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FIDSSA 6 Conference, Champagne Sports Resort

Points of interest **FIDSSA** conference **New ID Specialists Important Confer**ences in 2016 FIDSSA 6 Con- 2 ference report Newly qualified 8 **ID** specialists SASPID News 9 STDSSA AGM 10 SAASP Annual 10 Strategy meeting SASTM Boiling 12 Point 17th ICID, Hy-13 derabad Congratulations 14 time And Finally... 14

FIDSSA Conference Report



The 6th FIDSSA Congress 2015: Emerging Threats, was held from 5–8 November 2015, Champagne Sports Resort, Drakensberg. Jim Buttery and Shabir Madhi were the international and national guest speakers for SASPID. Plenary session discussions focused on important vaccination considerations such as adverse event reporting and urgently needed maternal-infant health strategies such as maternal immunisation.

As a fun fact, did you know that hysteria and syncope in adolescent girls receiving HPV vaccination is a real problem? Make sure the entrance and exit to the "vaccine chamber" is separate next time you vaccinate adolescents.

The paediatric ID session gave a broader view of current projects and topics within the paediatric ID community. The improved health and outcomes of our paediatric community in the era of viral vaccines was discussed by Jim Buttery. Angela Dramowski gave an excellent and very important presentation on paediatric infection prevention and control practices. Theuns Avenant was clear in his message that the congenital infection acronym "TORCHES" cannot simply be used in practice anymore; more detailed and focused examination and investigations are necessary for perinatal infections. Oral presentations were of a high standard and included topics on childhood pneumonia, PCV13 vaccine, Carbapenem-Resistant Enterobacteriaceae infection (CREI), and infant feeding choices in HIV infected mother-infant pairs. The session ended with case studies from the paediatric ID group in Pretoria to illustrate that ID physicians are indeed: Part master diagnosticians, part medical sleuths, these specially trained doctors are often called upon to solve cases that baffle their colleagues. "We're the Sherlock Holmeses of the medical world..."



Professor Dan Bausch, was working in Sierra Leone from the very beginning of the outbreak and has unrivalled knowledge on the subject. He gave a fascinating overview of history of Ebola prior to 2014 and shared his experiences this time around. This was followed by two local speakers. Janusz Paweska headed the South African laboratory response which was so vital to bringing state-of-the-art diagnostics to the field under extremely challenging conditions. Adrian Duse is an expert in Infec-

tion Control who was heavily involved in preparing South Africa for the challenges of imported cases. He shared his experiences and explained some of the many controversies in this area.

Dan Bausch gave further insights in two Ebola related presentations on 'Clinical pearls on Viral Hemorrhagic Fevers' and Sequelae after Ebola : Even When it's over it's not over. During the breakaway session we heard some personal experiences from the field including Dr Chikwe Ihekweazu's challenging job of contact tracing during the Ebola outbreak in Liberia.

Other highlights from IDSSA were Rob Davidson's presentation on a proposed open access course in tropical medicine which aims to bring high quality online learning materials to low resource areas in Africa and beyond. Lucille Blumberg and John Frean are a double act to rival some of the greats and told us about their experiences with managing trypanosomiasis in South Africa.

The conference was a great success and many thanks must go to the organisers. A special mention must go to John Black for leading the organising committee whilst trying to get to grips with healthcare in the Eastern Cape.

I C S S A Contributions by Joy Cleghorn, Lesley Devenish and Briette INFECTION CONTROL SOCIETY OF SOUTHERN AFRICA du Toit

A highlight of the Infection Prevention and Control conference programme was a series of outbreak related presentations delivered by our international speaker, Evonne Curran. Evonne previously worked in infection control at Glasgow Royal Infirmary and more recently at Health Protection Scotland as a nurse consultant, where she led the healthcare-related outbreak programme. In addition to writing a regular outbreak column for the Journal of Infection Prevention, she has published 58 papers. Evonne is now an independent Infection Prevention Consultant.



