

## Special points of interest:

5th FIDSSA Conference 2013

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CCSD

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## 5th FIDSSA CONFERENCE UPDATE - 10-12 October 2013

Preparations are well underway for this year's 5th FIDSSA conference to be held in the beautiful Drakensberg mountains at the Champagne Sports Resort. Accommodation ranges from hotel rooms to time share chalets which can sleep 6 people and are ideal to bring the family to enjoy all that is on offer. Bookings are already being taken, so book early to ensure you get your first choice. The nearby Drakensberg Sun also has accommodation for the conference if you would rather stay off-site.

The scientific programme is progressing well. Professor Eli Schwartz from Israel, one of Travel Medicine and ID's leading lights will be joining us, as will Prof Rob Heyderman, Professor of Tropical Medicine and Director of the Malawi-Liverpool-Wellcome Trust Clinical Research Programme, and Prof Debbie Goff from Ohio State University, the international advisor to the South African Antibiotic Stewardship Programme (SAASP). Announcements regarding 4 other international speakers will be out soon! Talking of SAASP, there will be a SAASP pre-congress workshop on Thursday 10th from 0900-1700. The programme has been drawn up by the SAASP working group and the workshop will be sponsored by MSD. Session updates on multi-drug resistant Gram negative infection (regional epidemiology, search and destroy strategies and correct antibiotic dosing), results from South African public and private hospital programmes will be presented as well as an invited abstracts session. The main conference will open with a plenary session focusing on key issues in antibiotic resistance and stewardship across the different fields of global Infectious diseases.

Once again, FIDSSA will be offering 5 bursaries to young investigators whose submitted abstracts are accepted and adjudged to be exceptional. The New Researcher Awards will cover travel from within the Southern Africa region, transfers, accommodation and registration. In addition, FIDSSA will be awarding R10,000 for the best oral abstract by a young researcher (<40-years) and R5000 for best poster. There will also be a R5000 prize for best presentation by a researcher not affiliated to an academic institution.

The conference website is up and running and you can access it via the FIDSSA website homepage at <http://www.fidssa.co.za>. Any enquiries can be addressed to Lea Lourens at [info@fidssa.co.za](mailto:info@fidssa.co.za).

We look forward to welcoming you to the 5th FIDSSA Conference!



## ARPEC and Antibiotic Stewardship at Tygerberg Hospital Department of Paediatrics



Increasing antimicrobial resistance rates with fewer effective antibiotics means that antibiotic stewardship and effective antibiotic prescribing is becoming more important in our daily patient care. This is particularly important in South Africa where infectious diseases are still an important cause of morbidity and mortality and in the public sector where antibiotic availability may be limited. The high incidence of HIV infected individuals with recurrent hospital admissions also influences the type of infections seen.

In the second half of 2011 Tygerberg Paediatric Infectious Diseases were invited to join the ARPEC (Antimicrobial Resistance and prescribing in European Children) group. The project was initially limited to Europe only but now includes 187 countries from around the world. Countries from Africa include South Africa, Gambia and Malawi. The main aim is to monitor rates of antimicrobial prescribing in children using a point prevalence survey method. It also determines the variation in drug, dose and indications of antibiotic prescribing in children admitted to hospital.

It is hoped that the information collected will identify targets for quality improvement (e.g. peri-operative prophylaxis; antibiotics used to treat infections in line with the hospital guidelines; IV to oral switch and documentation of antibiotic therapy); and help in designing hospital interventions that aim at promoting prudent use of antimicrobials. The effectiveness of these interventions can be assessed when repeating the point prevalence survey.

The differences in prescribed drugs and doses among the different countries by indication, ward and hospital characteristics, is another important research question, so far unanswered. The data collected is entered onto an online database on the ARPEC website. Data is able to be exported for the own hospitals analysis, but feedback is also given in the form of a power point presentation highlighting the specific hospital results as compared to other hospitals in the group. It also identifies possible areas for intervention.

