangkalaviraj, Bangrak Hospital, South Sathorn Road, Bangrak, Bangkok 10120 Thailand, E-mail: chavalit@cottisa.org

This year, the 20th STDs/AIDS Diploma Course will be conducted during 2-26 November 2010, 4-week course, at Bangrak Hospital. According to the twenty-year anniversary, the course faculties are grateful to ward a honorary diploma to an individual who demonstrates the important role, and long-life contribution to STDs/AIDS service infrastructure, at event of the 16th International Union against Sexually Transmitted Infections (IUSTI) Asia Pacific Conference, Bali, 4-6 May 2010 as follow :

<ul> <li>Dr. Sjaiful Daili</li> </ul>	(Indonesia)
<ul> <li>Dr. Jusuf Barakbah</li> </ul>	(Indonesia)
<ul> <li>Dr. Hans Lumintang</li> </ul>	(Indonesia)
<ul> <li>Dr. Tonny W. Djajakusumah</li> </ul>	(Indonesia)
<ul> <li>Dr. Nyoman Wirya Duarsa</li> </ul>	(Indonesia)
<ul> <li>Dr. Devinder M. Thappa</li> </ul>	(India)
<ul> <li>Dr. Janak Maniar</li> </ul>	(India)
<ul> <li>Dr. Chan Vicheth</li> </ul>	(Cambodia)
<ul> <li>Dr. Kamal Faour</li> </ul>	(United Arab Emirates
<ul> <li>Dr. Abdulla Mahmood Ustadi</li> </ul>	(United Arab Emirates

### • Dr. Verapol Chandeying

### World International Union Against Sexually Transmitted Infections (IUSTI) Executive Committee members

- Prof. King K. Holmes(USA)
- Dr Raj Patel (UK)
- Dr Janet Wilson (UK)
- Prof Angelika Stary (Austria)
- Dr Somesh Gupta (India)
- Prof. Jonathan Ross (Co-opted, UK)
- Prof. Michael Ward (Co-opted, UK)
- Dr James Bingham (UK)
- Dr Derek Freedman (Co-opted, Ireland)

#### **Regional Directors and Chairpersons**

- Prof David A. Lewis(South Africa)
- Dr Roy Chan (Singapore)
- Dr Keith W Radcliffe (UK)
- Prof Patricia J Garcia (Peru)
- Dr Charlotte A Gaydos (USA)

### **IUSTI Regional Chairpersons**

- Prof Aïssatou Gaye-Diallo (Sénégal)
- Dr Brian Mulhall (Australia)
- Dr Airi Poder (Estonia)
- Dr Adele Schwartz Benzaken (Brazil)
- Dr Jeanne Marrazzo (USA)

### Executive Committee : 2007 - 2011

- Prof Christopher Fairley (Australia)
- Dr Mikhail Gomberg (Russia)
- Dr H Hunter Handsfield (USA)
- Dr Angela Robinson (UK)
- Dr Chavalit Mangkalaviraj (Thailand)

#### Executive Committee : 2009 - 2013

- Dr. Xiang-sheng Chen (China)
- Assoc Prof Darren Russell (Australia)
- Dr. John M. Douglas, Jr. (USA)
- Assoc Prof Michel Janier (France)
- Dr Kevin Fenton (USA)
- Dr Sam Phiri (Malawi)
- Prof Yaw Adu-Sarkodie (Ghana)
- Dr Freddy Tinajeros (Honduras, Central America)
- Dr Miguel Tilli (Argentina)

President President Elect and Treasurer Secretary General Immediate Past President Membership Secretary Editor - IUSTI Newsletter Webmaster Financial Liaison

Regional Director Africa Regional Director Asia-Pacific Regional Director Europe Regional Director Latin America Regional Director North America

Regional Chair Africa Regional Chair Asia Pacific Regional Chair Europe Regional Chair Latin America Regional Chair North America

## International Union Against Sexually Transmitted Infections (IUSTI) ASIA PASIFIC

**Executive Committee : Liaison Officers PAHO** Prof. ROY CHAN (Singapore) • Dr Frank Judson, MD (USA) Dr. BRIAN MULHALL (Australia) International League of Dermatological Societies • Prof Angelika Stary (Austria) Dr. KAUSHAL VERMA (India) **Executive Committee : Senior Counsellors** Dr. TAN HIOK HEE (Singapore) • Dr Ross Philpot (Australia) • Dr Michael A Waugh (England) Prof. XIANG SHENG CHEN (China) • Dr James Bingham (England) • Prof Basil Donovan (Australia) • Dr Lew Drusin (USA) • Dr Thiru Thirumoorthy (Singapore) Dr. HEMENDRA DOSHI (India) • Prof Julius Schachter (USA) • Dr Verapol Chandeying (Thailand) A/Prof. DARREN RUSSELL (Australia) • Prof Peter Kohl (Germany) • Prof Jonathan Zenilman (USA) • Prof Thomas Quinn (USA) • Dr. Frank Judson (USA) A/Prof. SUNIL SETHI (India) • Dr Sevgi O Aral (USA) **Executive Committee : United Nations Representatives** New York - Main representative Dr. ROHANI BTE ALI (Malaysia) • Dr Lew Drusin (USA) Geneva - Main representative • Dr James Bingham (UK) Dr. KAMAL FAOUR (UAE) Vienna - Main representative Prof Angelika Stary (Austria)

### Regional Director

Regional Chairman

Hon Secretary

Membership Secretary

Treasurer & Chair-Elect & Vice Chairman East Asia Subregion (China)

Immediate Past Chairman

Vice Chairman Oceania Pacific Subregion (Australia)

Vice Chairman South Asia Subregion (India)

Vice Chairman South East Asia Subregion (Malaysia)

Vice Chairman West Asia Subregion (United Arab Emirates)

1	16th International	Union Agains Sexually	Transmitted Infections
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**Executive Committee : Ex Officio Members** 

• Prof Michel Alary (Co-opted Canada)

Dr. Francis J.Ndowa(Switzerland) WHO Medical Officer Responsible for STD

Representative of ISSTDR

### **ORGANIZING COMITTE**

16th IUSTI AP Conference 2010 Organizing Comittee

### 16th IUSTI AP Conference 2010 Organizing Comittee

#### PATRON • Fund Raising : dr. Tina Wardhani Wisesa, Sp.KK(K) Ministry of Health, Republic of Indonesia Prof. dr. Sjaiful Fahmi Daili, Sp.KK(K) Governor of Bali Province dr. AA Gde Putra Wiraguna, Sp.KK(K) dr. M. Nasser, Sp.KK, D.Law ADVISORY dr. IGK. Darmada, Sp.KK(K) Rector of University of Udayana, Bali • Dean of Faculty of Medicine University of Udayana, Bali Chairman of Indonesian Medical Association Documentation/Publication : dr. Endi Novianto, Sp.KK dr. Agus Nusantara, Sp.KK STEERING COMMITTEE dr. Made Sudarjana, Sp.KK IUSTI Regional Asia Pacific dr. Ketut Sutedja Chairman of Indonesian Society of Dermatology & Venereology (PERDOSKI) Chairman of the Study Group on Sexually Transmitted Infections (KSIMSI) Transportation & Accommodation : dr. Ari Muhandari Ardhie, Sp.KK dr. Ketut Kwartantaya, Sp.KK ORGANIZING COMMITTEE dr. Tjok Dalem Pemayun, Sp.KK Chairman : dr. Titi Lestari Sugito, Sp.KK(K) Conference Chairman – IUSTI : Prof. dr. Sjaiful Fahmi Daili, Sp.KK(K) • Exhibition & Logistics : dr. IGK Dharmada • Vice Conference Chairman - IUSTI : dr. AA Gede Putra Wiraguna, Sp.KK(K) dr. IGAA Praharsini, Sp.KK dr. IGA Dwi Karmila Secretary General : dr. Farida Zubier, Sp.KK(K) dr. Darma Putra SpKK : dr. Sandra Widaty, Sp.KK(K) Vice Secretary - IUSI dr. Eddy Karta, Sp.KK Secretariat : dr. Ariana, Sp.KK Made Suratni Programme : dr. Luh Mas Rusyati, Sp.KK Putu Widiarnata dr. Laksmi Duarsa SpKK Farida Sukandar Sutan Assin dr. Yufanti Sujudi, Sp.KK Noviana Dewi dr. Lili Legiawati, Sp.KK **Rini Setianingsih** dr. Nyoman Suryawati, M.Kes, Sp.KK Endar Wuryatmoko dr. Made Gede Palguna, Sp.KK dr. Elis Indira SpKK Treasurer : dr. Tina Wardhani Wisesa, Sp.KK(K) Food & Beverage : dr. Endang Soekrawati, Sp.KK(K) Vice Treasurer I - IUSTI : dr. Hanny Nilasari, Sp.KK dr. Wieke Triestianawati, Sp.KK(K) Scientific Committee - IUSTI : Dr. dr. Hans Lumintang, Sp.KK(K) dr. Wresti Indriatmi, Sp.KK(K), M.Epid Prof. Dr. dr. Tony Djajakusumah, Sp.KK(K) Prof. dr. Jusuf Barakbah, Sp.KK(K)

dr. Satiti Retno Pudjiati, Sp.KK(K)

### **Important and General Information**

#### Abstracts

Abstracts have been published by the Congress and included in the congress bag.

### **Courtesy Request**

Coffee Break : exhibition galery and Lunch at room: exhibition Hall Smoking : Smoking is absolutely forbidden inside the BI Conference Centre. Mobile phones : Please ensure that mobile phones are on silent mode during the conference sessions. As time will be very tight, delegates are requested to respect the starting times for all sessions.

### **Certificates of Attendance**

Certificates of Attendance will be made available to all delegates from the Registration Desk at the BICC ON Thursday, May 6 from 8.AM - 17 PM

**Emergency Medical Services** Dial 0 from any mainline telephone for an emergency response.

### Help Desk & Business Centre

Dial 0

**Insurance** All guests are responsible for their own insurance.

### Language Policy

The official language of the Congress will be English. No simultaneous translations will be provided.

### Poster Display Area – Exhibition Gallery

Situated 2nd floor BICC – Open for the duration of the Congress Posters will be displayed in the Exhibition Galery from Tuesday to Thursday. Your poster must be mounted in the morning, May 4, 2010. Posters must be removed by 18h00 latest on Thursday, May 6, 2010. The Poster discussion will be on Thursday during 15:30 – 16:30. The Author has to be ready during those hours. The Congress organizers will not be responsible for posers left behind after the Congress.

**Refunds and Accounts Queries** Contact the Registration Desk

### Important and General Information

### **Return Airport Transfers – Booking Essential**

Please confirm transfer arrangements with the hotel where you are staying of with the Registration Desk during the conference. The luggage storage facility will be arranged at each hotel. Please ensure all your luggage is clearly marked. Kindly note that the check-out times for all hotels the latest is 13h00.

### Security & Name Badges

We urge delegates to take care of their personal possessions at all times, and exhibitors to be particularly aware during the period of exhibition build-up and breakdown,. Lock-up storage is available.

The name badge issued on registration is your admission pass to all scientific sessions, the exhibition area and social functions. Name badges must be worn at all times. Dress Code is casual. Your co-operation is appreciated.

### Speaker Presentations/Preparation Room at Denpasar Room

Speakers are requested to submit theirs talks (on CD, disk or memory stick) to the technical staff in the Speaker Presentation room at the press centre at least 3 hours before the presentation. Chairpersons will ensure that all speakers adhere to the listed time for their presentation.

### **Travel Desk**

Sari Bali Convex will operate a Travel Desk daily from the Registration Desk.

### Disclaimer

The Organizing Committee, the Congress Organizer and IUSTI, accept no liability for any damages, injury and/loss of whatever nature by participants and/or accompanying person.

## Venue and Nusa Dua Bali Map

MAP



### **Ground Floor**





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AUDITORIUM EXHIBITION HALI

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## **First Floor**



### **IUSTI Bali 2010**



## IUSTI Bali 2010



## Scientific Program 16th IUSTI Asia Pacific Conference

TIME	TUESDAY, MAY 4, 2010
07.00 - 15.00	REGISTRATION
08.00 - 10.00	SYMPOSIUM REPRODUCTIVE TRACT INFECTION (Session 1) Room : Nusantara 2 & 3 1. Essential reproductive health care package (Sjaiful Fahmi Daili - Indonesia) 2. Syphillis in pregnancy (Hanny Nilasari - Indonesia) 3. Herpes simplex infection (Adolf H Mitaart - Indonesia) 4. Condom use in high risk group in Indonesia (Wiraguna AAGP - Indonesia) 5. How Thailand cut the STI incidence in the era of HIV/AIDS (Chavalit Mangkalaviraj - Thailand)
10.00 - 10.30	COFFEE BREAK
10.30 - 12.00	<ul> <li>SYMPOSIUM REPRODUCTIVE TRACT INFECTION (Session 2)</li> <li>Chairpersons : Suroso Adi Nugroho, M. Nasser Room : Nusantara 2 &amp; 3</li> <li>1. Implementation of prevention of Mother to Child Transmission Program (PMTCT) at Sanglah General Hospital Denpasar BAli 2006-2008 (Jayakusuma AAN - Indonesia)</li> <li>2. Sexually Transmitted Diseases Prevalence in female sex workers in Several Provinces of Indonesia (Rachmadi Dinata - Indonesia)</li> <li>3. Female circumcision Indonesia perspective (Satiti Retno Pudjiati - Indonesia)</li> <li>4. Sexually Tansmitted infection management based on laboratory examination (Rasmia Rowawi - Indonesia)</li> </ul>
12.00 - 13.00	LUNCH & PRAYER
13.00 - 15.30	<ul> <li>WORKSHOP ON HIV</li> <li>An interactive workshop in the management if HIV</li> <li>Coordinator : Dr. Veerakathy Harindra (UK), Sunardi R</li> <li>Room : Nusantara 1</li> <li>1. Laboratory tests for HIV (Charlotte Gaydos -USA)</li> <li>2. Initation of antiretroviral theraphy (Veerakathy Harindra - UK)</li> <li>3. Antiretroviral theraphy in treatment experience patients (Veerakathy Harindra - UK)</li> <li>4. Management of HIV infection in pregnancy (Veerakathy Harindra - UK)</li> <li>5. Management of opportunistic infections (Jimmy Ahmed - UK)</li> </ul>
19.00 - <u>22.00</u>	OPENING CEREMONY AND WELCOME DINNER

1 | 16th International Union Agains Sexually Transmitted Infections

			CLUI TALCOUVERSION
07.00 - 15.00		REGISTRATION	
08.00 - 10.15	PLENARY LECTURE - 1 - Room: Nusantara 2 & 3 Chairpersons: Roy Chan, Sjaiful F Daili 1. Global strategy in STI prevention: focus on devel 2. STI/HIV epidemiology in Indonesia, DG of Disea: 3. Role of gender/human rights issues in STI/HIV oc	loping countries, Francis J Ndowa, (WHO) ise Control and Environmental Health (Indonesia) ontrol, Marina Mahathir (Malaysia)	
10.15 - 10.45		COFFEE BREAK	
10.45 - 12.00	<ul> <li>SYMPOSIUM 1 - Room: Nusantara 3</li> <li>Advances in STI diagnostics</li> <li>Chairpersons: RW Peeling, Rasmia Rowawi</li> <li>1. Role of molecular diagnostics on STI, Rosanna W Peeling (UK)</li> <li>2. Rapid test of STI, Chen XS (China)</li> <li>3. Serological test on syphilis, Ron Ballard (USA)</li> </ul>	SYMPOSIUM 2 - Room: Nusantara 2 The impact of periodic presumptive treatment (PPT) interventions Chairpersons: Graham Nielsen, Tonny W Djäjakusumah 1. World experience, Richard Steen (UK) 2. Asia-Pacific experience, Graham Nielsen, FHI, (Bangkok) 3. Indonesian experience, Kep Subdit/HIV/ IMS-PP & PL (Indonesia)	WORKSHOP ON STI - Room: Nusantara 1 An interactive workshop in the management of STIs Chairpersons : Dr. Immy Ahmed (UK); Farida Zubier Earida Zubier Session-1 1. Diagnosis of STIs: Rapid test, Charlotte Gaydos (USA) 2. Diagnosis of STIS: Biomoloculer, Charlotte Gaydos (USA) 3. Management of genital ulcer, N Usman (India) 4. Management of urethral discharge, Veerakathy Harindra (UK)
12.00 - 13.00		LUNCH & PRAYER & GENERAL ASSEMBLY	
13.00 - 15.05	<ul> <li>SYMPOSIUM 3 - Room: Nusantara 3</li> <li>Subregional perspective on STI</li> <li>Chairpersons: Brian Mulhall, Adolf H. Mittaart</li> <li>Chairpersons: Brian Mulhall, Adolf H. Mittaart</li> <li>1. Australia and Pacific, Darren Russell (Australia)</li> <li>2. South East Asia, Tan Hick Hee (Singapore)</li> <li>3. South Asia, Sunil Sethi, (India)</li> <li>4. North East Asia, Chen XS (China)</li> <li>5. West Asia, Kamal Faour (Dubai, UEA)</li> </ul>	SYMPOSIUM 4 - Room: Nusantara 2 Update on bacterial STI in Asia Pacific Chairpersons: Basil Donovan, Wresti Indriatmi 1. Gonorrhoeae, Athena Limnios (Australia) 2. Syphilis, Kaushall Verma (India) 3. Chlamydia, Basil Donovan (Australia) 4. Update in bacterial vaginosis, Verapol Chandeying (Thailand)	<ul> <li>WORKSHOP ON STI - Room: Nusantara 1 Chairpersons: Dr. Immy Ahmed (UK); Rasmia Rowawi</li> <li>Session-2 : 5. Management of vaginal discharge, Farida Zubier (Indonesia)</li> <li>6. Management of complications of STIs, Immy Ahmed (UK)</li> <li>7. Management of vegetation, Immy Ahmed (UK)</li> <li>8. Genital dermatosis, Gilbert C Yang (Phillippines)</li> </ul>
15.05 - 15.35		COFFEE BREAK	
15.35 - 17.35	JOINT SYMPOSIA - WHO / CDC - Room: Nusantar Coordinator: Ron Ballard (CDC-USA), Francis Ndo 1. Antimicrobial resistance in N. gonorrhoeae : A gic 2. Multi drugs resistant N. gonorrhoeae in Western 3. Basic microbiology and mechanisms of resistanc 4. Strategic plan to respond to antimicrobial resistanc 5. Poportunitiesfor funding priority interventions for 6. Round table discussion: Epidemiological, clinical Ron Ballard (CDC-USA)	ra 2 & 3 owa (WHO Geneva), Jusuf Barakhbah (Indonesia) obal perspective, Francis Notowa (WHO, Geneva) Pacific and South-East Asia Regions, Athena Limnic ce in N. gonorrhoeae, Magnus Unemo (Sweden) nce & emergence of cephalosporin resistance in N.; sexualand reproductive health (SHR), including STI i & programmatic implications and responses to antin	is (Australia) gonorrhoeae, Ye Tun (CDC-USA) s, Manjula Lusti-Narasimhan (WHO, Geneva) nicrobial resistance N. gonorrhoeae,