Evonne spoke about outbreak prevention, preparedness, detection and management which included the gathering of outbreak intelligence, management tools, including a simple checklist, an algorithm and debriefing tool as well as several theories, including the human error theory. It became clear during her talks that unless we understand how errors arise, we will not be able to defend against them. In order to reduce outbreak vulnerability, we need to identify and strengthen our system's weaknesses. The importance of good, real-time surveillace in order to detect an outbreak and resource accordingly was also re-emphasised.

Evonne pointed out that healthcare settings are very vulnerable to outbreaks. The elements contributing to a possible outbreak are present every day, namely outbreak provoking conditions (shortages of staff, lack of single rooms, lack of application of IPC knowledge) and unsafe acts (failure of hand hygiene, failure to isolate, failure to clean equipment etc.)

Other presentations about environmental cleaning and environmental sampling linked nicely into outbreak management and were also very informative.

Although there is no consensus about CPE screening, the message from Dr Jennifer Coetzee was that a pro-active approach with regards to the identification of CPE positive patients is important. There were many new products introduced at the conference as well as a strong focus on hand hygiene. Exhibitions for hand hygiene included hygiene awareness through a lumenescing device and committing support to hand hygiene to ensure patient safety.

The conference was well attended by infection prevention and control (IPC) practitioners/specialists and a total of 18 ICSSA members attended the AGM. A request was made that all the public sector and hospital groups encourgage their IPC practitioners/specialists to become members of ICSSA.



'Emerging threats' was an appropriate theme for the congress held at the Champagne Sports Resort in the picturesque Drakensberg Mountains from the 5th-8th September 2015. The 'threats within' on a microscopic level such as microbial mutations leading to antibiotic resistance were extensively dealt with and the need for antibiotic stewardship again emphasised, especially with the dearth of new antibiotics on the horizon. Other threats such as hospital outbreaks of *Clostridium difficile* infections due to lapses in infection control outlined all the possible manners where vulnerabilities in procedures were not addressed. The 'threats without' on a macro level were elegantly addressed by SASTM's guest, the president-elect of the International Society of Travel Medicine (ISTM), Professor Leo Visser whose plenary talk 'Infections in a borderless world' expanded on the role of travel in the spread of infectious diseases.

He elaborated on a number of diseases and started with the medieval plague which spread along the silk route from Asia to Europe with the pathogen carrying flea vector hitching a ride on animals as diverse as rats and camels. *Yersinia pestis* resulted in the decimation of the European population. The speed with which the 2003 SARS virus spread globally drove home the reality of the world being a global village and the unpredictability of influenza pandemics demonstrated by the 2009 H1N1 pandemic which originated in Mexico and not in China as predicted by epidemiological modelling. The ease and speed of modern travel, and the need for surveillance was again emphasised. Drawing on the current West African Ebola epidemic, zoonotic spread of disease was shown to be spread by an overlap of the animal and human interfaces with spread facilitated by travel.

Professor Visser was also the keynote speaker at the SASTM parallel tract. This unfortunately ran parallel to the vaccine tract which covered topics that were of particular interest to the travel health practitioners but it still surprisingly drew a considerable number of delegates. He covered the current yellow fever controversies such as duration of immunity after vaccination and the effects of immunosuppressants. The different guidelines adopted by different countries as to whether vaccination leads to lifelong immunity or needs to be boosted every ten years emphasised the need for adequate consultations with travellers.

Dr Brink presented the SASTM initiative of the VERS (Vaccine Electronic Recording System) which would provide valuable information about the demographics of South African travellers as well as their destinations. The ease of using the system would ensure that not a lot of the valuable time of the travel medicine practitioner would be required. It is hoped that the system would be used for the mandatory capturing yellow fever vaccinations as required by the Department of Health and that SASTM would manage this on behalf of the DoH. Mande Toubkin analysed the records of travellers attending or calling an emergency department with specific reference to travel to Ebola affected areas.