In December 2011 we initiated a pilot study in our neonatal wards only and then went on to a full survey of all paediatric wards including neonates and surgery in October 2012. The data collection is in the form of a point prevalence survey (PPS) which includes all patients admitted to the wards at 08h00 on the day of the survey who are currently receiving an antimicrobial agent. Data collected includes the antimicrobial agent, dosing, dosing interval, route of administration and indication for therapy. The questionnaire was adapted to include syphilis and TB exposure or disease and HIV infection or exposure, which we thought were important co morbidities in South African children.

We have analyzed the pilot study and are currently analyzing the data from the October PPS. We have also received feedback from the ARPEC group following entry of data on the web based ARPEC database.

Our neonatal pilot showed a high antimicrobial prescription rate of 42.3%. Neonates on antimicrobials were premature (median corrected gestational age of 33 weeks) and low birth weight (median weight 1.5kg). Forty-nine percent were HIV-exposed and 9% had syphilis and TB exposure. Hospital acquired infection (48.5%) was the most common reason for antimicrobial prescribing. Benzylpenicillin was the most commonly prescribed antimicrobial, however Meropenem and Vancomycin were also frequently used.

We hope to compare this to our more recent data and identify areas where we can improve antibiotic prescribing by tailoring type and length of antibiotic used.

Heather Finlayson (Paediatric Consultant) and Angela Dramowski (Infection Control), Tygerberg Hospital

## Odyssean Malaria

Dr Jeannine van Lochem, SASTM



South African  
Society of  
Travel Medicine

Every year thousands of people get into a state of panic when the newspapers share stories of people who contracted malaria without travelling to an endemic area. This rare phenomenon can happen when a mosquito travels from an endemic to a non-endemic area and causes infection. There are many different routes by which the mosquito can be imported: taxis, aeroplanes, baggage, containers and so forth. The collective name for this mode of transmission is Odyssean malaria. The name derives from Odysseus of the Trojan war, who endured many hardships on his travels to be reunited with his beloved Penelope.

Odyssean malaria differs from transfusion malaria, which results from needle injuries or blood transfusions with infected blood. It can happen when a person with a sickle cell trait carries malaria. *P. malariae* can remain for 50 years in a person's body, whilst *P. falciparum* for three years.

In January of 2013 there were two clusters confirmed in Gauteng which were imported from endemic areas. The means of transport is unknown, but many vehicles and aeroplanes from neighbouring countries travel to and through Gauteng.

The first was in the Donkerhoek/Mooiplaats district in Tswane where a husband and wife developed flu-like symptoms and were diagnosed with *P. falciparum* malaria. Both were treated at the Steve Biko hospital and survived. Their neighbour, who was not so fortunate, became sick whilst on holiday in the Northern Cape. By the time the correct diagnosis was made, there was a parasitaemia of 23% and she died a few days later.

The second cluster was in the Kempton Park area where three people were infected: a father and his son as well as a lady who lives close by. They were treated successfully.

There are some certain conditions necessary for transmission of Odyssean malaria. Usually the highveld areas, where these cases occurred, are too cold and dry for the anopheles mosquito to survive. In the summer night temperatures can be above 20 degrees celsius making it favourable for the *P. falciparum* parasite to develop. *P. vivax* only needs an environment of 16 degrees to develop, but it is rarely seen in Southern Africa. For mosquitoes to breed and form clusters, still or free standing water, night temperatures above 20 degrees and humidity above 52% is required. Pretoria was an endemic area until the end of the nineteen hundreds, so it is easy for the anopheles mosquito to survive there in summer during heavy rain.

Knowledge of his form of transmission is important as malaria is often missed in these patients and can result in a mortality rate as high as 12%. This is in contrast to the rate of 0.6 to 1% when malaria is suspected and treated early. It is of the utmost importance to test for malaria in any person with an unexplained fever, irrespective of a travel history.

So the caveat is: as long as people and mosquitoes will travel, malaria will travel too!

## Venereophobia



Sexually Transmitted  
Diseases Society  
of Southern Africa

"I am having a sexually transmitted infection" said a patient visiting the clinic everyday complaining of the same "problem" that the doctor or healthcare worker cannot find on examination. The patient visits all the time and is surly and aggressive at times. How common is this fear or delusions of infection seen in dedicated STI clinics? What is the basis for presentation by the 'difficult patient' to a doctor or healthcare centre?

