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FIDSSA Quarterly

Newsletter of the Federation of Infectious Diseases Societies of Southern Africa

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Welcome to a new look FIDSSA Quartlery

The 7-year itch is upon us, and therefore, it seems like a great time for a facelift! Hence, not only does the FIDSSA Quarterly have a spanking new look, but we are also moving away from the previous format of educational articles, cases and lengthy reports, converting to a much more news and events style publication. We hope you like it, will find it easy to read and useful to you.

We welcome all comments, good and bad, as we want this quarterly publication to be relevant for our members. Please provide any feedback to our team at info@fidssa.co.za. Many thanks!

FIDSSA Executive Committee

Marc Mendelson (President), Andrew Whitelaw (Secretary Treasurer), Nelesh Govender (President-Elect & SASCM), Gary Reubenson (Secretary Treasurer-Elect), Adrian Brink (Past-President), Chetna Govind (SASCM), Joy Cleghorn & Briette du Toit (ICSSA), Nicolette du Plessis & Mark Cotton (SASPID), John Black & Tom Boyles (IDSSA), Salim Parker & Garth Brink (SASTM), Bronwyn Joubert & Frans Radembe (STDSSA), Lea Lourens (FIDSSA Administrator – info@fidssa.co.za)

SAASP
SOUTH AFRICAN ANTIBIOTIC STEWARDSHIP PROGRAMME

Launches new online antibiotic stewardship course for South Africa

The members of SAASP have been working hard over the past year or so to produce an online course on clinical antibiotic stewardship. It is finally finished and available online by following the link below-

https://www.openlearning.com/courses/clinical-antibiotic-stewarship-for-south-Africa

There are 23 short video lectures each followed by 5 MCQs. It covers a broad range of topics from principles of prescribing to common clinical scenarios. The course is aimed at anyone involved in antibiotic stewardship and prescribing from medical students to experiences clinicians, to nurse prescribers and pharmacists as well as healthcare managers.

Please disseminate the link to any groups who may be interested in learning about stewardship.

Tom Boyles

sascm
South African Society for Clinical Microbiology

2016 promises to be a year of many changes and challenges for the microbiology community!

The recently developed national AMR strategy implementation document is a framework for managing and limiting antimicrobial resistance in order to improve patient outcomes. Surveillance and diagnostic stewardship form two integral pillars of our national stewardship programme, which supports this framework. We should therefore seek innovative ways to optimise and further enhance our current surveillance capacity, as appropriate actions based on our surveillance data will depend largely on the accuracy of this data. With this in mind, laboratories are looking at the change from CLSI to the EUCAST system. Standardisation of susceptibility reporting especially with multi-drug resistant organisms is also a priority. These will be discussed at a SASCM workshop planned for the first half of this year. WHO has also introduced the GLASS document and future surveillance reporting structures will attempt to align themselves to this document thus allowing South Africa to benchmark themselves on an international platform.

The future of microbiology in terms of automation has finally arrived on our shores with Lancet Laboratories in Durban operating the Kiestra system. The Work Cell Automation (WCA) module is capable of selecting media, inoculating and streaking plates from different sample containers and

transferring these to the attached Smartincubator (ReadaCompact). This eliminates the human error factor while taking away the tedious tasks of inoculation and streaking plates from trained personnel, whose time and skill is now spent on reading and interpretation of growth on plates. The smartincubator is fitted with a camera which images plates at set incubation times. These are viewed at the workstation monitors where reading, interpretation and selection of follow-up work i.e. identification and susceptibility testing are selected. While staff safety is ensured, the quality and turnaround time for the patient is also improved. Will automated microbiology prove to be the panacea?

Last week, the first case of imported Zika virus in South Africa was diagnosed in a businessman from Columbia. He presented with a mild flu-like illness: fever, headache, body-ache and joint pain and has subsequently made a full recovery. The diagnosis was made on PCR testing of blood and confirmed by NICD. It is to be expected that there will be further imported cases as people travel between affected countries and South Africa. It is important to note that there is no local transmission of Zika virus in South Africa and South Africans are not at risk for infection unless they travel to an affected country.