Two ethics talks were given as well. Professor Duse outlined the principles of patient autonomy, beneficence, non-maleficence, and distributive justice. He then elaborated on the growing business of medical tourism and the unexpected results of it such as the spread of multi-resistant organisms from the country where procedures were performed to the country of origin of the tourist. He detailed the reasons for this growing industry such as the relative cheapness of procedures in developing countries. Other factors, such as the South African 'medifari' where a surgical procedure is combined with a safari were also mentioned. Salim Parker presented a number of case studies which raised ethical issues to the travel medicine practitioner. These included terminally ill travellers, a traveller wanting to take part in a child sex tour, and dealing with medical emergencies in a foreign country. He emphasised that goal post changes may occur pre, during and post travel and that medical ethics should equip the practitioner in handling such cases, with some cases not really having a right or wrong approach. In such cases the 'best under the circumstances' action with which both patient and practitioner is comfortable should be adopted.

STDSSA—Sexually Transmitted Diseases Society of Southern Africa—Frans Radebe & Bronwyn Joubert

Of the STD related presentations delivered at the congress, there are four which stand out:

- Urogenital schistosomiasis by Eyrun Kjetland (University of Oslo, Norway)
- Increased MICs of ceftriaxone and cefixime in *Neisseria gonorrhoeae* in KwaZulu-Natal, South Africa by Santhuri Rambaran (UKZN, South Africa)
- "Achilles heel of Syndrome STI management" –a Case of *Klebsiella granulomatis* infection by Dr Bernadette Gosnell (UKZN, South Africa)
- Overview of molecular diagnostics and antimicrobial resistance detection in STD pathogens by Allan Pillay (Centres for Disease Control and Prevention, USA)

The key points of each of these are summarized below in order to highlight the need for ongoing surveillance of the organisms which cause STDs, frequent testing to determine whether or not the organisms circulating in the population are susceptible to the antimicrobial agents included in the syndromic management regimen, as well as the possibilities that organisms which are known to cause STD may also affect other parts of the body.

Urogenital schistosomiasis

Human schistosomiasis, especially of the urogenital tract, remains under-diagnosed in most healthcare facilities. Female genital infection is a manifestation mainly of *Schistosoma haematobium* infection where women tend to approach health services with infertility or symptoms of STIs. It remains under-diagnosed due to low index of suspicion among health-care professionals. It is widespread in Africa in both rural and urban areas. It is transmitted by skin contact with infected fresh water. Diagnosis is by visual inspection of characteristic lesions on the cervix and vaginal wall. Treatment with praziquantel aims to kill the adult worms and prevent new lesions.

Increased MICs of ceftriaxone and cefixime in Neisseria gonorrhoeae in KwaZulu Natal

Resistance to ceftriaxone and cefixime for the treatment of *Neisseria gonorrhoeae* has been reported in a number of countries including South Africa. Four cases with decreased susceptibility were isolated in Cape Town and Johannesburg. In 2014 the University of KwaZulu Natal reported an increase in minumim inhibitory concentration (MIC) for the two drugs, one isolate had a MIC of 0.125mg/L for ceftriaxone, 3 isolates with MIC of 0.125mg/L for cefixime and 1 isolates had an MIC of 0.25mg/L for cefixime. The studies re-emphasize the need for coordinated ongoing monitoring to avoid total resistance to the third generation cephalosporins which is already happening in most countries.

"Achilles heel of Syndrome STI management" - a Case of Klebsiella granulomatis infection

This case of an HIV positive female patient presenting with a 5 month history of an ulcer, highlighted the shortcoming of relying completely on STI syndromic management for genital ulcer syndrome. Unfortunately it did not cover adequately for granuloma inguinale which was finally diagnosed clinically by an expert and confirmed by the laboratory. This emphasized the need to have a referral system and strengthen the laboratory capacity to diagnose these rare cases.

New diagnostics for syphilis & yaws and detection of Haemophilus ducreyi in cutaneous lesions in children

There is a high prevalence of *Haemophilus ducreyi* causing cutaneous lesions in children under 15 years old with clinically suspected yaws in Ghana, Solomon Islands, Vanuatu and Papua New Guinea. Yaws is caused by *T. pallidum* subsp. *pertenue* which is spread by skin-to-skin contact mainly among children. A real-time PCR assay that can differentiate between *T. pallidum* subsp. *pallidum* (syphilis), subsp. *endemicum* (bejel), subsp. *pertenue* (yaws) and can detect *Haemophilus ducreyi* in cutaneous lesions in children was used. The real-time PCR assays were useful for confirmation of yaws diagnosis, screening for molecular markers for azithromycin resistance and detection of cutaneous *H. ducreyi*. Detection of *T.pallidum* subsp.*pertenue*-specific DNA from skin lesions was associated with dual RPR/TPPA seropositivity. Mass Drug administration (MDA) had limited impact on cutaneous lesions caused by *H. ducreyi*.