Is this phenomenon realized and recognized? Is the condition exacerbated by psychological or psychiatric problems?

Venereophobia is **defined** as an unrealistic, exaggerated or irrational fear and interpretation of having STIs without actually having it. Young sexually active adults are commonly affected. The patients' main concerns are discharge from urethra, anus and vagina or an existing symptoms or signs on the genital area. Patients with this abnormality will compulsively perform an examination on their genital area, and commonly the doctor will not find any objective abnormality based on physical or laboratory examination. One may consult several doctors or health-care facilities without any improvements.

The most common **causes** of Venereophobia are usually emotional issues, anxiety and guilt associated with sexual behavior. It manifests as part of venereoneurosis, which is a psychological disturbance with manifestation of over-reaction to a sexual infection. **Factors leading to** Venereophobia may include among others; masturbation, risky sexual behavior causing anxiety, pre-marital and extra-marital sexual contact causing guilty feelings, use of sex toys and sharing common toilet, beds etc

**Signs and symptoms** of Venereophobia are numerous:

- *Spermatorrhoea* is reported by the patient as discharge after defaecation, recent sexual activity or constipation. This is normal secretion due to prostatic massage by these factors.
- *Sticky meatus* is a result of vigorous milking of the penis by the patient which is a normal product from glands within the penis and increased in amount by squeezing and expressed at the tip of the penis.
- *Threads in the urine* are seen by patients who have had previous urethritis which is due to a change in the character of the lining of the penis by previous infection.
- *Phosphaturia* is normally reported by patients as sudden milkiess appearing in the stream towards the end of the act of micturation.
- *Septic spots and warts*
- *Ducts of Smegma glands*
- *Presence of Smegma*
- *Superficial burns* caused by strong disinfectants used by the patient
- *Normal sebaceous glands and hair follicles* of the root of the penis or scrotum.

The patient has probably been reading popular literature on the subject of STIs. He has been looking out for symptoms and signs and has found one or more signs which he believes to be evidence of STI. They do not usually volunteer information to the health-caregiver as they themselves have found signs, and they intend the caregiver to find the sign. If they were previously infected with a real STI, they express their fear of a relapse and sometimes complaints of a penile discharge or vague aching in the genital region (perceived symptoms and signs of STIs). All tests should be carried-out to exclude an real STI, even for those patients stating that they never had sexual intercourse.

The **treatment** of venereophobic patient is difficult. They are normally surly, aggressive and in an anxiety state of mind but can be transformed into a friendly and receptive person as time progress with counseling and reassurance. The patient needs ongoing counselling and reassurance that he/she is free of any sexually transmitted disease.

If the patient realizes that his suspicious sign has been considered he is more likely to be satisfied than the reassurance of a general nature that he is not infected. Any attempt to get rid of the patient prematurely will result in failure of the treatment.

**Further reading:**

1. Oates JK, Gomez J. Venereophobia *BMJ* 1984; **31**: 435-6.
2. Ross MW. Psychological perspectives on sexuality and sexually transmitted diseases. In Holmes K, Mardh P-A, Sparling PF, Wieser PJ. Sexually transmitted diseases. Mc Graw-HILL. 1990: 55-60.
3. Fitzpatrick R, Frost D, Ikkos G. Survey of psychological disturbance in patients attending a sexually transmitted diseases clinic. *Genitourin Med* 1986; **62**: 111-5.

Frans Radebe, National Institute for Communicable Diseases/National Health Laboratory Service

## SASCM Surveillance Meeting



The SASCM Surveillance Meeting will take place:  
Saturday 9th March  
8.30 am — 3.30 pm  
Protea Hotel, OR Tambo Airport, Johannesburg

The programme will include:

- Discussion on surveillance data, including issues of collection, standardisation and dissemination of data
- Ethical issues related to surveillance (by CPD accredited speaker)
- Update on emerging infections, including carbapenem resistant Enterobacteriaceae
- Review of laboratory issues in antimicrobial susceptibility testing, including
- EUCAST methodologies and breakpoints
- Revised antifungal breakpoints
- Review of action points from the SAASP 2012 meeting and the way forwards for stewardship

This is an open invitation - anyone interested in the surveillance of antibiotic resistance is welcome to attend. Limited number of places are still available.