16th International Union Agains Sexually Transmitted Infections

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Scientific Program 16th IUSTI Asia Pacific Conference

TIME		THURSDAY, MAY 6, 2010	
07.00 - 15.00		REGISTRATION	
08.00 - 10.15	PLENARY LECTURE - 2 - Room: Nusantara 2 & 3 Chairpersons: Brian Mulhall, Hans Lumintang 1. MSM and HIV/STI in Asia, Roy Chan (Singapore) 2. STIs in sex workers, Chen XS (China) 3. Behavior intervention in STIs prevention, Lucas Man	jindaan (Indonesia)	
10.15 - 10.45		COFFEE BREAK	
10.45 - 12.15	<ul> <li>SYMPOSIUM 5 - Room: Nusantara 3</li> <li>The potential impact on HPV vaccination Chairpersons: Susanne Garland, Sattii Retno Pudjiati</li> <li>Dynamic transmission of HPV infection, Tonny W Djajakusumah (Indonesia)</li> <li>2. HPV vaccine implementation, Susanne Garland (Australia)</li> <li>3. HPV immunization and men, Basil Donovan (Australia)</li> </ul>	SYMPOSIUM 6 - Room: Nusantara 2 STI in HIV Chairpersons: Priya Sen, Rachmad Dinata 1. STI-HIV interaction, Brian Mulhall, (Australia) 2. Genital ulcers in HIV, Thirummorthy (Singapore) 3. Viral STI in HIV, Priya Sen (Singapore) ARV for viral STI in HIV, Zubairi Djoerban (Indonesia)	WORKSHOP: STI COUNSELLING Room: Nusantara 1 Coordinator: N. Usman Session - 1 1. Principles of counseling, Jusuf Barakbah, (Indonesia) 2. Law and ethics, M Nasser (Indonesia)
12.15 - 13.15	ΓΩΝ	CH & PRAYER & GENERAL ASSEMBLY	
13.15 - 14.55	<ul> <li>SYMPOSIUM 7 - Room: Nusantara 3</li> <li>Management of viral STI</li> <li>Chairpersons: Somesh Gupta, Hanny Nilasari</li> <li>Chairpersons: Somesh Gupta, Hanny Nilasari</li> <li>Herpes in pregnancy, Wresti Indriatmi (Indonesia)</li> <li>Herpes in neonates, Srisupalak</li> <li>Singalavanija (Thailand)</li> <li>Progress in management of genital herpes, Hans Lumintang (Indonesia)</li> <li>Amanagement of HPV infections, Somesh Gupta (India)</li> </ul>	<ul> <li>SYMPOSIUM 8 - Room: Nusantara 2</li> <li>STI in adolescent</li> <li>Chairpersons: Christopher Fairley, Sunardi R.</li> <li>1. Introduction: Burden of disease in adolescent, Christopher Fairley (Australia)</li> <li>2. Epidemiology of STI in adolescent.</li> <li>Jane Hocking (Australia)</li> <li>3. Behavior aspect of adolescence. Anthony Smith (Australia)</li> <li>4. Adolescent health services. Wong Mee Lian (Singapore)</li> </ul>	WORKSHOP: STI COUNSELLING Room: Nusantara 1 Coordinator: N. Usman; Jusuf Barakbah Session - 2 3. VCT, N Usman (India) 4. PTTC, N Usman (India) 5. Partner notification, Gilbert C Yang (Philippines)
14.55 - 15.25		COFFEE BREAK	
15.25 - 16.25	Free paper & poster presentations Room: Nusantara 3	Free paper & poster presentations Room: Nusantara 2	Free paper & poster presentations Room: Nusantara 1
16.25 - 17.25	King Holmes MD, PhD (USA) - STI - Globalization - Chairpersons: Winsy Warouw, AAGP Wiraguna Room: Nusantara 2 & 3	Fravellers - Prevention of STI and HIV infection	
19.25 - 17.25		GALA DINNER	

Scientific Program 16th IUSTI Asia Pacific Conference

### SCIENTIFIC PROGRAM

16th International Union Agains Sexually Transmitted Infections | 1

### Schedule of Scientific Program

TUESDAY, MAY 4, 2010

### SYMPOSIUM REPRODUCTIVE TRACT INFECTION

1694 / C	
Session 1	
Room	: Nusantara 2 & 3
Chairman	: Nyoman Wirya Duarsa, Farida Zubier
08:00 - 08:20	: Essential reproductive health care package Sjaiful Fami Daili (Indonesia)
08:20 - 08:40	: Syphillis in pregnancy Hanny Nilasari (Indonesia)
08:40 - 09:00	: Herpes simplex infection Adolf H. Mittaart (Indonesia)
09:00 - 09:20	: Condom use in high risk, group in Indonesia A.A.G.P Wiraguna (Indonesia)
09:20 - 09:40	: How Thailand cut the STI incidence in the era of HIV/(AIDS) Chavalit Mangkalaviraj (Thailand)
09:40 - 10:00	: DISCUSSION
10:00 - 10:30	: COFFEE BREAK
Session 2	
Room	: Nusantara 2 & 3
Chairman	: Suroso Adi Nugroho, M Nasser
10:30 - 10:50	: Implementation of prevention of Mother To Child Transmission Program (PMTCT) at Sanglah General Hospital Denpasar Bali 2005 – 2009
10:50 - 11:10	: Sexually Transmitted Diseases Prevalence in female sex workers in Several Provinces of Indonesia (Rachmad Dinata – Indonesia)
11:10 - 11:30	: Female circumcision: Indonesia perspective Satiti Retno Pudijati (Indonesia)
11:30 - 11:50	: STI management based on laboratory exmination Rasmia Rowawi (Indonesia)
11:50 - 12:00	: DISCUSSION
12:00 - 13:00	: LUNCH & PRAYER

### WORKSHOP ON HIV - An interactive workshop in the management of HIV

Room	: Nusantara 1
Chairman	: Dr. Veerakathy Harindra; Sunardi R
13:00 - 13:30	: Laboratory test for HIV Charlotte Gaydos (USA)
13:30 - 14:00	: Initiation of antiretroviral therapy Veerakathy Harindra (UK)
14:00 - 14:30	: Antiretroviral therapy in treatment experience patients Veerakathy Harindra (UK)
14:30 - 15:00	: Management of HIV infection in pregnancy Veerakathy Harindra (UK)
15:00 - 15:30	: Management of opportunistic infections Immy Ahmed (UK)
19:00 - 22:00	: OPENING CEREMONY AND WELCOME DINNER

### Schedule of Scientific Program

WEDNESDAY, MAY 5, 2010

### PLENARY LECTURE

Room Chairman & Co Chairman 08:00 - 08:45 08:45 - 09:30 09:30 - 10:15 10:15 - 10:45	<ul> <li>Nusantara 2 &amp; 3</li> <li>Roy Chan; Sjaiful F Daili</li> <li>Global Strategy in STI prevention: focus on developing countries</li> <li>Francis J Ndowa (WHO)</li> <li>STI / HIV epidemiology in Indonesia</li> <li>Directorate General of Disease Control and</li> <li>Environmental Health Dirjen PP &amp; PL (Indonesia)</li> <li>Role of gender/human rights issues in STI/HIV control Marina Mahathir (Malaysia)</li> <li>COFFEE BREAK - 1</li> </ul>
SYMPOSIA- 1	: ADVANCES IN STI DIAGNOSTICS
Room Chairman & Co Chairman 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45 11:45 - 12:00	<ul> <li>Nusantara 1</li> <li>Rosana W Peeling; Rasmia Rowawi</li> <li>Role of molecular diagnostics of STI Rosana W Peeling (USA)</li> <li>Rapid test of STI Xiang-Sheng Chen (China)</li> <li>Serological test on syphilis Ron Ballard (USA)</li> <li>DISCUSSION</li> </ul>
SYMPOSIA- 2	: THE IMPACT OF PERIODIC PRESUMPTIVE
Room	· Nusantara 2 & 3
Chairman & Co Chairman 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45 11:45 - 12:00	<ul> <li>: Graham Neilsen; Tonny W Djajakusumah</li> <li>: Periodic presumptive treatment : Global experience Richard Steen (UK)</li> <li>: The impact of periodic presumptive treatment : Asia-Pacific experience Graham Neilsen (Thailand)</li> <li>: Periodic presumptive treatment among female sex workers : Indonesia experience Dyah Erly Mustikawati (Indonesia)</li> <li>: DISCUSSION</li> </ul>
Chairman & Co Chairman 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45 11:45 - 12:00 WORKSHOP ON STI - Ar	<ul> <li>: Graham Neilsen; Tonny W Djajakusumah</li> <li>: Periodic presumptive treatment : Global experience Richard Steen (UK)</li> <li>: The impact of periodic presumptive treatment : Asia-Pacific experience Graham Neilsen (Thailand)</li> <li>: Periodic presumptive treatment among female sex workers : Indonesia experience Dyah Erly Mustikawati (Indonesia)</li> <li>: DISCUSSION</li> </ul>
Chairman & Co Chairman 10:45 - 11:05 11:05 - 11:25 11:25 - 11:45 11:45 - 12:00 <b>WORKSHOP ON STI - Ar</b> <b>Session - 1</b> Room Coordinator 10:00 - 10:30 10:30 - 11:00 11:00 - 11:30 11:30 - 12:00	<ul> <li>: Graham Neilsen; Tonny W Djajakusumah</li> <li>: Periodic presumptive treatment : Global experience Richard Steen (UK)</li> <li>: The impact of periodic presumptive treatment : Asia-Pacific experience Graham Neilsen (Thailand)</li> <li>: Periodic presumptive treatment among female sex workers : Indonesia experience Dyah Erly Mustikawati (Indonesia)</li> <li>: DISCUSSION</li> <li>interactive workshop in the management of STIs</li> <li>: Jakarta A</li> <li>: Dr. Immy Ahmed; Farida Zubier</li> <li>: Rapid test for the diagnosis of STIs Charlotte Gaydos (USA)</li> <li>: Molecular diagnosis of STIs Charlotte Gaydos (USA)</li> <li>: Management of Genital ulcer N Usman (India)</li> <li>: Management of Urethral discharge Veerakathy Harindra (UK)</li> </ul>

Schedule of Scientific Program	WEDNESDAY, MAY 5, 2010
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### Session - 2

Room	: Jakarta A
Coordinator	: Dr. Immy Ahmed; Rasmia Rowawi
13:00 - 13:30	: Management of Vaginal discharge
	Farida Zubier (Indonesia)
13:30 - 14:00	: Management of complications of STIs
	Immy Ahmed (UK)
14:00 - 14:30	: Management of vegetation
	Immy Ahmed (UK)
14:30 - 15:00	: Genital dermatoses
	Gilbert C Yang (Phillippines)

### SYMPOSIA- 3 : SUBREGIONAL PERSPECTIVE ON STI

Room	: Nusantara 1
Chairman & Co Chairman	: Brian Mulhall; Adolf H Mitaart
13:00 - 13:20	: Subregional perspective on STI : Australia and Pacific Darren Russell (Australia)
13:20 - 13:40	: Subregional perspective on STI : South East Asia Tan Hiok Hee (Singapore)
13:40 - 14:00	: Subregional perspective on STI : South Asia Sunil Sethi (India)
14:00 - 14:20	: Resurgence of Sexually Transmitted Diseases in Modern China Xiang-Sheng Chen (China)
14:20 - 14:40	: Subregional perspective on STI : West Asia Kamal Faour (Dubai, UEA)
14:40 - 15:00	DISCUSSION

### SYMPOSIA- 4 : UPDATE ON BACTERIAL STI IN ASIA PACIFIC

Room	: Nusantara 2 & 3
Chairman & Co Chairman	: Basil Donovan; Wresti Indriatmi
13:00 - 13:20	: Gonorrhoeae
	Athena Limnios (Australia)
13:20 - 13:40	: Syphillis Asia-Pacific an update
	Kaushall Verma (India)
13:40 - 14:00	: Chlamydia
	Basil Donovan (Australia)
14:00 - 14:20	: Update in bacterial vaginosis
	Verapol Chandeying (Thailand)
14:20 - 14:30	: DISCUSSION
15:00 - 15:30	: COFFEE BREAK – 2

## Schedule of Scientific Program

### TUESDAY, MAY

### JOINT SYMPOSIA WHO/CDC

Room	: Nusantara 2 & 3
Chairman & Co Chairman	: Ron Ballard; Francis Ndowa, Jusuf Barakbah
15:30 - 15:50	: Antimicrobial resistance in <i>N. gonorrhoeae</i> : A
	global perspective
	Francis Ndowa (WHO-Geneva)
15:50 - 16:10	: Multi drugs resistant N. gonorrhoeae in Western
	Pacific and South-East Asia Regions
	Athena Limnios (Australia)
16:10 - 16:30	: Basic microbiology and mechanisms of resistance
	in <i>N. gonorrhoeae</i>
	Magnus Unemo (Sweden)
16:30 - 16:50	: Strategic plan to respond to antimicrobial resistance
	& emerggence of cephalosporin resistance in N. gonorhoeae
	Ye Tun (CDC-USA)
16:50 - 17:10	: Opportunities for funding priority interventionsfor
	sexual and reproductive health (SHR), including STIs
	Manjula Lusti-Narasimhan (WHO-Geneva)
17:10 - 17:30	: Round table discussion: Epidemiological, clinical
	& programmatic implications and responses to
	antimicrobial resistance N. gonorrhoeae
	Ron Ballard (CDC-USA)

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THURSDAY, MAY 6, 2010

	Itific Program THURSDAY, MAY 6, 20
PLENARY LECTURE – 2	
Room Chairman & Co Chairman 08:00 - 08:45	: Nusantara 2 & 3 : Brian Mulhall; Hans Lumintang : HIV/STI among MSM in Asia Roy Chan (Singapore)
08:45 - 09:30	: Sexually Transmitted Infections in Sex Workers in Asia Xiang-Sheng Chen (China)
09:30 - 10:15	: Behaviour intervention in STIs prevention
10:15 - 10:45	: COFFEE BREAK - 1
SYMPOSIA- 5	: THE POTENTIAL IMPACT ON HPV VACCINATION
Room Chairman & Co Chairman 10:45 - 11:05	: Nusantara 2 & 3 : Susanne Garland; Satiti Retno P : Transmission dynamic of HPV infection Tonny W Djajakusumah (Indonesia)
11:05 - 11:25	: The potential impact of HPV vaccination Susanne Garland (Australia)
11:25 - 11:45	: HPV immunization of males Basil Donovan (Australia)
11:45 - 12:15	: DISCUSSION
SYMPOSIA- 6	: STI in HIV
Room Chairman & Co Chairman 10:45 - 11:05	: Nusantara 1 : Priya Sen, Rachmad Dinata : The interaction of HIV and other STI – Bewiched, Bothered and Bewildered Brian Mulhall (Australia)
11:05 - 11:25	: Genital ulcers disease in HIV
11:25 - 11:45	: Viral STI in HIV
	Priva Sen (Singapore)
11:45 - 12:00	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Dicerban (Indonesia)
11:45 - 12:00 12:00 - 12:15	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Djoerban (Indonesia) : DISCUSSION
11:45 - 12:00 12:00 - 12:15 WORKSHOP On STI CO	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Djoerban (Indonesia) : DISCUSSION NSELLING
11:45 - 12:00 12:00 - 12:15 <b>WORKSHOP On STI CO</b> Session - 1 Room Coordinator 10:45 - 11:15	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Djoerban (Indonesia) : DISCUSSION NSELLING : Jakarta A : (N Usman) India : Principle of counseling
11:45 - 12:00 12:00 - 12:15 <b>WORKSHOP On STI CO</b> Session - 1 Room Coordinator 10:45 - 11:15 11:15 - 11:45	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Djoerban (Indonesia) : DISCUSSION NSELLING : Jakarta A : (N Usman) India : Principle of counseling Jusuf Barakbah (Indonesia) : Ethical Aspect, The Dicipline of Profession and Lawsuit
1:45 - 12:00 2:00 - 12:15 WORKSHOP On STI CO Session - 1 Room Coordinator 0:45 - 11:15 1:15 - 11:45 2:15 - 13:15	Priya Sen (Singapore) : ARV for viral STI in HIV Zubairi Djoerban (Indonesia) : DISCUSSION NSELLING : Jakarta A : (N Usman) India : Principle of counseling Jusuf Barakbah (Indonesia) : Ethical Aspect, The Dicipline of Profession and Lawsuit M. Nasser (Indonesia) : LUNCH & PRAYER & GENERAL ASSEMBLY