By Teena Thomas: Since the last FIDSSA conference, the landscape of infectious diseases has changed dramatically. We have experienced outbreaks of Ebola, diphtheria and hospital-associated infections. In addition, we are faced for Clinical Microbiology with the challenges of treating resistant pathogens such as multi-drug resis-

tant (MDR) bacteria, Mycobacterium tuberculosis, HIV, Neisseria gonorrhoeae and Plasmodium spp. We have a limited armamentarium with few novel antimicrobial agents and face diagnostic challenges with our current laboratory tests.

The conference, aptly titled "Emerging Threats", attempted to tackle these topical issues. The organising committee successfully assembled world-class international and local experts to discuss newer diagnostic options, responses to outbreaks and the management of multi-drug resistant infections.

A highlight of the meeting were talks by Prof Yehuda Carmelli on novel treatment options for MDR-Gram negative bacteria and the controversies around treatment of infections by extended spectrum beta-lactamase (ESBL) producing pathogens.

In addition, plenary sessions on the prevention of infections through vaccination strategies were discussed. Prof Keith Klugman (who received a FIDSSA award) and Associate Prof Anne Von Gottberg, presented positive data on the impact of the pneumococcal conjugate vaccine on childhood pneumonia globally and in South Africa. Prof Shabir Madhi presented an overview of the research and development in maternal vaccinations in order to decrease neonatal infections and Prof Lynn Morris presented an optimistic view on HIV vaccine strategies and the current research in this area.



SASCM's international speaker, Prof William Hope from the U.K, whose areas of special interest are antimicrobial pharmacokinetics and pharmacodynamics, spoke on the issue of optimising treatment in the face of antimicrobial resistance. In addition, at his "Meet the Professor" session, an informative discussion ensued around a case of multi-drug resistant A. baumannii infective endocarditis in a pregnant woman. Prof Hope commented on the high calibre of presenters and talks at FIDSSA. In addition, he was particularly impressed with the 'communal' feel of the conference.

Associate Prof Anne Von Gottberg, a plenary speaker for SASCM, also complimented the FIDSSA organising committee for putting together a "cutting edge" programme. She was grateful for the opportunity to feedback local data to the conference attendees.

The trade centre at the conference was a buzz of activity and highlighted the significant strides made in the fields of microbiology and infectious diseases. It included diverse stalls with information on novel and in-use disinfectant/decontaminant products, antimicrobial agents and molecular testing platforms.

The poster presentations were varied including epidemiologic studies, research into novel laboratory test systems and comparisons between diagnostic modalities.

A highlight at the FIDSSA AGM was the news that the current SASCM deputy chairperson, Asociate Prof Nelesh Govender was elected to be the next FIDSSA president from 2017.

At the SASCM AGM, Dr Yesholata Mahabeer was chosen as the new society secretary following the resignation of Dr Bonnie Maloba. One of SASCM's focus areas is clinical microbiology registrar training. The society will continue to conduct its annual teaching program and aims to engage examiners nationally with a view to standardising the CMSA examinations. The current status of the adoption of the EUCAST standards for detection of antimicrobial resistance in South Africa was discussed. Additionally, SASCM will lead the way in mapping antimicrobial resistance (AMR) surveillance data in this country.

South African research in the field of clinical microbiology and infectious diseases is thriving. This was demonstrated by distinguished local experts and the dynamic scientific community who contributed valuable information with oral or poster presentations. However, despite the advances that have been made, we are still faced with several challenges in optimising the diagnosis and treatment of our patients.

To quote Sir Winston Churchill, "Never give up on something that you can't go a day without thinking about". This is **OUR** millennium battle to overcome!