Please RSVP to Dr Colleen Bamford (colleen.bamford@uct.ac.za) as soon as possible!

## Introducing a new logo for the South African Antibiotic Stewardship Programme (SAASP)



The new logo of the South African Antibiotic Stewardship Programme is unveiled in this edition of the FIDSSA Quarterly. Following several amateurish design attempts by the FIDSSA President, the SAASP Working group had the good sense to vote in favour of employing the talents of a professional designer. We think the new logo sends a strong message to stop and think before prescribing antimicrobials and look forward to using it in as the South African Programme matures.

## Infection Control News - CSSD Practice



Infection Control  
Society of  
Southern Africa

With the upcoming Decontamination and Sterilisation Conference at the Gallagher Convention Centre in Midrand (8 & 9 May 2013), this contribution of the ICSSA newsletter will revolve around the conference as well as some issues related to CSSD practices.

### Decontamination and Sterilisation Conference

For the first time ever, South Africa will host an international CSSD congress. The CFSA (CSSD forum of South Africa) have teamed up with the Africa Health Trade Exhibition to bring to us a conference of note.

The 2 day conference is divided into 8 sessions. The topics covered in each session are as follows:

- Session 1: Emerging Issues
- Session 2: The Future
- Session 3: Legal Requirements
- Session 4: Quality Assurance
- Session 5: Decontamination Challenges
- Session 6: Risk Assessment and Management
- Session 7: New Ideas
- Session 8: Practical Requirements for Validation of Equipment

We are privileged to have local and international speakers with expert CSSD and Infection Prevention knowledge at this conference. The keynote speaker **Professor Duse** will focus on the Current Challenges in Healthcare Situations.

International speakers at the congress include:

**Susan Meredith**, the Assistant Decontamination Lead/Sterile Services Manager at Southend University NHS Foundation Trust in the UK. Susan will address the hot topic of the importance of Tracking and Tracing Reusable Invasive Medical Devices. As you all know the Department of Health's National Core Standards Domain 3.5 calls for the use of a tracking system for product sterilization, identification, recording and recalls.

**Birte Oskarsson** is the vice president of WFHSS and is the Director of CSSD, at the Skånes University Hospital (SUS), Malmö, in Sweden. Birte will present two papers, one on the process of setting up and managing a new CSSD and one on the Validation of Sterile Barrier Systems

**Terry McAuley** is from Australia and has over 19 years' experience as an independent Consultant in her own business, STEAM Consulting. Terry who has an MSc (Masters), in Medical Device Decontamination will present a paper on: "Loan instruments: the need for extended sterilization times".

### The role of the Infection Prevention Specialist in the SSD

It is important that the IPC practitioner is visible in the theatre complex and the SSD. An audit of SSD practices is an excellent way of measuring the effectiveness of SSD processes. These audits should be performed twice a year. The IPC practitioner must discuss the outcome of such audits with the relevant theatre / CSSD managers. If any non-conformances or deviations are noted during the audit, relevant theatre / CSSD managers. If any non-conformances or deviations are noted during the audit, an action plan should be put in place noting responsible persons and due dates to address these non-conformances. It is not just a matter of doing the audit and forgetting about, follow up is vital.

Some of the elements that should be measured in a SSD:

- Cleaning & safe handling of contaminated items

- Mechanical cleaning
- Manual cleaning
- Packaging (sterile barrier systems)
- Sterilization

Training is another way to ensure SSD staff are competent and up to date with latest techniques. All processes within the SSD should be traceable and validated. The sterile service department is the hub of the hospital and it is a vital link in the Infection Prevention Chain to ensure the supply of safe and reliable products for our patients.

#### What should we use to effectively clean surgical instruments, bowls, receivers, jugs and medical devices?

We all know (or should know!) that cleaning of medical devices is a critical part of the disinfection / sterilisation process. How many times have you seen someone cleaning a medical device with Hibiscrub, or ammonia, or normal household soap?

In order to effectively manually clean an instrument or medical device one would need:

- Detergent
- Clean water
- Cleaning equipment (brushes, cleaning clothes)
- Correct cleaning technique

All of this needs to be in accordance with the instrument or medical devices manufacturers' recommendations.