<b>Session - 2</b> Room Coordinator 13:15 - 13:45 13:45 - 14:15 14:15 - 14:45	: Jakarta A : (Jusuf Barakbah) Indonesia : V C T N Usman (India) : P I T C N Usman (India) : Partner notification Gilbert C Yang (Pihillippines)
SYMPOSIA - 7	: MANAGEMENT OF VIRAL STI
Room Chairman & Co Chairman 13:15 - 13:35 13:35 - 13:55 13:55 - 14:15 14:15 - 14:35 14:35 - 14:55	<ul> <li>Nusantara 2 &amp; 3</li> <li>Somesh Gupta</li> <li>Herpes in pregnancy Wresti Indriatmi (Indonesia)</li> <li>Herpes in neonates Srisupalak Singalavanija (Thailand)</li> <li>Progress in management of genital herpes Hans Lumintang (Indonesia)</li> <li>Treatment of genital warts Somesh Gupta (India)</li> <li>DISCUSSION</li> </ul>
SYMPOSIA - 8	: STI in ADOLESCENT
Room Chairman & Co Chairman 13:15 - 13:35 13:35 - 13:55 13:55 - 14:15 14:15 - 14:35 14:35 - 14:55 14:55 - 15:25	<ul> <li>: Nusantara 1</li> <li>: Christopher Fairley; Sunardi R</li> <li>: IntroductionSTIs in adolescent Christopher Fairley (Australia)</li> <li>: Epidemiology STI in adolescent Jane Hocking (Australia)</li> <li>: Behaviour aspect of adolescent Anthony Smith (Australia)</li> <li>: Adolescent health service Wong Mee Lian (Singapore)</li> <li>: DISCUSSION</li> <li>: COFFEE BREAK - 2</li> </ul>
15:25 - 16:25 Room Nusantara 1 Room Nusantara 2 & Room Jakarta A Exhibition Galery	: FREE PAPER PRESENTATION 3 : FREE PAPER PRESENTATION : FREE PAPER PRESENTATION : POSTER PRESENTATION
STI - Globalization - Trave	elers
Room Chairman 16:25 - 17:25 19:00 - 22:00	<ul> <li>: Nusantara 2 &amp; 3</li> <li>: Winsy Warouw; AAGP Wiraguna</li> <li>: Prevention of STI and HIV infection : Current concepts and results of Community-Randomized Trial King Holmes (USA)</li> <li>: CLOSING &amp; GALA DINNER</li> </ul>

Schedule of Scientific Program

## LEGEND TO ABSTRACT

Plenary Lecture	PL
Symposium Reproductive Tract Infection	S-RTI
• Symposium	S
<ul> <li>Joint Symposium-WHO</li> </ul>	JS-WHO
• Workshop	W
Special Lecture	SL
Oral Presentation	OP
Poster Presentation	PO

## PLENARY LECTURE

PL 1.1	GLOBAL STRATEGY IN STI PREVENTION:FOCUS ON DEVELOPING COUNTRIES	Francis J Ndowa
PL 1.2	EPIDEMIOLOGY OF STI & HIV IN INDONESIA : BASED ON IBBS 2007	Tjandra Y Aditama
PL 1.3	ROLE OF GENDER/HUMAN RIGHTS ISSUES IN STI/HIV CONTROL	 Marina Mahathir
PL 2.1	HIV AND STI AMONG MSM IN ASIA	Roy Chan
PL 2.2	SEXUALLY TRANSMITTED INFECTIONS IN SEX WORKERS IN ASIA	Xiang-Sheng Chen
PL 2.3	BEHAVIOR INTERVENTION IN STIS (SEXUALLY TRANSMITTED INFECTIONS) PREVENTION	 Lukas Mangindaan

### GLOBAL STRATEGY IN STI PREVENTION : FOCUS ON DEVELOPING COUNTRIES

Francis J. Ndowa, Coordinator, STI Team, Department of Reproductive Health and Research World Health Organization Geneva.

The global strategy for the prevention and control of sexually transmitted infections, 2006–2015 was developed after a series of regional and global consultations and endorsed by the World Health Assembly (WHA59.19) in May 2006. The document provides the rationale for countries to adopt the control of sexually transmitted infections as one of the cost-effective public health interventions.

The array of old and new approaches to achieve key strategic goals laid out in the document take into consideration the differences that exist between different geographical regions and within regions. The Global Strategy highlights the complexities of sexual networks and dynamics of transmission of sexually transmitted infections. Five specific activities which are feasible and evidence based are suggested as having the most promising prospects of significant reductions in sexually transmitted infections, including HIV infection.

The lecture will address some of the key features of the Global Strategy for the prevention and control of STIs, including targeted interventions and approaches that are particularly relevant for resource-constrained settings.

### EPIDEMIOLOGY OF STI & HIV IN INDONESIA : BASED ON IBBS 2007

Tjandra Y Aditama DG of Disease Control and Environmental Health (Indonesia)

Aim: Based on Integrated Biological ñBehavioral Surveillance (IBBS) 2007, it is gauged the knowledge and risk behavior on HIV transmission among Injecting Drug Users (IDU), Female Sex Workers (FSW), FSW clients, Waria, Men Having Sex(MSM) with Men and High Risk Men (HRM), and also measure STI prevalence (Gonorrhea, Chlamydia, Syphilis and Trachomatis).

Methods: There were different type of data collection: Behavior Survey Surveillance (BSS), Integrated HIV and Behavior Surveillance (IHBS) ,and Integrated Biological and Behavioral Surveillance (IBBS). Surveillance sites were decided depends on the target groups and type of data collection. In summary, IBBS 2007 collected data from 15,958 respondents from 19 districts in 11 provincesin indonsia...

Results: The prevalence of sexually transmitted infections (STIs) was very high among Direct FSWs (1-74%) and moderately high among Indirect FWSs (1-38%). Between 6-16% of Direct FSWs and 2-9% of Indirect FSWs were infected with HIV. The prevalence of Chlamydia (1-7%) has reached modest levels among HRM, while the prevalence of syphilis is relatively high (4-9%). HIV has become detectable among HRM outside Papua (0-3%). STI rates were very high among MSM, especially among those engaging in commercial sex (29-34%). HIV prevalence among MSM are relatively high (2-8%). STI prevalence among Waria were extremely high (19-55%) in three cities in which biological data were collected (Jakarta, Bandung and Surabaya). HIV prevalence among Waria were also high (14-34%) Consistent condom use in commercial sex in 2007, HRM, MSM and Waria was low and shows no sign of having increased during the 2002-2007 period.

Conclusions: Intervention focused on HIV and STI prevention need to be expanded and intensified. Consistent condom use is low and strong condom promotion strategies with comprehensive coverage of FSWs, MSMs, HRMs and Waria are needed.

## ROLE OF GENDER/HUMAN RIGHTS ISSUES IN STI/HIV CONTROL

Marina Mahathir (Malaysia)

In a world where public health issues seem to be multiplying yearly, infectious diseases are particularly at the forefront. Although generally preventable and often treatable, control has, in some countries, been difficult to do at least partly because issues that affect both sexes differently are not taken into account.

Gender disparities in vulnerability have long been neglected. Diseases impact on the sexes differently and often because of systemic barriers to prevention and treatment, women tend to suffer more. A better understanding of the circumstances that make men and women differently vulnerable can help to programme prevention, treatment, care and support more effectively to both men and women.

This paper will give an overview of those gender differences and what needs to be done to protect both men and women better from STIs, especially HIV.

**HIV AND STI AMONG MSM IN ASIA** 

Roy Chan Director National Skin Centre Singapore Head STI Control Programme

The HIV pandemic started in the early 1980s among gay communities in USA and Europe, spreading to MSM in many parts of Asia in the mid 1980s. By early1990s, the epidemic in many parts of Asia expanded exponentially. In most parts of the region HIV infection became a mainly heterosexual epidemic, for example in Thailand in1992 more than 124,000 heterosexual infections were notified. The expanding heterosexual HIV epidemic in Asia was driven by sex workers and their clients and also by injecting drug users. There was a massive scaling up of prevention programmes among sex work and injecting drug users. In Singapore the infections among heterosexuals formed up to 75% of new infections in the 1990s. In Thailand it was recorded as almost 95%-98% heterosexual and IDU infections with a significant epidemic resulting from on mother-to child transmission. In north Asia the HIV epidemic also shifted towards a pattern characterized by increasing heterosexual transmission, though not to the same degree as was the case in South and South-east Asia.

PLENARY LECTURE

PL 2.

The rapid spread of infection among heterosexuals was met with the introduction of interventions targeting sex workers and their clients, IDU and mother-to-child transmission. These programmes have successfully managed to reduce infection rates in several countries with the worst epidemics viz. Thailand, Cambodia and India. Unfortunately in many countries in the 1990s and early 2000s there was little attention paid to the matter of MSM transmission. Owing to the invisible nature of the population, widespread stigmatization and discrimination against MSM, resistance from within MSM communities themselves, there was little solid epidemiological and behavioral data that could influence governments and policymakers to pay attention to HIV and STI among MSM.

Following the introduction of HAART in 1996 and increased availability of generic forms of ARV there were significant reductions in deaths due to AIDS in countries with access to these medications. This vastly improved prognosis for HIV-infected individuals. This was soon followed by increasing reports of resurgent HIV epidemics among MSM in Western countries. Similar increases of HIV infection among MSM are now reported in most Asian countries.

In most countries MSM constitute a significant minority and in others they constitute the majority of HIV infections. In many areas HIV is spreading most rapidly among MSM. For example prevalence rate of HIV infection was found to be 28.3% among MSM in Bangkok and 9.4% in Hanoi in 2007. The HIV epidemic in MSM populations in countries of developed East and South East Asia share several environmental and behavioural factors, these include the sexual liaisons made easier via the Internet, burgeoning sex-on-premises venues, use of recreational drugs with sex, circuit parties, sex parties and increasing regional travel and sex tourism. I will provide examples and lessons from intervention programmes targeting MSM in developed East and South East Asia

## SEXUALLY TRANSMITTED INFECTIONS IN SEX WORKERS IN ASIA

Xiang-Sheng Chen National Center for STD Control, China CDC WHO Collaborating Center for Prevention and Control of STIs 12 Jiangwangmiao Street, Nanjing 210042, China Email: chenxs@ncstdlc.org

Sexually transmitted infections (STIs) including HIV infections through sexual contacts have become a major public health problem in many countries in Asia. Female sex workers (FSWs) have been harshly and disproportionately impacted upon by STI/HIV. The sex industry in Asia is becoming increasingly complicated, with highly differentiated sub sectors and a greater number of people in a greater variety of sites.

Those women who engage in commercial sex can be further classified into several subgroups with different socio-demographic and behavioral characteristics, employment status, clients to serve and risk in getting and transmitting STI/HIV infections. Studies have not only suggested a substantial prevalence of STI infections in this population but also a substantial difference in the prevalence between different classes of this population, indicating a highest prevalence in the lowest class. It is widely believed that the future of the STI/HIV epidemic depends to a great extent on what transpires over decades. Low class of FSWs who are likely quite important in the spread of disease and their clients are likely to play a central role in the spread of STIs, including HIV. The current strategies to prevent STI/HIV in FSWs should be carefully revisited in consideration of both the existence of this occupation and its heterogeneity.

## BEHAVIOR INTERVENTION IN STIS (SEXUALLY TRANSMITTED INFECTIONS) PREVENTION

Lukas Mangindaan, SpKJ Department of Psychiatry Faculty of Medicine, University of Indonesia

Behavior intervention in STIs prevention is a part of the comprehensive program in dealing with STIs.

Before programming a behavior intervention, an assessment of the person's life, problems, sexual life and practices should be made sensitively with empathy. High risk sexual behavior (whether active or passive) should be scrutinized; and if possible, also the chain of infection should be traced and treated. Assessment should also include assessment on ignorance, and myths about STIs. On a different level and perspective, assessment should also include personal values, personality traits, and psychopathology (like depression, low self esteem), also marital, family, work problems. Among adolescents: peer pressure and low self esteem are often significant factors. For homosexual persons assess how far internalized homophobia in the person, in the family, society and national policy contribute to depression and high risk behavior. In cases where high risk behavior is associated with "seeking fun", help the client be aware and help the client shift the concept of "seeking fun" (which in many cases is an effort to alleviate depression), to "live a happy and meaningful life" which is part of the WHO's definition of Mental Health (2001)

The type of behavior intervention - A, B, C and D - should be programmed and tailored individually. In some cases the behavior intervention should be combined with psychotropic drugs if there is an underlying psychopathology like depression or other psychopathology. Cognitive psychotherapy or counseling with cognitive therapy methods is particularly useful. Other cases can be combined with group therapy. For adolescents, A (abstinence) is proven to give better results than giving them the choice of A, B, C or D

A good intervention program should also involve social, political and religious levels especially when there are taboos on talks, discussion on sex and sexual education.

The ultimate target of counseling is to achieve the WHO's concept of Sexual Health in particular and Mental Health in general

Sexual health is a state of physical, emotional, mental and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. (WHO working definition, 2002)

## SYMPOSIUM REPRODUCTIVE TRACT INFECTION

S-RTI 1.1	ESSENTIAL REPRODUCTIVE HEALTH CARE PACKAGE	Sjaiful Fahmi Daili
S-RTI 1.2	SYPHILIS IN PREGNANCY	Hanny Nilasari
S-RTI 1.3	HERPES SIMPLEX INFECTION	Adolf H.Mittaart
S-RTI 1.4	CONDOM USE IN HIGH RISK GROUP IN INDONESIA	Wiraguna AAGP
S-RTI 1.5	HOW THAILAND CUT THE STI INCIDENCE IN THE ERA OF HIV/AIDS	Chavalit Mangkalaviraj
S-RTI 2.1	IMPLEMENTATION OF PREVENTION OF MOTHER TO CHILD TRANSMISSION PROGRAM (PMTCT) AT SANGLAH GENERAL HOSPITAL DENPASAR BALI 2005 – 2009	Jayakusuma AAN
S-RTI 2.2	SEXUALLY TRANSMITTED DISEASES PREVALENCE IN FEMALE SEX WORKERS IN SEVERAL PROVINCES OF INDONESIA	– Rachmad Dinata
S-RTI 2.3	FEMALE CIRCUMCISION: INDONESIAN PERSPECTIVE	 Satiti Retno Pudjiati 
S-RTI 2.4	SEXUALLY TRANSMITTED INFECTION MANAGEMENT BASED ON LABORATORY EXAMINATION	Rasmi Rowawi

1 | 16th International Union Agains Sexually Transmitted Infections

### **ESSENTIAL REPRODUCTIVE HEALTH CARE PACKAGE**

Sjaiful Fahmi Daili Department of Dermatovenereology Faculty of Medicine, University of Indonesia Jakarta-Indonesia

The International Confrence on Population and Development in Cairo 1994 stated that 50% of the world's population under 20 years of age is prone to sexual and reproductive health problems.

Based on that statement, the Ministry of Health, Republic of Indonesia and several private organizations founded an Essential Reproductive Health Care Package to provide a better access to a better sexual & reproductive health service in the primary care setting.

This Essential Reproductive Health Package (ERHP) consists of four components: health service for mother & child, family planning, STI/HIV prevention and treatment, and reproductive health for the youth.

We report an example of a pilot project of ERHP at one reproductive health clinic in Jakarta in a period from January-December 2008. The project reported a high rate of Sexually Transmitted Infection in assymptomatic patients.

### SYPHILIS IN PREGNANCY

Hanny Nilasari Dermatovenereology Department, Faculty of Medicine, University of Indonesia RSUPN Cipto Mangunkusumo Jakarta, Indonesia

Syphilis is a sexually transmitted infection (STI) that's caused by a type of bacterium called a spirochete. The disease passed from person to person through direct contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Transmission of the organism occurs during vaginal, anal, or oral sex. Pregnant women with the disease can pass it to the babies they are carrying.

Depending on how long a pregnant woman has been infected, she may have a high risk of having a stillbirth (a baby born dead) or of giving birth to a baby who dies shortly after birth. An infected baby may be born without signs or symptoms of disease. However, if not treated immediately, the baby may develop serious problems within a few weeks. Untreated babies may become developmentally delayed, have seizures, or die. All pregnant women should have serological test at the first antenatal visit as a screen.

Syphilis can be treated and cured with antibiotics during pregnancy. Penicillin should be used in dosage schedule appropriate for the stage of syphilis as recommended of non-pregnant patients.

Keywords : syphilis-pregnancy-earlyscreening-treatment

## **HERPES SIMPLEX INFECTION**

Adolf H. Mitaart Dermatovenereology Department Medical Faculty of Sam Ratulangi University/Prof.dr.RD.Kandou Manado General Hospital Indonesia

Herpes simplex infection is an infection caused by Herpes simplex virus (HSV) type 1 and 2, it includes genital herpes and orolabial herpes. This infection still causes problem because of its hard-to-cured tendency and recurrence, its ability to transmit the virus from asymptomatic patient, its effect on pregnancy, infant/neonate, and immunocompromised patient. The risk factors of infection include age and sexual behavior. Clinical manifestation could be affected by patient immunity status, previous HSV exposure, the last episodes, and the type of the virus. The clinical appearance of genital herpes includes the primary initial lesion, non-primary initial lesion, recurrence lesion, atypical lesion, and subclinical / asymptomatic reactivation. Meanwhile orolabial herpes could manifest as primary herpetic ginggivostomatitis with recurrence extra oral / intra oral lesion. There are 3 categories of treatment, i.e. prophylactic that covers the explanation to the patient about the disease, psychotherapy, and individual protection; non-specific treatment that has symptomatic characteristic; and specific treatment which is the antiviral agent.