Carbapenem resistant Enterobacteriaceae (CRE) continue to prove an ongoing challenge. NICD requests the submission of all isolates in order to provide an accurate representation of the situation in South Africa with the aim to eventually assist in drawing therapeutic guidelines.

New antibiotics expected in 2016:

Ceftaroline (5th generation cephalosporin)

- Inhibits bacterial cell wall synthesis by binding to penicillin-binding proteins (PBPs) 1 through 3. This action blocks the final transpeptidation step of peptidoglycan synthesis in bacterial cell walls and inhibits cell wall biosynthesis. Bacteria eventually lyse due to ongoing activity of cell wall autolytic enzymes (autolysis and murein hydrolases) while cell wall assembly is arrested. Ceftaroline has a strong affinity for PBP2a, a modified PBP in MRSA, and PBP2x in *S. pneumoniae*, contributing to its spectrum of activity against these bacteria
- Spectrum of activity is similar to a 3rd generation cephalosporin with MRSA cover
- Indicated for skin and soft tissue infections and community acquired pneumonia
- Primarily renally excreted

SAVE THE DATE

SASCM WORKSHOP

26-27 May 2016

STDSSA News

CAPRISA "Advancing STI Care in KwaZulu-Natal" Workshop

On 27 January 2016, Centre for the AIDS Programme of Research in South Africa (CAPRISA) hosted a workshop entitled "Advancing STI Care in KwaZulu-Natal" at CAPRISA on the University of KwaZulu Natal Medical School Campus. This NIH funded workshop was arranged by Dr Nigel Garrett, Head of Vaccine and Pathogenesis at CAPRISA and brought together key stakeholders involved in STI care, including clinicians and researchers mostly from within the province of KwaZulu Natal, but also from other parts of South Africa, as well as an international guest from Australia. The overall goal was to "evaluate the current [STI] epidemic and care provision in KZN, and to discuss the latest evidence for and against the transition to a diagnostic care model."

Despite the implementation of the syndromic management regimen whereby STIs are treated with a cocktail of antimicrobial agents on the same day that the afflicted person presents at a health care facility, STIs are not going away. STIs can increase the risk of HIV acquisition and are therefore clinically important. This means that the current strategy for controlling STIs should be reviewed to determine what can be done better, develop an improved strategy and implement it. It is important to recognize that both behavioral and clinical factors come into play with both STI and HIV transmission dynamics. At this workshop a multidisciplinary approach was employed and many aspects of the STI epidemic were considered, including epidemiology, association with HIV risk, laboratory capacity and new technologies, and behavioural dynamics.

The workshop highlighted the burden of STIs within the province of KwaZulu Natal and that much work still needs to be done to reduce the incidence of STIs amongst people living within South Africa. In order for this to happen, policy makers, clinicians, researchers and laboratory personnel need to work together to assess the situation, decide what needs to happen and implement the strategy. It will take time and planning, but if all stakeholders work together towards a common goal, it can be done.

Participants at the workshop including (third from the right): Dr Nigel Garrett from CAPRISA, Professor Koleka Mlisana from the National Health Laboratory Services and University of KwaZulu-Natal, Dr Adrian Mindel from Australia and Professor Joanne Passmore from University of Cape Town.

ICSSA
INFECTION CONTROL SOCIETY OF SOUTHERN AFRICA

Regional Chapters

Established ICSSA Chapters held several study days across the country during 2015 and some have already planned events for 2016. Some dates that were established at time of writing are:

- MICI (Bloemfontein) – 18th May and 16th November
- GICS (Gauteng) – 16th March, 15th June, 14th September and 24th November
- PIF (Pretoria) 17th March, 23rd June and 22nd September

ICSSA affiliates with ICAN

In addition to our main affiliation with FIDSSA, ICSSA has agreed to affiliate with the Infection Control Africa Network (ICAN).