We should use a detergent that is designed to remove the types of soils that surgical instruments and medical devices are exposed to. This includes organic proteins and lipids (blood, body fluid, and tissues), inorganic substances like saline, iodine, cement. These types of detergents are known as medical grade detergents.

In addition to being designed to remove the soils mentioned above, a medical grade detergent should also be:

#### **Able to work effectively regardless of the water quality:**

This is normally accomplished by chelating agents which can prevent the damage caused by poor water quality. The chelating agent will combine with the metal ions in the water. In this way the metal ions remain tied up and aren't able to affect the instruments.

#### **Low foaming**

Many surgical instruments are sharp, and in order to avoid injury one needs to be able to see them – therefore the detergent used must be low foaming. A high foaming detergent may also interfere with the cavitation process in ultrasonic cleaners, and will affect the force of water spray and the pumps in a washer.

#### **Compatible with the materials that instruments or medical devices are made from**

Which is pretty self explanatory

#### **Free rinsing**

This means it's easy to get detergent residues off the instrument. If detergent residues are not rinsed off they can corrode and stain the instruments.

#### **Provide protection for instruments**

Some medical grade detergents are formulated with corrosion inhibitors to protect the instruments and prevent corrosion.

#### **In a liquid form**

Medical grade detergent in a liquid form will mix quickly and easily with water and will therefore be used in the correct concentration. Detergents in powder form take time to dissolve and may not dissolve properly, potentially leading to incorrect dilutions.

#### **Biodegradable** (also self explanatory)

Thanks to Xana Jardine, SafMed, for the above contributions

## Multi-drug resistant bacteria on the rise in SA



Increasing numbers of carbapenem-resistant *Enterobacteriaceae* and *Pseudomonas aeruginosa* are being reported in both the private and public sectors in almost all regions of South Africa including the Eastern and Western Cape, Gauteng and KwaZulu-Natal. These include organisms producing a variety of carbapenemases such as NDM, OXA-48-like, VIM, IMP, GES, KPC and IMI.

In addition, vancomycin-resistant *Enterococcus faecium* that have been present in Gauteng for the past few years, have now become established in a number of hospitals in the Port Elizabeth/Uitenhage area and have also been detected in at least 2 Cape Town state hospitals in the last 3 months. The rapid dissemination of these organisms highlights the difficulties in communication that arise as a result of the lack of appropriate forums for sharing of information.

All health care workers are asked to be on the lookout for any highly resistant organisms, and to send appropriate specimens to the microbiology laboratories. Laboratorians should likewise have a high index of suspicion and perform/refer for additional testing as needed. The NICD's Centre for Opportunistic, Tropical and Hospital Infections (COTHI) offers molecular testing for common carbapenemase genes in both Johannesburg (contact Olga Perovic [olgap@nicd.ac.za](mailto:olgap@nicd.ac.za)) and in Cape Town (contact Colleen Bamford [colleen.bamford@nhls.ac.za](mailto:colleen.bamford@nhls.ac.za)). Private pathology groups have also introduced similar testing (contact Terry Marshall [marshallte@ampath.co.za](mailto:marshallte@ampath.co.za) or Craig Corcoran [corcoranc@ampath.co.za](mailto:corcoranc@ampath.co.za), or Marthinus Senekal [senekal@pathcare.co.za](mailto:senekal@pathcare.co.za)).

Antibiotic stewardship remains vital as exposure to antibiotics is a major risk factor for acquisition of resistant organisms, while infection control is our main tool to limit spread of these organisms which can easily become endemic in both acute care and long stay facilities. Infected patients may benefit from individualised antibiotic therapy though significant mortality may be expected as antibiotic options are frequently very limited.

Clinicians accepting patients from other institutions should be aware that these patients may carry resistant pathogens. In turn, clinicians should document the presence of any resistant pathogen infecting or colonising a patient when transferring that patient elsewhere. The infection Control Society of South Africa has produced a useful transfer form to meet this need and this should be widely adopted.