### **CONDOM USE IN HIGH RISK GROUP IN INDONESIA**

Wiraguna AAGP Department of Dermato-venereology Medical Faculty of Udayana University/ Sanglah Hospital Denpasar, Bali

Sexually transmitted infection (STI) and HIV are a disease often found in Indonesia and recently increased the number of cases of people infected with HIV. The modes of transmission, although most often a small percentage as the cause of HIV is through sexual intercourse. Therefore STI and HIV prevention through sexual contact is very important and needs to be improved continuously, especially in the female sex workers (FSW) and other high risk group.

One of acceptable prevention through sexual contact is the use of condoms that quite effective preventing STI and HIV infection in some studies. But in IBBS (Integrated Biological Behavioral Surveillance) research on high risk groups conducted in eight provinces in Indonesia in 2007 found direct FSW (DFSW) that always used condom with client past week the lowest is Jakarta 2% and highest is Papua 72% followed by Bali and East Java respectively 38% and 32%. While in Indirect Female Sex Workers (IFSW) who always use condoms with client past week, the highest is North Sumatera and Papua each 45% and 42%, while the lowest is West Java 24%.

Condom use in commercial transactions between FSW and clients in Indonesia seem to increase very slowly, even to say the road in place during the period 2002 - 2007. Proportion of condom use last and always use condoms with clients past week both tend to increase between 2002 - 2007. Altough consisten condom use in FSW inadequate to inhibit the spread of HIV among FSW with clients and vice versa.

On the study of reproductive tract infection prevalence of FSW in ten cities in Indonesia in 2005 who always uses a condom during past week are 11% in Surabaya and 72% IFSW in Medan. Who never use condom at all obtained 5% DFSW in Bandung and 65% IFSW in Bitung. In the same study in 2007 in 7 cities in Indonesia that are always using a condom during past week among DFSW only 20.4% and 20.5% in IFSW. While who never using a condom at all on obtained 26.2% DFSW and 55.2% IFSW. Almost in all the cities most customers of DFSW only sometimes use condoms.

The use of condoms for prevention of STI and HIV transmission is still low when compared with countries such as Thailand and the Philippines who have been able to reduce the incidence of STI and HIV. The lack of condom use consistent continuous in high risk group (FSW) in Indonesia caused by lack of knowledge of STI and HIV in high risk group, condom availability is limited, economic constraints making it difficult to refuse clients who do not want to use condoms.

To increase the use of condoms to high risk groups in Indonesia that aims to reduce the incidence of HIV and STI is to introduce condom use program 100%, continuous extension of the risk of contracting STI and HIV, condom availability of cheap and easily accessible in the location of prostitution, government support in terms of political issue (legislation) and funding.

## HOW THAILAND CUT THE STI INCIDENCE IN THE ERA OF HIV/AIDS

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Thailand have the National STD Control Program since 1941, from 1967 STD have been a major public health problem parallel with the increasing rate of economics growth of the country. From 1980 there was a rapid increase in case of STD due to: rapid socioeconomic development, enormous industrialization, migration from rural to urban area, changing of sexual behavior, expansion of the commercial sex industry. The first case of HIV infection was report on 1984, from 1988 HIV was spreading rapidly among intravenous drug user in Bangkok and low-fee sex workers in Chiang Mai.

The National STD control program perform the activities follow the WHO strategy as: Case finding, Case treatment, Contact tracing, Health education, and counseling Control source of infection.

From 1989 Ministry of Public Health (MOPH) have launched a massive expansion of HIV/AIDS Prevention control program relied on the STD prevention infrastructure that have already in place and condom use was promote among commercial sex workers. In the year 1991 MOPH have created 100% condom program which national law enforcement authorities back up with sanction and tough fines for commercial sex establishment that do not comply. The integration of STD services at primary health care centers were implemented and testing in most provincial and district health facilities were offered in 1994.

### Result

The STD case was reduced from 780:100,000 populations in the year 1985 to 17:100,000 populations in 2008.

- The condom use among commercial sex worker was increased from 50% in 1989 to 99% in 2008
- The HIV prevalence of direct sex worker was reduced from 28% in 1993 to 2.59% in 2008
- The HIV prevalence of indirect sex worker was reduced from 17% in 1996 to 4.59% in 2008
- The HIV prevalence of conscript was reduced from 4% in 1993 to 0.5% in 2008

### IMPLEMENTATION OF PREVENTION OF MOTHER TO CHILD TRANSMISSION PROGRAM (PMTCT) AT SANGLAH GENERAL HOSPITAL DENPASAR BALI 2005 – 2009

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HIV and the AIDS has become a World wide health problem and is a major threat to the stability of social and economics in the developing countries. The epidemic has extended to beyond 40 million people world wide and halve of those have died. The fact that these infection have affected 2000 children under 15 years of age and have led to the death of 1400 of them makes the issue another challenge that we have to face. Ninety percent of these occur as a result of vertical infection form the pregnant mother to the baby.

In Indonesia there has been a trend in the inclination of the disease since 1987. Since the end of 2002 there has been an increase in the sub population with high risk with a 5% prevalence, thus since then Indonesia has been included in the concentrated epidemic level. It is estimated that by 2010 there will be 400 000 infection with 100000 deaths, by 2015 this number will increase to 1000000 infections and 350000 deaths. Child transmission among children is estimated to be 38500. Mother to child transmission is the end part of the cycle.

A strategy developed to counter the above problem is to prevent transmission of HIV from pregnant mother to their offspring. By this regard, Sanglah General Hospital has implemented the PMTCT program since 2005, through Nigraha Clinic which runs the promotion, preventive and curative aspects and seeks to assure pregnant woman with HIV until delivery.

Seventy seven pregnant woman with positive HIV infection has been included in the PMTCT Program at The Nigraha Clinic , Sanglah General Hospital between 2005-2009 with the current result of 49 deliveries made by cesarean section and 24 babies had been tested for HIV with one (1) positive result.

### SEXUALLY TRANSMITTED DISEASES PREVALENCE IN FEMALE SEX WORKERS IN SEVERAL PROVINCES OF INDONESIA

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Sexually transmitted diseases (STD) are a serious medical, social and cultural problem. It is estimated that each year approximately 340 million new cases of syphilis, gonorrhoea, chlamydia and trichomoniasis occur in men and women aged 15–49. Sexually transmitted diseases prevalence rates continue to rise in most countries, including developed countries. It is difficult to obtain population-based data, due to limited resources especially in Indonesia. Strong evidence supports that STDs can facilitate HIV transmission, hence, monitoring STDs is valuable to estimate sexual HIV transmission in a country.

Female sex workers (FSW) are the core group that has a dominant role in the transmission of HIV and other STDs. Data from 2007 Integrated Biological-Behavioral Surveillance (IBBS) from eight provinces for two groups of FSW: Direct FSWs (DFSW) and Indirect FSWs (IFSW) estimated that there were 95.000-157.000 DFSWs and 85.000-107.000 IFSWs in Indonesia in 2006. Chlamydia is the most common STD among both groups of FSWs. Around 36% of DFSWs in East Java and 60% in Jakarta were at least infected with one of three STDs (gonorrhoe or chlamydia or syphilis), while on IFSWs in East Java and Jakarta, it occurred in around 29% and 39% respectively. Prevalence of chlamydia, gonorrhoea, and syphilis in DFSWs in 7 Provinces in Indonesia (North Sumatra, Batam, Jakarta, West Java, Central Java, East java, Bali, and Tanah Papua) ranges between 20.2%-55,0%, 15.8%-44.2%, and 0.9%-16.8% respectively, while prevalence of IFSWs ranges between 23.9%-31.9%, 7.8%-17.9%, and 0.8%-6.8%. Prevalence of HIV in DFSWs ranges between 6.1%-15.9%, while in IFSWs ranges between 1.6%-9.0%.

Keywords : sexually transmitted diseases, female sex workers, Indonesia

## FEMALE CIRCUMCISION: INDONESIAN PERSPECTIVE

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Female circumcision or female genital mutilation is an ancient practice that has been done in various social circles all over the world for religious and social-culture reasons. This practice still continues until today. One crucial issue regarding this phenomenon is the reproductive health risk due to the procedure that includes; handling by the non expert person, not sterile equipment usage, as well as inappropriate medical treatment.

Although WHO has called so that female circumcision should not be carried out in any part of the world, but this practice still continues to take place in several countries, including Indonesia. Many factors such as social, culture, religion, and medical support the implementation of female circumcision which is still carried out in rural areas and urban areas in Indonesia. This multi-factor has invited various studies and the research using multidisciplinary approach to emerge.

Research shows that perception of the community about female circumcision divided in two, some believe that female circumcision is that is partly regarded as the guidance of the religion and another see this only as tradition. Several research data showed that the possibility of female circumcision practice in Indonesia will continue for years to come. The aim of this writing is to analyze the view of some Indonesian communities towards the practice of female circumcision.

Key Words : female circumcisiom - fimale genital mutilation

### SEXUALLY TRANSMITTED INFECTION MANAGEMENT BASED ON LABORATORY EXAMINATION

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Sexually transmitted infections (STI) are among the most common infectious diseases and pose a major health concern globally. The World Health Organization (WHO) has estimated a total of 340 million new cases of curable STI in adult per year, mainly, 151 million occur in South and Southeast Asia. Million of viral STIs also occur annually, attributable mainly to human immunodeficiency virus (HIV), human herpes virus and human papilloma virus. Unfortunately, such diseases are often asymptomatic, and are left untreated resulting in significant health care cost and morbidity rates. Furthermore, there is substantial evidens that certain STIs greatly increases the risk of acquiring or transmitting HIV. The laboratory testing is used to identify the causative agent or a marker of infection such as antigen, antibodies or nucleic acid, and is most useful for detection of asymptomatic STI to prevent transmission and complication. Laboratory diagnosis has undergone many changes in recent years due to the introduction of the new technology with higher specificities and sensitivities however, in some cases older, conventional assays remain valid and should still be used. In this paper discusses the different diagnostic methods to identify the causative agents of urethral discharge, vaginal discharge, genital ulcer, genital wart, and the treatment according the WHO guidelines.

Key word : STI, laboratory examination, treatment

**SYMPOSIUM** 

S 1.1	ROLE OF MOLECULAR DIAGNOSTIC TESTS ON THE CONTROL OF STIS	Rosanna W Peeling
S 1.2	RAPID TESTS FOR SEXUALLY TRANSMITTED INFECTIONS	— Xiang-Sheng Chen
S 1.3	SEROLOGICAL TESTING FOR SYPHILIS	Ronald C Ballard
S 2.1	PERIODIC PRESUMPTIVE TREATMENT: GLOBAL EXPERIENCE	Richard Steen (UK)
S 2.2	THE IMPACT OF PERIODIC PRESUMPTIVE TREATMENT (PPT) INTERVENTIONS: ASIA-PACIFIC EXPERIENCE	Graham Neilsen
S 2.3	PERIODIC PRESUMPTIVE TREATMENT AMONG FEMALE SEX WORKERS: INDONESIA EXPERIENCE	lwan Mulyono
S 3.1	SUBREGIONAL PERSPECTIVE ON STI : AUSTRALIA AND THE PACIFIC	— Darren Russell
S 3.2	SUBREGIONAL PERSPECTIVE ON STI : SOUTH EAST ASIA	— Tan Hiok Hee
S 3.3	Subregional perspective on STI - SOUTH ASIA	Sunil Sethi
S 3.4	RESURGENCE OF SEXUALLY TRANSMITTED DISEASES IN MODERN CHINA	
S 3.5	SUBREGIONAL PERSPECTIVE ON STI - WEST ASIA	Kamal Faour
S 4.1	GONORRHOEA IN THE SOUTH EAST ASIAN AND WESTERN PACIFIC REGIONS : UPDATE	— Athena Limnios
S 4.2	SYPHILIS IN ASIA-PACIFIC-AN UPDATE	Kaushal Verma

SYMPOSIUN

## SYMPOSIUM

S 4.3	CHLAMYDIA	Basil Donovan
S 4.4	UPDATE IN BACTERIAL VAGINOSIS	– Verapol _Chandeying
S 5.1	TRANSMISSION DYNAMICS OF HPV INFECTION	Tonny S Djajakusumah
S 5.2	THE POTENTIAL IMPACT OF HPV VACCINATION	 Suzanne M. _Garland
S 5.3	HPV IMMUNIZATION OF MALES	Basil Donovan
S 6.1	THE INTERACTION OF HIV AND OTHER SEXUALLY TRANSMISSIBLE INFECTIONS- BEWITCHED, BOTHERED AND BEWILDERED	B P Mulhall
S 6.2	GENITAL ULCER DISEASE IN HIV	– T. Thirumoorthy
S 6.3	VIRAL STIS AND HIV	– Priya Sen
S 6.4	ARV FOR VIRAL STI IN HIV	– Zubairi Djoerban
S 7.1	HERPES IN PREGNANCY	- Wresti Indriatmi
S 7.2	HERPES IN NEONATES	– Srisupalak _Singalavanija
S 7.3	PROGRESS IN MANAGEMENT OF GENITAL HERPES	Hans Lumintang
S 7.4	MANAGEMENT OF HPV	– Somesh Gupta
S 8.1	INTRODUCTION STIS IN ADOLESCENTS	_ Christopher K _Fairley
S 8.2	EPIDEMIOLOGY OF SEXUALLY TRANSMITTED INFECTIONS	Jane Hocking

## SYMPOSIUM

S 8.3	BEHAVIOURAL ASPECTS OF ADOLESCENCE.	Anthony Smith	
S 8.4	ADOLESCENT HEALTH SERVICES	Wong Mee Lian	

SYMPOSIUM

## ROLE OF MOLECULAR DIAGNOSTIC TESTS ON THE CONTROL OF STIS

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The World Health Organization estimates that approximately 440 million individuals annually acquire the curable STIs of Trichomonas vaginalis, Chlamydia trachomatis, Neisseria gonorrhoeae and Treponema pallidum. This translates into more than 1 million new cases of these STIs a day and all the associated complications that individuals and control programmes worldwide must deal with daily. In addition, syphilis has now re-emerged as a public health problem in both developed and developing countries.

Molecular tests are commercially available for the diagnosis of STIs, such as genital chlamydial and gonococcal infections. With the high sensitivity and specificity of these nucleic acid amplified tests, it is now possible to use non-invasive specimens such as urine and self-collected or physician collected vaginal swabs. It has also become possible to move screening from traditional venues, such as clinics, to a range of non-traditional outreach venues such as schools, youth and detention centers, prisons, venues for sex work or for street kids. Screening at facilities offering termination of pregnancy has been shown to be effective in prevention of post-abortal salpingitis. Self-collected swabs have also been used for a mail-in chlamydia screening programme with some success.

Molecular tests require sophisticated laboratory infrastructure with technical competence, access to good quality reagents and an understanding of quality control. Health care providers need to be able to interpret laboratory results to guide management decisions. Although the time required for performing these tests has decreased significantly, tests are batched for processing, requiring patients to return for their test results. Failure to return for results has been a major problem for control programmes. The use of mobile phone technology is being explored for transmitting results back to patients so that treatment and partner notification can be performed without delay.

## RAPID TESTS FOR SEXUALLY TRANSMITTED INFECTIONS

#### Xiang-Sheng Chen1, Yue-Ping Yin<sup>1</sup>, and Rosanna Peeling<sup>2</sup>

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Sexually transmitted infections (STIs) are still a major public health problem in the developing world. Laboratory services for STIs are important for prevention and control of the diseases but unfortunately such services are usually either not available because of lack of infrastructure or personnel, or where limited services are available, patients may not be able to pay for or physically access those services. Despite the existence of national policy for antenatal screening to prevent congenital syphilis and national guidelines to encourage STI management among high-risk groups, implementation of screening and case-finding programmes remain unacceptably low because of lack of the testing tools that can be widely used in primary health care settings and intervention activities targeted to high-risk groups. WHO Sexually Transmitted Diseases Diagnostics Initiative (SDI) in collaboration with test manufacturers has initiated laboratory- and clinic-based evaluations of rapid syphilis tests and indicated that many of these tests were easy to use and interpret results and were acceptable to both clients and health service providers. The introduction study is now conducting in pregnant women and high-risk groups in several countries to promote the SAME DAY TESTING AND TREATMENT (STAT), and facilitate integration of syphilis screening and HIV testing in VCT/PMTCT programmes. Although rapid tests for chlamydia and gonorrhoea lack sensitivity, more tests are in development.

## SEROLOGICAL TESTING FOR SYPHILIS

Ronald C Ballard, Division of STD Prevention, Centers for Disease Control and Prevention Atlanta, GA., U.S.A.