Newly Qualified Infectious Diseases Specialists

Congratulation to the 4 IDSSA members who have recently been awarded the Certificate in Infectious Diseases by the College of Medicines for South Africa (Cert. ID SA). From left to right they are-:





Prue Ive who completed her training at Groote Schuur Hospital and is planning to move back to Gauteng with an ID job at Helen Joseph Hospital. She will continue to work on antibiotic stewardship and TB/HIV.

Jade Mogambery will be continuing at Grey's Hospital as a consultant in the Infectious Diseases Unit. She plans on expanding the hospital's outreach service to the surrounding HIV clinics and hospitals in the district and complete her research project.

Table Greyling who trained at Tygerberg hospital is moving over to the private sector at Christiaan Barnard Memorial Hospital in Cape Town where he is taking over a general internal medicine & HIV outpatient practice. He plans to build an Infectious Diseases practice with a focus on travel medicine, HIV resistance, viral hepatitis & primary immune deficiencies. He will be taking the lead in antibiotic stewardship in the hospital whilst continuing his academic links with the Tygerberg Infectious Diseases division.

Samantha Potgeiter is staying on at Universitas Academic Hospital in Bloemfontein where she trained. She has a half day ID consultant job and will continue to deliver an infectious disease consultation service while focussing on building up the antibiotic stewardship program. She spends the other half of her days building sand castles and climbing jungle gyms.

SASPID News—Nicolette du Plessis

The 9th World Congress of the World Society for Paediatric Infectious Diseases (WSPID) was held from 18-21 November 2015 in Rio de Janeiro, Brazil. The International Scientific Committee, chair by Shabir Madhi, developed a high quality scientific program.

The first day saw a closed educational workshop for paediatric ID fellows and industry sponsored symposia. This left the afternoon free for delegates to visit Rio's top tourist attractions. The 710m-high Corcovado (Christ the Redeemer statue), Sugarloaf Mountain, Maracana Football Stadium, and the beaches along the Copacabana, Ipanema and Leblon are as spectacular as suggested in the tour guides of this Cidade Maravilhosa (Marvelous City). Just a word of warning...the "refreshing" cocktail of choice, the famous Caipirinha, is one powerful drink.

Some of the global priorities in Paediatric Infectious Diseases currently is disease prevention strategies through the use of and access to current and new vaccines. Vaccine development is currently a topic of great interest. Latest research in vaccine development for diseases such as dengue fever, RSV, and HIV was presented. This highlighted some old and new vaccine principles such as the measurement/correlate of protection, optimal vaccination age/timing, and the influence of maternal immunisation of infant vaccination responses. During the WSPID World Lecture, presented by Keith Klugman, preventive strategies to improve and target neonatal mortality was also emphasized.

Marc Mendelson would be proud of the extensive use of mobile applications ("Apps") and social media during the conference. The combination of oral and poster presentations, online abstract and poster viewing facilities, and up-to-date information regarding access, transport etc. for the meeting made this a world class event. SASPID was well presented during the meeting with EXCO members, Mark Cotton, Shabir Madhi and Brian Eley that made significant contributions.

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Clockwise from top left: The 9th World Congress of the World Society for Paediatric Infectious Diseases was held at the Sul America, Centro de Convencoes, Rio de Janeiro, Brazil. The breath-taking views of Pão de Açúcar (Sugarloaf Mountain) and surroundings Cristo Redentor, the open-armed savior, has been watching over the city since 1931. The Rio nightlife, bar-lined streets and samba rhythms are neatly awaiting the masses of the 2016 Olympic Games.

The African Society for Paediatric Infectious Diseases (AfSPID)

A special mention is needed for the SASPID members that have been playing an important role in the activities of the African Society for Paediatric Infectious Diseases for the past few years. The AfSPID Bulletin is managed and edited by Brian Eley and the South African paediatric ID community is contributing actively to this.

Did you know there are 8 lunar phases? I didn't...

The 7th lunar phase, just before the balsamic or final phase, is called the Last Quarter Moon. If you believe in Astrology, this is apparently the time when you need to let go, when no further action needs to be taken. So as we let go of 2015, we start planning for an exciting new year with a new EXCO committee in the pipe-line, hopefully successful registration as an NPO, and academic contributions to many conferences including the South African Paediatric Association (SAPA) conference from 31 August – 4 September 2016 in Durban.