Colleen Bamford (with contributions from Olga Perovic, Adrian Brink and Marthinus Senekal)

## SAJEI hard copies discontinued



In the last edition of SAJEI, the Editor in Chief, Charles Feldman wrote an editorial outlining the need for a re-think surrounding the publishing format of our Journal. Scientifically, the SAJEI has gone from strength to strength. At the same time, the current economic climate has affected the amount of advertising revenue that is available from the pharmaceutical industry. Hence a decision has been made to discontinue hard copies of each edition of the journal and go to a purely electronic format. This can continue to be accessed via the link on the FIDSSA website. A conference edition with abstracts will continue to be offered.

We are indebted to Charles Feldman, Prof Hendrik Koornhoff and all of the SAJEI editorial and administrative team for their ongoing exceptional dedication to producing a top class journal. We are hopeful that SAJEI will be accepted for Medline accreditation in the next couple of months.

## Celebrating Condom Week



Last week was national condom week, a time to reflect and celebrate the wonders of latex. I must admit that I have always met the statement “the condom burst” with a fair degree of scepticism, taking it as a euphemism for ‘I didn’t wear one’. Back in the day, this was not a common experience that was discussed down the pub, although granted, men feel more able to own up to embarrassing experiences since Pele went on TV to tell us it was OK to talk about erectile dysfunction. So I was interested to learn that despite manufacturers formidable and stringent tests of tensile strength (pictured below), a number of publications show that breakage rates amongst men using condoms are high.



A study of young men 17-22 years using condoms, reported 23% experiencing at least one breakage during the prior 12 months and 2.5% of all condoms had broken<sup>1</sup>. Multivariate analysis showed that increased experience of condom use protected against breakage. Another study in Sydney of 108 men aged 18-62 years, documented an overall breakage rate of 4.9%<sup>2</sup>. Risk factors for breakage in multivariate analysis were male sex partner(s), infrequent condom use, having trouble with condoms slipping, and interestingly, use of the conventional application method of rolling the condom on. Modified application methods appeared protective. Clearly, condom breakage is not merely a euphemism, and perhaps we need to spend a bit more time counselling our patients about condom use, so that they don’t go into battle unprepared. Both studies identified experience with condoms as protective, so maybe it’s time to bring back that wooden phallus and get teaching, or set up virtual reality programmes to save our young men and women from a damp squib. My New Year’s resolution was to devote the next year of my life to understanding the mechanisms of condom breakage. Not since Kinsey will there have been a study like it, carefully documenting controlled explosions in the South African boudoir and beyond. Donations to fund this important work gratefully received.

### References

Lindberg et al. Fam Plann Perspect 1997;29(3):128-31

## New Resources on the FIDSSA Website

**fidssa**federation of infectious diseases  
societies of southern africa

For a number of years, the FIDSSA website has been sponsored by Sanofi-Aventis and we at FIDSSA would like to thank them for their generosity and support in helping us develop this vital resource. However, this year, we welcome a new Sponsor, Aspen, Pharmacare, who have stepped in to partner with us. Many thanks to Deon Hall and all the team at Aspen Pharmacare for making this possible. The FIDSSA website content remains under the sole control of the FIDSSA executive and its individual societies.

The FIDSSA Home Page now has a direct link to the South African Antibiotic Stewardship Programme website, which is nested within the FIDSSA Site. Visitors can download up to date versions of the SAASP antibiotic prescription chart and find essential publications and links to other antibiotic stewardship websites. The content will continue to expand as the programme matures.

The FIDSSA Training Group has also now developed its own position on the FIDSSA website, which can be navigated to via the left hand menu found on the "Links" tab. Content is currently being developed and any trainees that wish to contribute to this should contact Dr John Black ([john.black@uct.ac.za](mailto:john.black@uct.ac.za)) or Dr Cronje Heys ([sipho@doctors.org.uk](mailto:sipho@doctors.org.uk)).

The website continues to offer up to date information on local and international ID-related conferences, current guidelines of the Societies, public and private surveillance data, current and past issues of the FIDSSA Quarterly, and the FIDSSA case of the Month, all of which can be accessed from the homepage.

We are always looking for ways to expand content that would be of use to our members. If you do have any ideas, please feel free to contact us at [info@fidssa.co.za](mailto:info@fidssa.co.za)