A diagnosis of syphilis is usually based on a combination of clinical manifestations together with direct detection of Treponema pallidum in early skin lesions, or more commonly, as a result of serological testing. The serological diagnosis of syphilis requires the detection of two distinct antibodies, heterophile or nontreponemal antibodies and those directed against T. pallidum-specific antigens (treponemal antibodies). Classically, nontreponemal tests, such as the RPR or VDRL tests, are used for initial screening, while treponemal tests such as the TPPA, FTA-ABS or EIAs have been used to confirm the specificity of reactive nontreponemal screening tests. Many high volume laboratories have introduced screening with treponemal EIAs, thus reversing the traditional algorithm, which has resulted in considerable confusion regarding interpretation of results. In addition, the introduction of treponemal point-of-care tests, particularly in resource-poor settings, has resulted in an apparent increase in the incidence of the disease. These problems arise because treponemal antibody tests generally remain positive for life -even following the administration of successful therapy, while nontreponemal tests tend to revert to negative following successful treatment of early disease. Many of these problems are being overcome as a result of the development of dual non-treponemal/treponemal test platforms either for use in the laboratory or in primary health care clinics or other unconventional settings. Quantification of the non-traditional, nontreponemal components of these tests may ultimately lead to a more robust approach to monitoring the effectiveness of therapy than existing RPR or VDRL tests which tend to be read subjectively.

### PERIODIC PRESUMPTIVE TREATMENT: GLOBAL EXPERIENCE

Richard Steen, Graham Neilsen, Antonio Gerbase, Francis Ndowa

Successful efforts to achieve STI control among sex workers and their clients include structural interventions that reduce vulnerability (empowerment models) and increase condom use (100% condom-use policies) supported by direct clinical interventions. Clinical interventions based on syndromic STI management work well for sex workers with symptoms but miss the majority of asymptomatic STIs. Regular screening visits can help identify asymptomatic infections if sensitive laboratory tests are available, but this is uncommon in low-resource settings.

One-time and periodic presumptive treatment (PPT) are forms of epidemiologic treatment, which like partner treatment, are based on an assumption of high infection risk. Evidence of benefit from early experience is summarized in a WHO report (see table). In South African mining communities, for instance, prevalence of gonorrhoea, chlamydia and genital ulcers declined among women using the services and miners in the area, and chancroid was effectively eliminated. Similar yet variable STI declines were reported among sex workers in the Philippines, Laos, Madagascar, Benin, Ghana, Kenya and India.

Table: Presumptive treatment and prevalence of N. gonorrhoeae, C. trachomatis and genital ulcers [WHO 2008]



Data presented at London PPT consultation, Sept 2005

More recent studies have improved understanding, particularly of operational aspects of PPT provision. Modeling based on South African and other data has shown that even partial coverage at PPT frequencies of 1-3 months can have individual and public health impact on both STIs and HIV.

In summary, periodic presumptive treatment should be included as an interim component of STI prevention and control programmes for sex workers with poor access to healthcare services. It should be combined with efforts to establish outreach and other services. Once these are in place and prevalence declines, PPT can be given less frequently or phased out.

## THE IMPACT OF PERIODIC PRESUMPTIVE TREATMENT (PPT) INTERVENTIONS: ASIA-PACIFIC EXPERIENCE

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From 2002-2009, research has continued to document the strong impact of periodic presumptive treatment (PPT) on sexually transmitted infections (including gonorrhea – GC, chlamydia – CT and genital ulcers). Intervention-linked research has been conducted in border provinces of Vietnam and Laos (2002-2004), Papua New Guinea (2003-2004), Bangladesh (2005) and Indonesia (2009). Additionally, Lao surveillance data (2004-2008) suggest that PPT is having a population effect on GC/CT in several provinces and at the national level (see Figure). Reductions of GC/CT prevalence of 50% or more have been reported, with larger declines associated with monthly PPT compared to less frequent treatment (as in PNG).

A randomized controlled trial conducted in Bangladesh in 2005 compared PPT with 'enhanced' syndrome management (with risk-based screening) and resulted in similar treatment rates in each arm. The results in each arm were almost identical but the PPT arm was shown to be much more cost-effective (with savings of about 50% and the ability to see 17% more women per day as a result of time-savings). Only the PPT arm of the study is shown below.

Many governments and donors (including USAID, ADB and UNFPA which funded this work) require generation of local evidence to support investment in PPT. Evidence appears strong that PPT, at least as a short-term measure, can contribute to reducing prevalence of several common, curable STIs in high prevalence settings. PPT should be offered as part of a package of interventions with sex workers that includes peer outreach, targeted condom programming and related SRH services.

Impact of PPT on GC and CT in Asia and Pacific, Female Sex Workers, 2002-2009



### PERIODIC PRESUMPTIVE TREATMENT AMONG FEMALE SEX WORKERS: INDONESIA EXPERIENCE

Dyah EM<sup>1</sup>, Iwan Mulyono<sup>1</sup>, Nunung Priyatni<sup>1</sup>, Atiek S.Anartati<sup>2</sup>, Liesbeth J M Bollen<sup>2</sup>, Chawalit Natpratan<sup>2</sup>, Robert Magnani<sup>2</sup> 1 Subdirectorate AIDS & STI, Ministry of Health, Jakarta, Indonesia 2 Family Health International, Country Office, Jakarta, Indonesia

**Aim :** Periodic presumptive treatment (PPT) for gonorrhea and chlamydia for female sex workers in addition to routine STI screening using effective drug in Indonesia has resulted in decreased prevalence in short period of time.

**Methods :** Piloted in three area in Bintan (Riau Islands), Salatiga (Central Java), Banyuwangi (East Java) with comprehensive package included 1) provision of adequate drugs for gonorrhea and chlamydia as periodic presumptive treatment (PPT) followed by syndromic treatment; 2) condom use promotion by involving the local community and ensuring sufficient condom supply. Endocervical samples were collected and tested for gonorrhea and chlamydia (PCR). Cross-sectional assessments were done at several time points at the STI clinic.

**Results :** 18 months implementation from January 2008 till June 2009 in Bintan, decreasing gonorrhea prevalence from 36.1% to 7.6% and Chlamydia from 33.7% to 10.2% (both p<0.01); in Salatiga gonorrhea prevalence from 23.62% to 13.17% and Chlamydia from 27.14% to 20.36%; and Banyuwangi analysis is not finished yet

**Conclusions :** PPT is effective to reduce STIs and should be delivered as a complement of routine screening, effective safe sex and condom use intervention, ensured availability of condom, and involvement of local stakeholders. This comprehensive intervention is being scaled up to 14 sites with GFATM Round 8 AIDS component.

## SUBREGIONAL PERSPECTIVE ON STI : AUSTRALIA AND THE PACIFIC

D.B. RUSSELL

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Australia has seen an upsurge in diagnoses of HIV – particularly in homosexuallyactive men – in recent years, along with an increase in syphilis diagnoses. The prevalence of genital Chlamydia trachomatis infections also remains worryingly high. A good initiative has been the roll-out of the HPV vaccine for adolescent and young adult women, and there is early evidence of a decrease in the number of presentations for genital wart treatment in these age-groups.

New Zealand is seeing a change in the epidemiology of HIV infections, with increasing rate of infection now being observed in heterosexual males, and in women. 2008 saw a record high number of HIV diagnoses. Some of these infections are related to immigration to New Zealand from countries of high prevalence.

There is generally poor surveillance of STIs in the Pacific Island states, but there is some evidence of high rates of bacterial STIs in these populations. Access to good health care is also patchy in this region. Papua New Guinea has the highest prevalence of HIV in the Pacific Region, with no sign that the epidemic is abating at all. This has significant implications for the long-term future of PNG, and for the health of its people.

### SUBREGIONAL PERSPECTIVE ON STI : SOUTH EAST ASIA

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South- East Asia has the second highest burden of HIV/AIDS globally, with an estimated 3.6 million people living with HIV infection in 2007. WHO estimates the regional prevalence to be 0.3%, but there is wide variation in the burden of the disease in the many different countries that make up South-East Asia.

One of the key areas of concern is the problem of HIV transmission among people who inject drugs (PWID). Evidence suggests there is risky injecting and sexual behaviours among PWID in South-East Asia.

Bacterial STIs continue to cause significant burden on the region. Gonococcal antibiotic resistance is an area of concern. In countries like Singapore, Chlamydia has become the most common STI, with more wide spread testing being done. There is generally a rising trend of STI amongst younger patients as well.

A brief presentation on the work done in STI prevention and screening amongst commercial sex workers in Singapore as well as some aspects of quality improvement programs will also be done.

## SUBREGIONAL PERSPECTIVE ON STI - SOUTH ASIA

**Prof Sunil Sethi** 

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While the region has made spectacular technological and medical advances, large sections of its population have little or no access to basic health facilities. South Asia is facing an HIV epidemic that is severe with an estimated 5.5 to 6 million people currently infected. However, making the task difficult are cultural taboos and gender imbalance. A link between sex trafficking and HIV is emerging; in India, over 60% of those trafficked into sex work are adolescent girls in the age group of 12-16 years (UNDP, 2005) There are an estimated 2,000,000 prostitutes in India; in Mumbai 60% are HIV-positive. Homosexuality has traditionally been a taboo subject. However, there are many millions of men who practise homosexual behaviours, or who adopt homosexual identities, but it is only very recently that the High Court of India overruled a 148-year-old colonial law, and de-criminalized homosexual behaviour. A culturally identifiable group known by the Urdu term "hijra" lives in most parts of India; most are castrated males and dress as females.. MSM in India are at significant risk of HIV infection because of frequent risky sex, and poor health-seeking behaviours. Mapping studies from Pakistan also demonstrate that, as with female SWs, large urban areas contain dense concentrations of MSM and male SWs. Stigma reduction through multisectoral approaches is essential to provide a supportive environment for risk reduction and to increase access and use of prevention and care services.

### RESURGENCE OF SEXUALLY TRANSMITTED DISEASES IN MODERN CHINA

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China has been recognized to be the first country in the world to abolish syphilis in its territory. However, maintaining of the abolishment has been challenged by the resurgence of the plague in recent decades. China's opening to the West in the 1980s and the economic reforms enhancing freedom of movement and personal wealth as well as prostitution practice have created a social climate more conducive to the spread of sexually transmitted diseases (STDs), resulting a reemergence of the diseases mainly in female sex workers and their clients. However, outbreaks of syphilis and other STIs including HIV among men who have sex with men (MSM) have further intensified the epidemic in the country. As the numbers of syphilis and other STI cases continue to soar across many regions in China, the public health mandate for substantial change has been strengthened. The government programs have already laid the foundation for change by helping to introduce syphilis screening among high-risk groups. But broader recognition of STIs as a public health problem, renewed financial commitment from the government, and technical input from advocacy organizations are imperative if syphilis is to be controlled and eliminated once again in modern China.

### SUBREGIONAL PERSPECTIVE ON STI - WEST ASIA

Kamal Faour (Dubai, UEA)

## GONORRHOEA IN THE SOUTH EAST ASIAN AND WESTERN PACIFIC REGIONS : UPDATE

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Gonorrhoea remains a major sexually transmitted infection in the Region, but data quality data on disease incidence/prevalence varies considerably between countries. Most disease estimates are based on clinical presentations managed syndromically. Aetiologically-based diagnoses in well-resourced settings are increasingly based on nucleic acid amplification assays, while culture-based methodologies are retained to monitor antibiotic resistance in Neisseria gonorrhoeae. Disease rates may also range widely within countries. Foe example, annual notified rates in Australia range from 4000/100,000 population in rural indigenous populations, to 60/100,000 in inner-city populations and 6/100,000 in suburban centres. Urethritis in men and endo-cervicitis in women remain the commonest infections reported. Rates of extra-genital disease such as oro-pharyngeal and ano-rectal infection in both sexes; pelvic inflammatory disease; ophthalmia of the new born; and disseminated gonococcal infection are hard to estimate. The absence of reliable incidence/prevalence data makes the Regional economic burden of gonorrhoea hard to estimate. DALY (disability adjusted life year) estimates are probably the best means of achieving comparability. However, not only should the morbidity directly attributable to gonococcal disease and its sequelae be included in these estimates, but also that arising from the enhanced spread of HIV that occurs in the presence of gonorrhoea.

Antibiotic resistance in N. gonorrhoeae continues to be a major Regional problem with extremely high rates of quinolone resistance in many centres, and now, increasing evidence of treatment failures with third-generation cephalosporins. The combination of high disease rates, inadequate control programmes and decreasing treatment options pose considerable public health problems.

### SYPHILIS IN ASIA-PACIFIC-AN UPDATE

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Syphilis, caused by T. pallidum is an important ulcerative STI world over. Of about 340 million cases of curable STIs occurring globally every year, 12 million cases are of syphilis. The prevalence of syphilis had decreased significantly till 90s, however in the last decade the disease has re-emerged with alarming intensity, especially in developing countries. The rate of syphilis has risen from 0.2 /100,000 cases in 1993 to 5.7/100,000 cases in 2005 in China. High risk groups like CSWs, MSMs have syphilis 1 in 10 to 1 in 5 cases. Congenital syphilis has increased from 0.01/100,000 live births in 1991 to 19.68/100,000 in 2005, an average annual increase of >71%. Increasing migrant workers and prostitutes, more extramarital sex, low condom use and poor health controls are key factors in its increase. The incidence of early infectious syphilis has risen from 10/100,000 cases in 1979 to 29/ 100,000 in 1986 in Singapore. Female prostitutes, reduced herd immunity, decreased penicillin use, greater population movement and decreased surveillance have contributed to this increase. An Australian study has shown an increase in infectious syphilis from 3.1/100,000 in 2004 to 6.6/100,000 in 2007. In a study from Delhi, India, syphilis has been found to be the commonest ulcerative STI. 46% male inmates in a district jail in Delhi were found to have syphilis in 1999. There is increased seroprevalence of syphilis in blood donors. Similarly, syphilis has accounted for 37% of cases in transsexuals in Karachi, Pakistan in 1999 and a prevalence of 23% has been found in HIV drug users in Bangladesh. In Southeast Asia and Western Pacific region also syphilis has increased in the last decade primarily due to booming sex industry, travel and tourism, migration of workers and poor control measures.

### **CHLAMYDIA**

Basil Donovan National Centre in HIV Epidemiology and Clinical Research University of New South Wales; and Sydney Sexual Health Centre Sydney Hospital Australia

Multiple prevalence surveys throughout the Asia-Pacific Region have confirmed that chlamydia is typically the most prevalent bacterial sexually transmissible infection. However, nucleic acid amplification tests for chlamydia are often beyond the budgets of individual patients or health systems. Moreover the public health value of wide-spread or population-level screening for chlamydia remains unproven. Some countries that have embarked on national screening programs are beginning to question what has been achieved.

SYMPOSIUM

S 4.

In a series of national-scale studies in Australia we have been investigating the extent that chlamydia notification trends are a result of either a screening artifact or a true increase in the incidence of chlamydia. The Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) Project involves over 80 clinical sites and a public health laboratory network. The crucial features of the ACCESS Project are that it includes testing denominators and it reaches all priority populations. The ACCESS networks should also assist in the evaluation of future interventions to control chlamydia.

In the Australian Chlamydia Control Effectiveness Pilot (ACCEPt) Project, using a randomized controlled community-cluster trial methodology, we hope to explore optimal methods to enhance chlamydia screening. If the trial can be adequately extended, we may be able to demonstrate whether increased screening can lower the prevalence of chlamydia in the general population.

## **UPDATE IN BACTERIAL VAGINOSIS**

Verapol Chandeying, M.D, OBGYN Dip (Thai), FRCP (Edin), FRCP (London) Department of OBGYN, Faculty of Medicine, Prince of Songkla University, Hat Yai 90110 Thailand.

Bacterial vaginosis represents a unique upheaval of the complex vaginal bacterial flora with disappearance of lactobacilli and overgrowth of Gardnerella vaginalis and resident anaerobic vaginal bacteria.

However, more than one half of clinically diagnosed patients are asymptomatic. Many evidences indicate that the anaerobes identified as components of BV have been implicated in adverse pregnancy outcomes across all gestational ages. It is linked to first and second trimester fetal loss, chorioamnionitis, preterm delivery, low birth weight infants, postpartum endometritis, and so on, as well as postoperative pelvic infections, and pelvic inflammatory disease.

Although bacterial vaginosis is not considered a true sexually transmitted infection, it is correlated to sexual activities. Clinical trials demonstrated important reductions in many of these adverse events with appropriate screening and antimicrobial treatment protocols. New low-cost, diagnostic, point-of-care screening tools are available for rapid screening of patients, affording the physician the opportunity to potentially make a dramatic clinical and cost impact in preventing preterm birth and the costly sequelae of prematurity.

### TRANSMISSION DYNAMICS OF HPV INFECTION

Tony S. Djajakusumah Department of Dermato Venereology Padjadjaran University Bandung-Indonesia

Today HPV infection is the most prevalent sexually transmitted infection worldwide. There is strong evidence that transmission occurs primarily via sexual activity, most commonly vaginal and anal intercourse. A knowledge of pattern of sexual behavior and sexual networking in a population is fundamental for the understanding of HPV transmission dynamics such as permissiveness, early sexual debut, number of partners and acquisition of new partners, characteristics of new partners and sexual network, concurrency and serial monogamy, probability of transmission upon exposure and factors affecting it. The implication of transmission dynamics is very important in improving the quality of treatment and prevention of the disease.

Keyword : HPV infection, prevalence, transmission, sexual behavior, implication

## THE POTENTIAL IMPACT OF HPV VACCINATION

Suzanne M. Garland

Director of Microbiological Research and of Clinical Microbiology and Infectious Diseases Royal Women's Hospital, Senior Consultant Microbiology, Royal Children's Hospital Professor, Faculty of Medicine, Dentistry and Health, Department of Obstetrics and Gynaecology, University of Melbourne.