News from the STDSSA AGM

The FIDSSA Congress is attended by clinicians, scientists, nurses, students and any other health care professionals. It provides an exciting opportunity to showcase relevant research, discuss new ideas, form new collaborations and friends, and for societies to plan the way forward until the next FIDSSA Congress. The AGM of the Sexually Transmitted Diseases Society for Southern Africa (STDSSA) was held during the FIDSSA Congress. At this meeting it was decided that STDSSA would be led by a new group of scientists and clinicians:

- Chair/president: Dr Bronwyn Joubert, UKZN
- Secretary: Dr Marcelle le Roux, SMU
- Treasurer: To be decided if it will remain in Jo-burg with NICD
- Other committee members: Dr Bernadette Gosnell, UKZN; Dr Praksha Ramjattan, UKZN; Dr Lindi Masson, UCT
- Supporting role: Mr Fans Radebe

The new committee would like to thank the outgoing committee members for all the hard work behind the scenes which they put in to running STDSSA. A special mention must go to Mr Frans Radebe, the outgoing chair of STDSSA for his valuable advice and agreeing to assist the new committee with support and advice when needed.

Those who attended the AGM of STDSSA are passionate about researching STDs, improving service delivery to patients with STDs and trying to reduce the prevalence of STDs in South Africa. We plan to liaise with other like-minded groups from around the country to take the society forward.

Annual Strategy Meeting



SOUTH AFRICAN ANTIBIOTIC STEWARDSHIP PROGRAMME

SAASP held its annual strategy meeting prior to the FIDSSA conference. A review of the year's achievements towards our targets was presented, each facet of the AMR response was discussed & goals for 2016 were put forward. A full report of the meeting can be found on the SAASP website. Thanks to all members of the Working Groups for their commitment and support towards achieving the goals of our SA national strategy

Important Conferences for 2016

Travel Health Africa the boiling point?



International Society of Travel Medicine Promoting healthy travel worldwide

Travel Health Africa 28 September to 1 October 2016

fidssa

Biennial Congress of The South African Society of Travel Medicine

and the

7th Regional Conference of The International Society of Travel Medicine

Important dates

Registration opens and call for abstracts: **1 September 2015** Early bird registration closes: **31 March 2016** Abstract submission closing date: **9 May 2016**

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17th International Congress on Infectious Diseases

HYDERABAD • INDIA MARCH 2~5, 2016



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Congratulations time!



Professor Keith Klugman joins the select list of Infectious Diseases national, regional, and global leaders who receive FIDSSA's highest award, Honorary Life Membership. Keith is currently Director of Pneumonia at the Bill and Melinda Gates Foundation, enabling the international community to benefit from his leadership in the field. We are very proud of Keith's many achievements and for continuing to fly the flag for South Africa at home and abroad.

It is with the greatest of pleasure that we announce that **Prof Nelesh Govender** from the National Institute of Communicable Diseases and current Deputy Chair of SASCM has been elected to the position of FIDSSA President-elect. Nelesh will take up the Presidency at the next FIDSSA AGM in 2017. Equally, we are delighted that **Dr Gary Reubenson** of SASPID, will be taking up the position of FIDSSA's secretary-treasurer. This is a formidable team, who are set to do great things!

And Finally....

At the end of another packed year, it is fitting to pay tribute to all the contributors to the FIDSSA Quarterly over the past 12 months. Each and every one of you have made a significant contribution. I would however, like to pay special tribute to Frans Radebe of the STDSSA, who stands down this year as the Society's president, and who has single-handedly contributed to almost every Quarterly newsletter over the past 5 years. Thank you Frans for your unswerving support and the excellence that you have brought to the society.

A special thank you to Lea Lourens, FIDSSA Administrator. Membership is growing, as is the number of paidup members! Great job Lea.

And thank you to our conference organizers, Sue McGuiness and Claudette Lamont, from Europa Africa, and to our many sponsors, who supported the FIDSSA conference and continue to support FIDSSA with unconditional educational grants, which makes much of our educational work possible.