In June 2006, a quadrivalent HPV vaccine was approved by the US Food and Drug Administration (FDA) and by the Therapeutic Goods Administration (TGA) Australia for the prevention of HPV 6/11/16/18-associated cervical cancer, adenocarcinoma in situ, and cervical intraepithelial neoplasia (CIN) grades 1 to 3, vulvar intraepithelial neoplasia (VIN) and vaginal intraepithelial neoplasia (VaIN) grades 2/3, and genital warts in women. A bivalent vaccine that protects against HPV 16 and 18 was licensed in Australia by the TGA in May 2007 and in Europe in September 2007. Licensure for both vaccines was based on the very high efficacy, immunogenicity and safety, in phase 3 vaccine trials. They are being recommended for girls aged 11 to 12 years, and in some countries, catch-up programs for those up to 26 years are also being offered. Implementation of vaccine programmes has varied in different countries: those using government funded school-based programmes have shown the greatest compliance rates and in the order of near 80% (Australia and the United Kingdom which have used to be quadrivalent and bivalent vaccine respectively).

More recently, both vaccines were licensed in some countries for women up to 45 years, based on immunogenicity and/or disease prevention from the vaccine related HPV types. In some countries, vaccination for boys with the quadrivalent vaccine for those aged 9 -12 has been endorsed based on immunobridging data. Vaccination of males with the quadrivalent vaccine has also shown efficacy for external genital lesions as well as for anal intraepithelial dysplasias from vaccine related HPV types.

These prophylactic vaccines have the potential with good coverage, to reduce the burden of disease from vaccine-HPV related types. However those countries with the greatest burden of disease have the greatest challenge in affording the vaccines, implementation with efficient delivery systems, yet are those most worthy of such a great public health initiative.

### **HPV IMMUNIZATION OF MALES**

Basil Donovan National Centre in HIV Epidemiology and Clinical Research University of New South Wales, and Sydney Sexual Health Centre Sydney Hospital, Australia

The value of vaccinating young women and girls against human papillomaviruses (HPVs) is no longer contentious. HPV-related cancers are common and the vaccines have demonstrated very high efficacy. Many public health systems that heed cost-effectiveness models have already opted to subsidize HPV vaccines for young females. But should we vaccinate young males?

Growing evidence is accumulating that HPV vaccines are safe and acceptable in young males and that the quadrivalent vaccine offers high efficacy against genital warts. However, it is too early to know the efficacy of HPV vaccines against cancer in males. Though noting that those epidemiologists and virologists that can afford it are vaccinating their sons, cost-effectiveness models are yet to justify public subsidy of HPV vaccination of young males. Issues that complicate the models include:

- 1. While the incidence of genital warts has been increasing historically, high vaccination rates among females may provide some herd immunity for males.
- 2. If vaccination coverage among females is modest the value of vaccinating males increases, in order to protect females.
- 3. Men who have sex with men have very high rates of HPV-related cancer of the anus but, by the time they might be identifiable as homosexually active, vaccination may be too late.
- 4. Other HPV-related cancers, particularly of the head and neck, are projected to continue to increase.

More generally, single sex vaccination programs raise issue of equity and discrimination and they have a history of eventually being expanded to include both sexes.

## THE INTERACTION OF HIV AND OTHER SEXUALLY TRANSMISSIBLE INFECTIONS- BEWITCHED, BOTHERED AND BEWILDERED

**Dr. B P Mulhall** North Coast Area Health Service, and School of Public Health University of Sydney Australia.

In the 1980's and early 1990's, observational and other studies suggested an association between the presence of sexually transmitted infections (STIs), and human immunodeficiency virus (HIV) transmission, by increasing either the infectiousness of the index case, the susceptibility of the partner, or both ("Epidemiological synergy", Wasserheit, 1992). However, the hypothesis that control of sexually transmitted infections can prevent the spread of HIV in populations has been extensively tested in community RCTs, and is not supported by evidence in seven of eight trials. The equivocal results highlight the difficulty in assessing the effects of a single intervention and multiple causation, as well as the possible differential effects of STIs in early, mature, and late phases of an HIV epidemic. HIV and HSV-2 are known to be involved in a particularly vicious circle, with HIV facilitating acquisition and reactivation of HSV, and HSV in turn enhancing HIV acquisition and replication. However, several very large trials of HSV suppression have failed to demonstrate an effect on HIV acquisition, a profoundly disappointing result that remains perplexing. It has become evident that HSV biology is not well understood. In contrast, three very large trials of circumcision in Africa have shown a remarkable, strong and consistent protective effect of 50-60% on HIV acquisition, (and some STIs); this is an area of intense focus, including innovative studies of foreskin biology.

### **GENITAL ULCER DISEASE IN HIV**

**Dr. T. Thirumoorthy, Associate Professor** *Duke-NUS Graduate Medical School Singapore.* 

The synergistic association between genital ulcers in the acquisition and transmission of HIV has been established in studies in Africa in the early 1990s. Genital ulcer disease (GUD) in persons with risk for HIV is a strong indication for serological testing for early diagnosis of HIV infection.

The commonest cause of anogenital ulcers in HIV negative and positive persons worldwide appears to be caused by Herpes Simplex Virus (HSV 2). Early in the course of HIV infection, anogenital HSV presents as recurrent painful ulcers usually healing in 1 to 2 weeks. With advanced HIV infection, anogenital HSV infections become more extensive, severe and persistent non-healing ulcers. In patients responding to HAART, anogenital herpes can severe and frequent as an immune reconstitution phenomenon.

There has been a recent re-emergence and increase in the incidence of infectious syphilis in MSM populations in several urban centres worldwide. At least a third of these patients present with GUD or perianal ulcers. The increase in Syphilis incidence has been more significant in HIV positive MSM cohorts. Primary syphilis in the perianal areas can be painful and mimic common anal fissures. The clinical features of primary syphilis in the majority of HIV infected persons are similar to those who are HIV negative.

Chancroid which presents as painful, purulent penile ulcers in men who have had sexual contact with lower socio-economic commercial sex workers is declining in incidence in both Africa and Asia. Extending sexual health services and antibiotic therapy to commercial workers would appear to create a possibility to eradicate Chancroid disease.

The other common causes of GUD must be considered in HIV persons with GUD which would include Gram negative bacteria, TB, deep fungal infection, Behcets and squamous cell carcinoma.

HIV negative person with GUD should be provided intense behavioural change intervention to prevent or reduce the risk of HIV acquisition.

### VIRAL STIS AND HIV

**Dr Priya Sen** 

BSc (Hons), MBBS, MRCP (UK), Dip GU Medicine (UK) Consultant, National Skin Centre Singapore; Deputy Head Department of STI Control Singapore

Viral STIs include genital herpes (HSV), genital warts (HPV), Hepatitis A, B and C, Molluscum Contagiosum (pox virus) and Karposi's Sarcoma (HHV8). The majority of these viral infections are incurable and represent an important public health burden as a result of the chronic nature of the infection. The emergence of HIV infection has increased the importance of measures aimed at controlling viral STIs as studies have shown an increased risk of HIV transmission in the presence of viral STIs. Furthermore, the clinical presentations and the response to treatment in viral STIs are altered in the presence of HIV infection. The presence of a viral STI may increase the infectiousness of an HIV-positive individual as well as enhance susceptibility to HIV infection among those who are HIV-negative. Early diagnosis and management of viral STIs will decrease the risk of HIV transmission.

This talk will focus on each viral STI and their individual impact on HIV infection and transmission.

### IMMUNE RECONSTITUTION INFLAMMATORY SYNDROME IN STI-HIV CO INFECTION

#### Zubairi Djoerban

Hematology-Medical Oncology Div, Department of Internal Medicine, Faculty of Medicine University of Indonesia/Cipto Mangunkusumo Hospital Jakarta, Indonesia

The morbidity and mortality related to HIV/AIDS are significantly decreased since the era of Anti Retroviral Therapy (ART). ART also has significant impact to minimize HIV transmission. However, immune recontitution can trigger inflamation respons known as Immune Reconstitution Inflammatory Syndrome (IRIS)

IRIS is a paradoxical clinical worsening of a known condition or the apperance of a new condition after initiating ART. Its results from restored immunity to specific infectious or non-infectious antigen.

The common infectious etiologies are M.tuberculosis, hepatitis C, Cytomegalo virus, Herpes Zoster virus, and Cryptococcus neoformans. STIs patogens are less common etiologies. The frequently reported diseases are anogenital herpes, genital warts, and molluscum contagiosum.

Currently, there are no specific guidelines in managing IRIS in STI-HIV co infection. Antimicrobial agents can be prescribed to treat the presenting pathogens. Clinicians can give steroids or non steroids anti-inflammatory drugs to control inflammation process. ART therapy is continued in most cases of IRIS.

Keywords : IRIS, STI, ART

## **HERPES IN PREGNANCY**

Wresti Indriatmi (Indonesia) Faculty of Medicine University of Indonesia Jakarta, Indonesia

Herpes simplex virus infections often occur in women of reproductive age. Pregnant women infected with either herpes simplex virus 2 (HSV-2) or herpes simplex virus 1 (HSV-1) genital herpes have a higher risk for miscarriage, premature labor, retarded fetal growth, or transmission of the herpes infection to the infant while in the uterus or at the time of delivery. But only a small number of infected pregnant women have a history of symptoms, so in many cases herpes infection is not suspected, or symptoms are missed.

Factors influencing transmission include the type of maternal infection (primary or recurrent), the presence of transplacental maternal neutralising antibodies, the duration of rupture of membranes before delivery, the use of fetal scalp electrodes and mode of delivery. Women who experience their first genital HSV infection in pregnancy are at the highest risk of transmitting the virus to their newborn. Transmission can occur if the amniotic membrane of an infected woman ruptures prematurely, or as the infant passes through an infected birth canal. Very rarely, congenital herpes may occur as a result of transplacental intrauterine infection. Also rarely, newborns may contract herpes during the first weeks of life from being kissed by someone with a herpes cold sore. Recurring herpes and a first infection that is acquired early in the pregnancy pose a much lower risk to the infant.

Oral aciclovir and valaciclovir given in late pregnancy have been shown to limit clinical recurrence of genital herpes, shedding of HSV at delivery and the rate of caesarean delivery for past HSV disease. But there are still insufficient data to determine the effect of oral antiviral prophylaxis in pregnancy on neonatal HSV disease. Neonatal HSV disease should always be treated with systemic antiviral therapy. Prophylactic administration of acyclovir or valacyclovir in the third trimester of pregnancy should be provided to all pregnants with frequent genital herpes outbreaks and with active genital HSV infection near term or at the time of delivery

### **HERPES IN NEONATES**

**Srisupalak Singalavanija,M.D.** *Queen Sirikit National Institute of Child Health Bangkok, Thailand* 

Herpes simplex virus (HSV) infection in the neonate is a rare event with severe consequences for the child. The neonatal infection is mostly acquired from perinatally infection but congenital intrauterine herpes infection can occur. If the mothers have primary genital herpes infections at delivery, the risk to transfer the infection to the baby is high (50%), while the risk of recurrent genital infections to the baby is only 3 percent. Clinical manifestations of neonatal herpes are varied from localized skin-eyemouth (SEM), neonatal disseminated or central nervous system disease. Cutaneous vesicles are found in 30-50% of cases and the diagnosis is made easily by Tzanck's smear. In cases without skin lesions, the diagnosis of neonatal HSV is difficult, but it should be suspected in any newborn with irritability, lethargy, fever or poor feeding at one week of age or with seizure at 2 weeks to 4 weeks of age. Laboratory diagnosis of neonatal HSV infection is confirmed by viral culture, serological testing, or PCR. All newborns suspected to have HSV infection should be treated with parenteral acyclovir. Early antiviral treatment is a predictor for better outcome. The prognosis depends on the extent of disease and the efficacy of treatment. The mortality rate is highest in neonatal disseminated diseases followed by central nervous system infection and the least in SEM infection.

### PROGRESS IN MANAGEMENT OF GENITAL HERPES

Hans Lumintang Department of Dermato-venereology, Airlangga Medical Faculty Surabaya, Indonesia

Infection of Herpes Simplex Virus can cause a spectrum of clinical sign as follow: no infection, asymptomatic, subclinical, clinical, severe infections. It also depends on the immune status of the patient from immunocompetent untill immunocompromise. The spectrum is turn to the left in immunocompetent and turn to the right in immunocompromise. The classical clinical sign of herpes is first episode infection stage, latent stage and recurrent episodes. Recurrent episodes for less than six times usually happen in immunocompetent, but in immunocompromise like HIV infection and AIDS recurrent episodes are more frequent and some can be prolonged with bigger and deeper ulcers.

The problems are :

1. How to make diagnosis and therapy. Normally the diagnosis is made with isolation of HSV by culture, NAAT, direct immunofluoresence and serological immunoglobulin especially for asymptomatic and subclinical infections. Citologic test by Tzanks smear to find multinucleated giant cell for clinical and severe infections.

2. How the regiments of therapy. The treatment we use are acyclovir, valacyclovir and famcyclovir. The others are foscarnet and gancyclovir. Treatments consist of: first episode treatment, recurrent treatment, prophilaxis treatment, viral shedding treatment, short course treatment, immunocompromise treatment, resistant treatment. Vaccination there are no new report.

3. How to manage Herpes in Immunokompromise.

### **TREATMENT OF GENITAL WARTS**

Somesh Gupta, MD, DNB Asst. Professor Department of Dermatology and Venereology, All India Institute of Medical Sciences, New Delhi-110029, INDIA

External genital warts often cause long-term impairment in quality of life and need to be treated promptly. However, these are a difficult condition to treat and initial success in clearing the lesions may be short-lived due to frequent recurrences. Currently available therapeutic modalities can be classified into 3 categories:

1) Ablative therapies, like cryotherapy, scissor excision, laser therapy, and electrosurgery;

2) Cytotoxic agents are topical preparations that kill cells on contact, irrespective of HPV status, by antiproliferative or chemodestructive modes of action. Podophyllin, podophyllotoxin, trichloroacetic acid and 5-fluorouracil cream are main agents in this category.

3) Immunomodulators. Various immunomodulating agents have been evaluated for the treatment of genital warts, which include topical imiquimod, interferon -?2b, and dinitrochlorobenzene.

Imiquimod is a patient-applied immunomodulatory treatment of genital warts. It leads to cytokine induction, mainly interleukin (IL)-2, IFN-? 1 and 2, IFN-?, IFN-? and TGF-?, which may lead to genital wart clearance.1 A clinical response with imiquimod is accompanied by a decrease in the amount of HPV DNA.

Interferon-?2b, injected intralesionally, is also an effective immunomodulatory treatment for warts and appears to be better than placebo and systemically used interferons.2

Intralesional injection of strong antigenic substances unrelated to HPV has been found to be a potentially effective treatment strategy and need to be explored further.3 A mixture of green tea catechins (Polyphenon E) has been found to be more effective than vehicle cream. It has immunostimulatory, antiproliferative and antitumour properties.4

Response rates to these therapies range from 38% to 90%, though up to 65% of the responders relapse in due course of time.5

SYMPOSIUM

S 7

## INTRODUCTION STIS IN ADOLESCENTS

Christopher K Fairley Melbourne Sexual Health Centre, and School of Population Health University of Melbourne. 580 Swanston Street, Carlton Victoria 3053, Australia.

This short presentation will set the scene for other speakers in this session who will discuss the epidemiology of sexually transmitted infections (STI) in adolescents (Hocking), sexual risk behaviour of adolescents (Smith) and what is needed to design health care services for adolescents (Wong).

This presentation will focus on the issues that are relevant to the control of endemic STI in adolescents from a community or government perspective so that the audience can understand the relative importance of behaviour and health care access for effective STI control.

The prevalence of different STI in communities is dependent on a complex mix of sexual practices and for treatable STI, access to health care. Examples will be used to illustrate these points.

### EPIDEMIOLOGY OF SEXUALLY TRANSMITTED INFECTIONS IN ADOLESCENTS

**Dr Jane Hocking** Centre for Women's Health, Gender and Society University of Melbourne. Australia

Nearly half the global population is aged less than 25 years with the current generation of adolescents being the largest in our history. WHO defines adolescents as people aged 10 to 19 years. Globally, adolescents are at significant risk of sexually transmitted infections (STIs). Adolescent girls are at particular increased risk for several reasons. Firstly, their immature reproductive and immune systems leads to increased susceptibility to STIs and HIV transmission. Secondly, many societal issues such as age differences between heterosexual partners (younger girl and older male partner), gender differences in norms for sexual behaviour (sexual involvement expected for boys and men while not accepted for girls and women), and early marriage for girls, all contribute to increased STI risk for adolescent girls. Further, in much of the developing world, some young girls also turn to sex work as a means of obtaining food and shelter.

This places them at further increased risk of STIs, particularly because many are either unable to access health care or avoid it for fear of being judged or stigmatised. WHO estimates that each year more than 340 million new curable STIs (gonorrhoea, syphilis, chlamydia and trichomonas) occur among reproductive-aged men and women; this excludes the estimated 33 million new cases of HIV as well as an estimated 100 million plus infections caused by other viral STIs. Adolescents and young adults aged under 25 years have the highest rates of curable STIs – up to 1 in 20 adolescents develop a new STI each year. This presentation will describe the epidemiology of STIs affecting adolescents, explore differences in rates between developing and developed countries and discuss factors that are contributing to these differences.

Professor Anthony Smith Deputy Director, Australian Research Centre in Sex, Health & Society La Trobe University, Melbourne Australia

Adolescence is the key transition from childhood to adulthood. As such, in many cultures, it marks the time when young people begin to explore their sexuality and for many of them it marks the onset of sexual activity. Usually, the onset of sexual activity is gradual beginning with k=low risk activities such as kissing with the addition of further elements of the sexual repertoire added progressively. Importantly, it is widely accepted that it is more effective to educate young people to engage is safe sexual practices at the outset rather than trying to modify established practices such as the non-use of condoms. This presentation will provide an overview of what is known of the sexual behaviour of young people n Asia and the Pacific with a particular emphasis on sexual practices linked to the acquisition and transmission of sexually transmissible infections.

### **ADOLESCENT HEALTH SERVICES**

Associate Professor Wong Mee Lian Department of Epidemiology and Public Health Yong Loo Lin School of Medicine National University of Singapore

Worldwide, HIV/AIDS, sexually transmitted infections, depression and tobacco, alcohol and other substance use form the main health problems in adolescents. Heath services for adolescents should meet their health, emotive and cognitive functioning needs and be youth-friendly. Adolescents face many barriers in seeking healthcare, particularly for sensitive health matters such as sexually transmitted infections. These barriers include policies which forbid the provision of contraceptives to unmarried adolescents, fear about lack of confidentiality, and health care providers not trained in communicating with adolescents.

SYMPOSIUM

S 8

Principles for developing youth-friendly health services have been proposed by WHO and experts on adolescent health. These include paying attention to gender and social equities, accessibility, acceptability, appropriateness and effectiveness in health service delivery. These health initiatives have been implemented in some countries. However, many of these initiatives, particularly STI services for adolescents, have not been implemented or evaluated in Southeast Asia. A youth-friendly STI prevention intervention is currently being implemented for sexually active adolescents attending the only public STI clinic in Singapore. The intervention, developed from an assessment of their needs (i) incorporates some of the abovementioned initiatives, (ii) engages youth in the development of health education messages and activities, and (iii) incorporates new media and behavioural strategies to reduce risky sexual behaviours and sexually transmitted infections among them.

This presentation outlines key models of adolescent-friendly health services and reviews the evidence on their impact on adolescents' health. Preliminary findings of a randomized controlled trial to assess behavioural and disease outcomes of an STI prevention intervention for adolescents in Singapore will also be presented.

JOINT SYMPOSIUM - WHO

JS-WHO 1	ANTIMICROBIAL RESISTANCE IN N. GONORRHOEAE : A GLOBAL PERSPECTIVE	Francis Ndowa
JS-WHO 2	GONORRHOEA IN THE SOUTH EAST ASIAN AND WESTERN PACIFIC REGIONS : UPDATE	Athena Limnios
JS-WHO 3	BASIC MICROBIOLOGY AND MECHANISMS OF RESISTANCE IN NEISSERIA GONORRHOEAE	Magnus Unemo
JS-WHO 4	STRATEGIC PLAN TO RESPOND TO ANTIMICROBIAL RESISTANCE & EMERGENCE OF CEPHALOSPORIN RESISTANCE IN N. GONORRHOEAE	Ye Tun
JS-WHO 5	OPPORTUNITIES FOR FUNDING NATIONAL STRATEGIC PLANS FOR SEXUAL AND REPRODUCTIVE HEALTH (SRH), INCLUDING STIS THROUGH THE GLOBAL FUND TO FIGHT AIDS, TUBERCULOSIS AND MALARIA	— Manjula Lusti- Narasimhan
JS-WHO 6	ROUND TABLE DISCUSSION : EPIDEMIOLOGICAL, CLINICAL & PROGRAMMATIC IMPLICATIONS AND RESPONSES TO	– Ron Ballard

ANTIMICROBIAL RESISTANCE N. GONORRHOEAE

## ANTIMICROBIAL RESISTANCE IN N. GONORRHOEAE : A GLOBAL PERSPECTIVE

Francis Ndowa (WHO, Geneva)

## GONORRHOEA IN THE SOUTH EAST ASIAN AND WESTERN PACIFIC REGIONS : UPDATE

Athena Limnios, M. App Sc Senior Hospital Scientist WHO Collaborating Centre for STD, Sydney Microbiology Department, SEALS The Prince of Wales Hospital Australia

Gonorrhoea remains a major sexually transmitted infection in the Region, but data quality data on disease incidence/prevalence varies considerably between countries. Most disease estimates are based on clinical presentations managed syndromically. Aetiologically-based diagnoses in well-resourced settings are increasingly based on nucleic acid amplification assays, while culture-based methodologies are retained to monitor antibiotic resistance in Neisseria gonorrhoeae. Disease rates may also range widely within countries. Foe example, annual notified rates in Australia range from 4000/100,000 population in rural indigenous populations, to 60/100,000 in inner-city populations and 6/100,000 in suburban centres. Urethritis in men and endo-cervicitis in women remain the commonest infections reported. Rates of extra-genital disease such as oro-pharyngeal and ano-rectal infection in both sexes; pelvic inflammatory disease; ophthalmia of the new born; and disseminated gonococcal infection are hard to estimate. The absence of reliable incidence/prevalence data makes the Regional economic burden of gonorrhoea hard to estimate. DALY (disability adjusted life year) estimates are probably the best means of achieving comparability. However, not only should the morbidity directly attributable to gonococcal disease and its sequelae be included in these estimates, but also that arising from the enhanced spread of HIV that occurs in the presence of gonorrhoea.

Antibiotic resistance in N. gonorrhoeae continues to be a major Regional problem with extremely high rates of quinolone resistance in many centres, and now, increasing evidence of treatment failures with third-generation cephalosporins. The combination of high disease rates, inadequate control programmes and decreasing treatment options pose considerable public health problems.

### **BASIC MICROBIOLOGY AND MECHANISMS OF RESISTANCE IN NEISSERIA GONORRHOEAE**

Magnus Unemo

National Reference Laboratory for Pathogenic Neisseria Department of Laboratory Medicine, Microbiology, Örebro University Hospital Örebro, Sweden

Globally, antimicrobial resistance (AMR) in Neisseria gonorrhoeae continues to escalate and compromise effective treatments and disease control efforts. N. gonorrhoeae is exceedingly successful in developing/acquiring AMR, by continual mutations and transformation and subsequent recombination of whole/parts of resistance genes from e.g. commensal Neisseria species. During recent years, increasing AMR to the currently ideal treatment options extended-spectrum cephalosporins (ESCs) and treatment failures using oral ESCs, have stressed that gonorrhoea may become untreatable in certain circumstances. With special emphasis given to ESCs, enhanced understanding of the biology of N. gonorrhoeae, phenotypic and genetic mechanisms of AMR and their relevance in vitro and in vivo, and dynamics of emergence and spread of AMR (including cross resistance) in different populations, usually originating in WHO Western Pacific Region with subsequent global spread, are crucial. At the symposia, current knowledge will be reviewed, regarding microbiological, genetical and mechanistical factors that are crucial for a valid clinical and laboratory-based identification and surveillance of ESC AMR, ESC treatment failures at different anatomical sites, and establishment of response plan(s) (including microbiological, epidemiological, clinical, and programmatic components) to meet the global challenge with multi-drug resistant N. gonorrhoeae, and in a near future maybe untreatable gonorrhoea in certain circumstances.

### STRATEGIC PLAN TO RESPOND TO ANTIMICROBIAL RESISTANCE & EMERGENCE OF CEPHALOSPORIN RESISTANCE IN N. GONORRHOEAE

**Ye Tun** CDC-USA

Over the years, Neisseria gonorrhoeae has readily acquired resistance to a broad spectrum of antimicrobial agents traditionally used for the treatment of gonococcal infections. There is major concern over the potential emergence of cephalosporin resistance (Ceph-R) in Neisseria gonorrhoeae. This class of antibiotics has been widely used as a first-line therapy to treat gonococcal infections in the United States and in many other countries. Strains with intermediate levels of resistance to commonly used oral third-generation cephalosporins have been reported from several countries in East Asia. Some of these isolates have been associated with apparent treatment failure. The emergence and dissemination of multidrug resistant gonococcal strains which are also resistant to injectable cephalosporin drugs could have a catastrophic effect on gonorrhea control. Preventing the emergence of drug-resistant gonococci requires a concerted and sustained effort involving multidisciplinary groups. The public health authorities need to identify strategies for enhanced surveillance to detect the emergence of these strains, combined with public response to address the emergence of Ceph-R N. gonorrhoeae. The strategic plan is prepared as a proactive attempt to delay the potential spread of cephalosporin-resistant gonococci through good clinical and public health practices.

### OPPORTUNITIES FOR FUNDING NATIONAL STRATEGIC PLANS FOR SEXUAL AND REPRODUCTIVE HEALTH (SRH), INCLUDING STIS THROUGH THE GLOBAL FUND TO FIGHT AIDS, TUBERCULOSIS AND MALARIA

Lusti-Narasimhan, M., Ndowa, F., Pires, S.

Department of Reproductive Health and Research World Health Organization

The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) is one of the largest donors for HIV/AIDS programmes worldwide and as of December 2008, it had committed over US\$ 9 billion in over 250 HIV programmes in 140 countries. The financial support provided by the Global Fund is pivotal to countries worldwide, especially to those with limited resources to prevent and control the HIV epidemic. The first comprehensive analysis of sexually transmitted infections in funded HIV proposals to the Global Fund was carried out from Rounds 1-8. The analysis contributes to the understanding of how the STI control interventions have been perceived by countries in the development of their proposals to the Global Fund, probably highlighting changing priorities at country level over time.

It is hoped that as strategies and programmes for HIV prevention become more comprehensive and more integrated to maximize population coverage, the control of STIs, including HIV will have a greater impact. It will be important for countries to understand which STIs are prevalent in a particular setting and among which vulnerable populations, and what opportunities exist to include strengthened STI/SRH components in Global Fund HIV proposals.

### ROUND TABLE DISCUSSION : EPIDEMIOLOGICAL, CLINICAL & PROGRAMMATIC IMPLICATIONS AND RESPONSES TO ANTIMICROBIAL RESISTANCE N. GONORRHOEAE

Ron Ballard (CDC-USA)

## WORKSHOP PRESENTATION

W 1.1	LABORATORY TESTS FOR HIV	Charlotte Gaydos
W 1.2	INITIATION OF ANTIRETROVIRAL THERAPY	Veerakathy H.
W 1.3	ANTIRETROVIRAL THERAPY IN TREATMENT EXPERIENCE PATIENTS	Veerakathy H.
W 1.4	MANAGEMENT OF HIV INFECTION IN PREGNANCY	Veerakathy H.
W 1.5	MANAGEMENT OF OPPORTUNISTIC INFECTIONS	Immy Ahmed
W 2.1	RAPID TESTS FOR THE DIAGNOSIS OF STIS	Charlotte Gaydos
W 2.2	MOLECULAR DIAGNOSIS OF STIS	Charlotte Gaydos
W 2.3	MANAGEMENT OF GENITAL ULCER	N Usman
W 2.4	MANAGEMENT OF URETHRAL DISCHARGE, COMPLICATIONS OF STIS, VEGETATIONS	Immy Ahmed
W 3.1	MANAGEMENT OF VAGINAL DISCHARGE	Farida Zubier
W 3.2	MANAGEMENT OF COMPLICATIONS OF STIS	Immy Ahmed
W 3.3	MANAGEMENT OF VEGETATION	Immy Ahmed
W 3.4	GENITAL DERMATOSIS	Gilbert C Yang
W 4.1	PRINCIPLES OF COUNSELING	Jusuf Barakbah
W 4.2	ETHICAL ASPECT, THE DISCIPLINE OF PROFESSION AND LAWSUIT OF THE SERVICE OF STI CASE	M Nasser
W 5.1	VCT	N Usman
W 5.2	PITC	N Usman
W 5.3	PARTNER NOTIFICATION	Gibert C Yang

## LABORATORY TESTS FOR HIV

Charlotte A. Gaydos, Johns Hopkins University, Baltimore, Maryland, USA

**Background**. Persistence of HIV is the result of the inability to test all at-risk individuals. Accurate and highly sensitive tests for the detection of HIV are needed, as well as assays that are rapid. EIA tests with Western blot confirmation are the gold standard but have limitations with regard to the "window period" associated with infection and seroconversion. Turnaround time associated with laboratory assays results in patients not receiving timely results. Rapid point-of-care (POC) tests can increase the ability of the medical community to provide timely results to persons regarding their HIV status.

**Objectives**. To provide an update on the use of POC HIV tests and their accuracy when used in clinical settings, as well as demonstrate the ability of HIV nucleic acid amplification tests for RNA using pooled sera to detect acute HIV infections. **Results**. The POC tests that are licensed in the U.S. include OraQuick, Reveal, Multi Spot, Uni-Gold, and Clearview. Sensitivities are excellent, ranging from 99.3-100%, while specificities are >99%. Performing nucleic acid amplification tests for HIV-RNA on pools of sera that are negative for HIV antibody has been shown to detect recently infected individuals, indicating acute infection.

Conclusion. HIV diagnostics continue to improve.

### **INITIATION ON ANTIRETROVIRAL THERAPY**

Dr V Harindra FRCP, FRCP(Glasg), Consultant Physician, Department of GU Medicine, St. Mary's Hospital, Portsmouth. UK

HIV has become a chronic disease that almost always will require antiretroviral (ARV) medications. Once ARV therapy is commenced it is likely to be lifelong. The life expectancy for a 20-year-old on currently available ARVs will be around 40 years and for a 30-year-old about 30 years. If the viral load is undetectable and CD4 count remains over 500, the life expectancy is similar to that of somebody whose age/sex matched in the normal population. Access to ARV is limited in resource limited countries due to access to care and availability of drugs. Delivery of care further limited due to stigma, lack of infrastructure, human resources & training, drug supply, finances, integrity of first line therapy and monitoring of HIV makers.

The treatment guidelines recommend earlier use of ARV based on current evidence. The benefit of early treatment is based on observational studies and expert opinion and not on randomised studies. If treatment is started early the drugs will be better tolerated, better chance of normalising CD4, less likely to develop resistance, fewer opportunistic infections and death and also prevent non AIDS events such as cardiovascular, renal, hepatic diseases, and neoplasm. But there still remains concern regarding the development of long-term adverse events and drug resistance associated with the early treatment of HIV infection. Patients starting ART should be counselled regarding the benefits and risks of treatment and the importance of adherence, and they should be willing and able to commit to lifelong treatment. \*ART should be started in all patients who have a history of an AIDS-defining illness \*ART should be considered in patients with CD4 counts between 350 and 500 cells/mm<sup>3</sup>

Regardless of CD4 count, ART should also be started in patients who are pregnant or who have HIV-associated nephropathy or hepatitis B virus (HBV) co infection for which treatment of HBV is indicated

In patients with HIV who have tuberculosis, ART should be started as soon as feasible if the CD4 count is less than 100 cells/mL For a CD4 count of between 100 and 350 cells/mL, treatment with ART should begin as soon as practical and can wait until after 2 months of tuberculosis treatment is completed . For a CD4 count of more than 350 cells/mL, treatment with ART should begin at clinician discretion.

World Health Organization has broadened the criteria for antiretroviral therapy in resourcelimited settings in line with early treatment. This approach would more than half of the deaths resulting from infectious aetiologies such as gastroenteritis, tuberculosis, and pneumonia. The first-line choice of ART is a backbone of dual nucleoside reverse transcriptase inhibitor (NRTI) plus either a non nucleoside reverse transcriptase inhibitor (NNRTI) or a ritonavirboosted protease inhibitor (PI). Due to higher genetic barrier ritonavir-boosted PI would be preferred in patients suspected of poor adherence.

## ANTIRETROVIRAL THERAPY IN TREATMENT OF EXPERIENCE PATIENT

Dr V Harindra FRCP, FRCP(Glasg), Consultant Physician, Department of GU Medicine, St. Mary's Hospital, Portsmouth. UK

### Changing Therapy: Treatment Regimen Failure

Treatment failure could result in an increase in viral load, decrease in CD4 count or develop clinical symptoms.

### Virologic failure:

Incomplete virologic response: HIV RNA > 50 copies/mL after 24 wks Virologic rebound: repeated detection of HIV RNA after viral suppression

### Immunologic failure:

CD4 increase of less than 25-50 cells/mm3 in first year of therapy CD4 decrease below baseline on therapy

### **Clinical failure:**

occurrence of HIV-related events - after >3 months on therapy; excludes immune reconstitution syndrome (IRIS)

When patients develop treatment failure one needs to assess adherence to therapy, tolerability, resistance, pharmacokinetic issues, Drug-drug interactions and potency of regimens. The management of treatment failure depends on the backbone ARV. If the New regimen has 2 or more active agent response would be 70-80% better. Drugs with low genetic barrier and drugs with compromised activity need more support. First-line failure of a NNRTI-based regimen should be treated with 2 active NRTIs plus a ritonavir-boosted PI. Failure of a PI-based regimen can be more complicated, (depending upon the genetic barriers). If caught early, changing the NRTI component to 2 active drugs might be sufficient to save the regimen. But as resistance points accumulate, one should consider use of other PIs. Treatment of multidrug experience patients are more challenging. Availability of newer ARVs such as CCR5 inhibitor, Intergrase inhibiters and third generation NNRTIs have given many options.

### MANAGEMENT OF HIV IN PREGNANCY

Dr V Harindra FRCP, FRCP(Glasg), Consultant Physician, Department of GU Medicine, St. Mary's Hospital, Portsmouth. UK

Highly active antiretroviral therapy (HAART) is now the gold standard for prevention of mother-to-child transmission (PMCT) in all settings. Transmission rates are reduced from 33% without any intervention to around 1% to 2%. Maternal treatment regimens used for PMTC of HIV-1 vary markedly across resource-limited settings. Longer duration of antepartum ART prophylaxis (starting 24 to 28 weeks gestation) is more effective than shorter duration. If women do not receive antepartum ART, intrapartum ART combined with infant antiretroviral prophylaxis should be given to reduce the risk of perinatal transmission. HIV-infected pregnant women who require ART due to their advanced HIV status should receive standard potent combination antiretroviral therapy as soon as possible. The risk of perinatal transmission from vaginal delivery is very low if the maternal viral load is undetectable or below 1000 copies/ml. But scheduled caesarean delivery at 38 weeks gestation is recommended for women with HIV RNA levels >1,000 copies/mL. The 4-week of Infant antiretroviral prophylaxis is recommended for all HIV-exposed neonates to reduce perinatal HIV transmission. Avoidance of breastfeeding is preferred but if breast fed early cessation of breastfeeding will minimize transmission. Mixed feeding should be avoided. Current international guidelines for resource limited countries recommend that HIV-infected women exclusively breastfeed their infants to postnatal Month 6, unless replacement feeding feasible, affordable, and safe. Current evidence shows that infant HIV transmission through breast feeding could be significantly reduced with the use of HAART. For HIV-infected women who wish to breastfeed, there will be a need to provide either infant prophylaxis or maternal HAART regardless of the mother's CD4+ cell count at delivery.

During the workshop case scenarios will be used to highlight practical management of HIV infected patients.

## MANAGEMENT OF OPPORTUNISTIC INFECTIONS

Dr Immy Ahmed-Jushuf, FRCP, MBA, Consultant Physician, Department of GU Medicine, Nottingham University Hospitals, City Campus, Nottingham . UK

Opportunistic infections (OIs) still pose a major challenge in the management of HIV infected patients. With the advent of anti-retroviral treatment (ARV), the spectrum and frequency of HIV associated OIs changed. ARV is still not easily accessible in many parts of the world and here prevention and treatment of OIs form a major component of HIV case management.

This workshop will review the management of common OIs affecting the mouth, lungs, CNS liver and kidneys by way of case based discussions. Aspects of clinical assessment, investigations, diagnosis, treatment and prevention of OIs will be discussed.

### **RAPID TESTS FOR THE DIAGNOSIS OF STIs**

Charlotte A. Gaydos, Johns Hopkins University, Baltimore, Maryland, USA

**Background.** Point-of-care (POC) tests are an important strategy to address the epidemic of sexually transmitted infections (STIs). Access to care and confidentially are barriers to STI care. POC tests allow clinicians to provide immediate, confidential results and treatment. POC tests, if accurate, can provide the public health community tools to prevent the transmission of STIs in the community.

**Objectives**. To provide an update on the use of POC tests for STIs and to present new methods of outreach into the community.

**Results.** POC tests for chlamydia include: Clearview Chlamydia<sup>®</sup>, QuickVue<sup>®</sup>, and Chlamydia Rapid Test, however their sensitivity is relatively low compared to nucleic acid amplification tests (NAATs). For gonorrhea, POC tests include PATH GC-Check<sup>®</sup> with a sensitivity of 70% compared to NAATs. Trichomonas POC tests include: XenoStrip  $-Tv^{TM}$  (not on the US market), OSOM<sup>®</sup>TV, and the Affirm<sup>®</sup> VPIII. Sensitivities are good compared to culture, but lower compared to NAATs. POC tests for syphilis are not yet available in the US, but are available in Europe and Asia. Simplicity and ability to be CLIA-waived are limiting consideration for use.

**Conclusion.** New STI POC tests are desperately needed and promising new assays are under development.

## **MOLECULAR DIAGNOSIS OF STIS**

Charlotte A. Gaydos, Johns Hopkins University, Baltimore, Maryland, USA

**Background**. Molecular tests for the detection of STIs are now the gold standard for diagnosing chlamydia (CT) and gonorrhea (GC) infections, but these molecular tests for diagnosing other STIs are not yet commercially available, with the exception of HIV.

**Objectives**. To provide an update on the use of nucleic acid amplification tests (NAATs) for the detection of STIs and to present new methods of using self-collected urogenital samples at home via Internet recruitment to provide outreach into the community.

**Results**. There are three commercially available NAAT assays for the diagnosis of CT/GC: Amplicor PCR, ProbeTec SDA, and APTIMA Combo2 TMA. Another new assay is at the FDA for clearance and one new NAAT test is in clinical trials. Sensitivities and specificities are uniformly high. New specimen types such as urine and vaginal swabs are approved for detection of STIs using NAATs. Internet recruited home samples are showing promise as a new way to reach individuals at risk for STIs. Home collected samples are acceptable to individuals and are highly accurate.

**Conclusion.** New tests and new methods of reaching individual a risk for STIs will provide effective tools for preventing transmission of STIs.

### MANAGEMENT OF GENITAL ULCER

N.Usman M.D., D.V., Ph.D. India

Genital ulcers can be due various causes like STIs, Non STIs. Trauma, Malignancy, allergy, systemic diseases etc. When patients come with genital ulcer/s, their age, marital status, wife currently pregnant, occupation and use of alcohol/drugs etc should be documented .Obtaining sexual history is vital component in the management of genital ulcers. (Marital, Extra marital and premarital, recent sexual partners in the last three months, type of sexual activities like, oral, anal and/or vaginal etc). In female patients, menstrual history, contraceptive usage like, IUD/Pills, pregnancy history and miscarriage with dates has to be asked. History of previous STIs should include, which STI, when / how many times, disease free periods, tests done, treatment given and any drug allergies.

Pertaining to the present lesion, detail like, duration, initial lesion (Vesicle, Papule, Erosion etc) painful or painless, single or multiple, treatment taken (Inj / Tab / Cream etc) should be obtained. After completing general examination, patients should be asked to undress from chest to knee for genital examination. Inguinal nodes, scrotum, perineum, abdomen, vagina and cervical motion tenderness etc should also be examined.

Number, site, size, shape, surface, borders / base, painful or not, whether indurated, discharge from ulcer etc are to be looked for the present ulcer/s.

If single ulcer is present it could be either primary syphilis or granuloma inguinale . Multiple STI ulcers could be due to secondary syphilis, chanroid or genital herpes. Granuloma inguinale may present as multiple ulcers also.

For confirmation, Specific investigations should include Smears (DG for TP, Gram stain for H.Duc and Leishman for DB / Tzank), Blood Tests (VDRL / RPR, HIV, HBsAg, HSV) and Biopsy.

Non STI causes of genital ulcers should be kept in mind before arriving at the final diagnosis, Etiological or syndromic treatment can be offered with partner notification and follow up.

## MANAGEMENT OF URETHRAL DISCHARGE, COMPLICATIONS OF STIS, VEGETATIONS

Dr Immy Ahmed-Jushuf, FRCP, MBA, Consultant Physician, Department of GU Medicine, Nottingham University Hospitals, City Campus, Nottingham. UK

STIs pose a major public health challenge in most parts of the world. Whilst rates of STIs do vary in different regions, these still pose a heavy burden on the health services of most countries. The last few years have witnessed significant new developments in STI diagnostics as well as treatments which mean that many STIs can now be managed effectively in non-specialist settings.

This workshop will review the management of STIs with an overview of the key elements of sexual history taking, the benefits and limitations of syndromic versus epidemiological models of managing STIs. It will cover aspects of the clinical management of STI syndromes including the management of patients with urethral discharge, complications of STIs e.g. pelvic infection. epididymitis, sexually acquired reactive arthritis etc and those with 'vegetations' including genital warts.

The workshop will focus on clinical management of these scenarios both in resourcerich as well as resource-poor settings by way of case based discussions. Aspects of clinical assessment, investigations, diagnosis, treatment and prevention of STIs will be discussed.

## MANAGEMENT OF VAGINAL DISCHARGE

Farida Zubier Department of Dermato-Venereology, Faculty of Medicine University of Indonesia

Vaginal discharge which is an abnormal increased amount or odor or color of vaginal secretions, is a very common symptom and among the most important reasons for women to seek treatment. These conditions may be physiological, due to endogenous infections, or related to sexually transmitted infections (STIs) that affect cervix or vagina.

Bacterial vaginosis, vulvovaginal candidiasis are the causes of endogenous infections. The most frequent underlying causes of STIs cervicitis are *Neisseria gonorrhoeae* and/or *Chlamydia trachomatis* while the cause of STIs vaginitis is *Trichomonas vaginalis*. Cervical infections often undiagnosed and hence untreated due to complete absence of symptom and sign in many infected women or they do not recognise as being related to STIs.

Since the symptoms of vaginitis are nonspecific, neither self-diagnosis nor diagnosis by a physician is reliable without laboratory confirmation of a specific disorder.

Unlike STIs caused by viral, gonorrhea, chlamydiasis and trichomoniasis are curable and easy to diagnose, and cheap to treat. Treatment for STIs need to be effective and administered as promptly as possible. In choosing antibiotics especially for gonorrhea, regional antibiotics resistance pattern should be considered because *N. gonorrhoeae* develops resistancy to antibiotics more easy.

If cervicitis remain untreated, it may cause serious complications such as pelvic inflammatory diseases (PID), ectopic pregnancy and fertility, and the infections will continously spread to the sexual partner. The consequences of STIs for the unborn or newborn may be serious and lifelong.

Clearly, STIs have calamitous effects on humankind. Given the significant medical, financial and social cost of STIs, controlling their spread is essential. The first step in combating STIs is accurate diagnosis and prompt treatment. Infection can be diagnosed accurately only after laboratory tests have been carried out on samples from .the appropriate anatomical sites. In a limited health facilities where laboratory examination can not be perform, WHO has made guidelines using syndromic approach to manage STIs.

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## **GENITAL DERMATOSES**

Gilbert C. Yang, M.D., Fellow, Philippine Dermatological Society, Diploma in Venereology (Liverpool, England), Head, Section of Dermatology, University of the East Ramon Magsaysay Memorial Medical Center, Aurora Boulevard, Quezon City 1113 Philippines

Commonly, physicians encounter skin conditions in the genitalia which are not sexually transmitted. These non-venereal dermatoses are extremely important for the physician to recognize, so that proper diagnosis management and patient advice can be given. After a thorough history and physical examination is done, several non-venereal dermatological conditions can be considered.

Normal variations of some genital conditions are common in the general population. In addition to this, erythematous, squamous and papular dermatoses may also be seen in the genitalia. One should also consider eczema as well as drug eruptions in the differential diagnosis. Ruling out bacterial, fungal, viral and parasitic infections should also be done. Other conditions (such as Behç'8det's disease and Zoon's balanitis) may also be entertained, as they may cause confusion to the physician. Finally tumors, whether they are benign, premalignant or malignant, also occur as lesions in the genitalia.

Each disease entity shall be discussed briefly. The take home message at the end of the lecture is basically this: Not all genital lesions are sexually transmitted. Many dermatoses affect the male and female anogenitalia which are non-venereal in nature, and recognizing these conditions is the first and crucial step in managing such patients.

### **PRINCIPLES OF COUNSELING**

Jusuf Barakbah Department of Dermato-Venereology Faculty of Medicine Airlangga University/ Dr Soetomo General Hospital, Surabaya Indonesia

**BACKGROUND** Sexually Transmitted Infection (STI)/HIV-AIDS epidemic continues to rise at alarming rate especially in the developing countries since more than 80% of the new infection worldwide occurred in this region, particularly among population with high-risk behaviors, including injecting drug user (IDUs), man who have sex with man (MSM), sex workers, migrants and youth.

One of the important factors which support this situation is the lack of right information so that many peoples did not know their risk of infection.

**OBJECTIVES** counseling in STI/HIV-AIDS has become a core element in a holistic model of health care and health education, and has been proved effective in the management of STI HIV-AIDS. It helps people accept and cope with the knowledge of being STI/HIV positive, can make a decision about testing as well as reduce the transmission

Many aspects of the diseases and its impacts should be discussed during the counseling.

**AIMS** counseling has two general aims; (1) for the prevention of STI/HIV transmission and (2) the support of those affected peoples for their all needs, changing behavior, reducing stigma and psychological stress.

All counselors in this field should have formal counseling training and receive regular clinical supervision a part of adherence to good standards of clinical practice.

Key words; counseling, health, stigma transmission.

## ETHICAL ASPECT, THE DISCIPLINE OF PROFESSION AND LAWSUIT OF THE SERVICE OF STI CASE

M.Nasser MD., Doctor of Law, Lecturer on Post Graduate Law Faculty UNSOED Purwokerto and Hasanuddin University Makasar- INDONESIA

A doctor that serving on the STI case from the examination, medical treatment and counseling may commit violation of medical ethics, discipline or lawsuit, intentionally or not. Lawsuit can happen on the case of tort law or crime.

In Indonesia, several cases on STI and HIV potentially invite ethical violation and lawsuit. Confidentially, right to know and disclosures many times become gray area to ignite the conflict between patient, doctor or hospital.

This paper not only mentions about contemplation on the possibility of those violation mentions above, but also offers certain alternatives in order to solve the problem faced and its prevention effort.

VCT and PITC

Dr. N.Usman M.D., D.V., Ph.D.

Routine HIV testing will result in increased identification of HIV/AIDS cases, more rapid entry into the healthcare system, and earlier diagnoses for HIV/AIDS patients. In practice it is not possible to force everybody to undergo HIV testing and hence the concept of VCT was interduced.

Principle of VCT: Provision of a facility to help an individual to decide whether to take up the test or not to take up- through appropriate counseling and through INFORMED CONSENT.

VCT is the entry point for HIV care and consists, team effort, client-centered approach, provision of treatment links, provision of support links via networks etc. When a person opts for HIV testing he is given pretest counseling (Information about nature of illness, consequence of test result, what the test result means, concepts of HIV,AIDS, window period, alteration of risk behavior, promoting condom use). Once result is obtained, depending on the positive or negative results post test counseling is imparted. Components of negative counseling : window period, alteration of risk behavior and reinforcing condom use. If the test is positive client should be told about disease progression, treatment options, alteration of risk behavior, nutrition and hygiene, partner testing and resources for care & support. Attitude and behavior of counselor will play a major role in VCT.

In developing countries like India the percentage of clients voluntarily getting tested is very meager. Most of the tested are mainly referred from maternity, TB, STI and pediatric departments (Provider initiated).

Hence the concept of Integrated Counseling and Testing Center (ICTC) was interduced in India and it has paid dividends in detecting more number of cases. Ideally, a health facility should have one integrated counselling and testing centre for all groups of people. However, an ICTC is located in facilities that serve specific categories such as pregnant women. Accordingly, an ICTC is located in the Obstetrics and Gynaecology Department of a medical college or a district hospital or in a maternity home where the majority of clients who access counselling and testing services are pregnant women. The justification for such a centre is the need for providing medical care to prevent HIV transmission from infected pregnant women to their infants. Similarly an ICTC is located in a TB microscopy centre or in a TB sanatorium, where the majority of clients are TB patients. As TB is the most common co-infection in people with HIV, availability of HIV counselling and testing can help patients to diagnose their status for accessing early treatment.

At the end of March 2009, the number of ICTCs registered in India was 5,062.

Community awareness should be intensified with IEC for the maximum utilization of these centers. Health care providers also must be sensitized to test more clients not only HRGs but also from general community.

## **VCT and PITC**

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### **PARTNER NOTIFICATION**

Gilbert C. Yang, M.D.,

Fellow, Philippine Dermatological Society, Diploma in Venereology (Liverpool, England), Head, Section of Dermatology, University of the East Ramon Magsaysay Memorial Medical Center, Aurora Boulevard, Quezon City 1113 Philippines

Partner notification and management breaks the cycle of transmission of sexually transmitted infections (STI). Identifying the source of infection may not be possible, but it is recommended that all sexual partners of the previous two months need to be treated. Partner notification and management involves delivering treatment to all sexual partners, as well as providing treatment for the same STI as the patient.

Partners can be contacted through patient referral, when the patient informs partners that they need to seek treatment for STI, or through provider referral, when the health care provider contacts the partners named by the patient. Voluntary partner referral by the patient is the preferred method of partner notification.

Topics to be discussed with the index patient are included in this part of the workshop. Options when patient referral does not work, and options when the partner does not come for treatment will be taken up as well. Steps to undertake in treating partners are also tackled.

## **ORAL PRESENTATION I**

NUSANTARA I		STI EPIDEMIOLOGY	
OP 1.1	PREVALENCE OF SEX (STI) AMONG HIV-INFI CARE HOSPITALS IN	KUALLY TRANSMITTED INFECTIONS ECTED WOMEN AT THREE TERTIARY BANGKOK, THAILAND, 2004-2006	Piyawan Limpanyalert (THAILAND)
OP 1.2	SEXUALLY TRANSMI SEX WORKERS IN MA PCR / REVERSE LINE	ITED INFECTIONS AMONG FEMALE NADO, INDONESIA USING A MULTIPLEX BLOT ASSAY	Fera Mawu (AUSTRALIA)
OP 1.3	RTIS PREVALENCE AI CITIES IN INDONESIA	ND CONDOM USE OF FSW IN SEVERAL , IN 2003, 2005, AND 2006/07	Luxsi
OP 1.4	HIGH STI PREVALENO TRANSGENDERS IN I PRESUMPTIVE TREA	CE AMONG MALE-TO-FEMALE NDONESIA: TIME FOR PERIODIC TMENT?	Atiek Anartati
OP 1.5	PREVALENCE, IDENT RISK FACTORS OF VI FEMALE SEX WORKE	IFICATION OF CANDIDA SPECIES, AND JLVOVAGINAL CANDIDOSIS AMONG ERS IN YOGYAKARTA	Eliza Miranda
OP 1.6	SYPHILIS AMONG FE	MALE SEX WORKERS IN INDONESIA:	Nurholis Majid

P 1.6 SYPHILIS AMONG FEMALE SEX WORKERS IN INDONESIA: Nurholis Majid NEED AND OPPORTUNITY FOR INTERVENTION