What this means to ICSSA members:

- as an individual, a paid up ICSSA member can become a member of ICAN for $5 (currently less than R90) compared to the normal fee of $25 per annum
- access to education, e-learning, e-research etc. on the ICAN website
- bursary preference is given to ICAN members
- access to ICAN fellowships and student exchange programmes

What this means to ICAN:

- Increase in membership across the continent
- Mutual support, knowledge and networking
- A larger base for input into guideline development for Africa

Annual global hand hygiene campaign

The annual global hand hygiene campaign for the World Health Organisation (WHO) will take place again on the 5th of May. The focus this year is "Prevention of Surgical Site infections" and the importance of improved hand hygiene practices in all aspects of healthcare delivery: operating theatre, nursing units, outpatient settings and wound care clinics. The first *Global guidelines on surgical site infection prevention* will be issued by WHO in 2016.

The slogan proposed by the WHO is ***SAFETY STARTS HERE***!

Let's join hands again this year and mobilise the whole of South Africa; creating awareness of the importance of hand hygiene to prevent infections.

You can access information and material about the campaign on the following link:

http://www.who.int/gpsc/5may/en/

SAVE LIVES: Clean Your Hands - WHO's global annual call to action for health workers

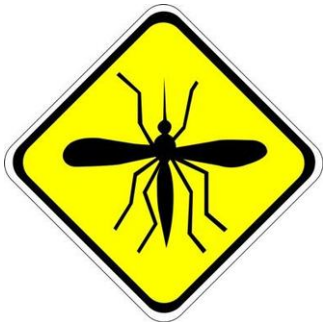
South African Society of Travel Medicine

SASTM has been busy on many fronts!

1. **Travel Medicine Anthology**
   SASTM has added a new publication to its stable being "Travel Medicine – an anthology". These are short articles written by the SASTM President, Dr Salim Parker and include chapters on "The deadliest tiny beast", "Travel away from hepatitis A', "The unholy alliance: influenza and pneumonia" and "Dislodging the travel clot".

   This Anthology and the other two publications viz. "A guide to the practice of travel medicine in the South African Context"and"Beyond Childhood Vaccination can be ordered on-line or direct from Marion Blewett, admin@sastm.org.za.

2. **Asia Pacific Congress, 2 – 5 March, Kathmandu, Nepal**
This promises to be an exciting and stimulating Congress, at which SASTM will be represented. Dr de Frey has been invited to talk on "Large mammal and other health risks in Africa" and Garth Brink will present a paper on the uptake of yellow fever vaccine in travel clinics in the private sector.



3. **Validity of the yellow fever vaccine certificate**
The World Health Assembly adopted the recommendation of the Strategic Advisory Group of Experts on Immunisation (SAGE) to remove the 10-year booster requirement of yellow fever vaccination by 1 June 2016. Despite the fact that the WHO has stated that vaccine should be considered life-long, many countries have not adopted this policy. Further, there are specific groups who might not respond as well to the vaccine.

SASTM has issued a statement to the effect that it is in the interest of South African travellers that the validity of yellow fever vaccine remains TEN YEARS from ten days after the date of administration; booster doses are immediately valid and effective.

For the rationale of this policy, visit www.satsm.org.za

4. **Travel Health Africa – the boiling point**?
This Congress, which is the biennial Congress of SASTM and the 7th Regional Congress of the International Society of Travel Medicine, will be held in Port Elizabeth from 28 September to 1 October, at the Boardwalk, Port Elizabeth.

Plenary sessions will include:

- Climate change – its impact on health and travel
- Viral diseases – their impact on travel and business
- Rabies in Africa – toward elimination
- Rabies vaccination schedules – the evidence behind it all
- Malaria – who is winning?

The Opening Session includes a presentation by **Jolandie Rust**, the only woman to have circumnavigated Africa on a motorcycle – a journey of 45 000 kms. She will relate her experiences from a health and psychological perspective as well her interaction with people as she travelled through the various countries.

Early Bird registration closes on 31 March – REGISTER NOW at www.sastm.org.za

Emerging Diseases Clinical Assessment & Research Network (**EDCARN**): Emerging infectious diseases (EIDs) are a constant threat to global health security. Clinicians play a critical role in the detection and control of EIDs. Rapid implementation of effective clinical management can lead not only to improved health outcomes for individual patients, but can also curtail disease transmission through patient isolation and treatment to diminish pathogen load, and thus infectivity, and contribute to building trust in the community. Communicating and receiving clinical feedback from front-line clinicians and assisting them to systematically collect and report clinical data on EIDs is also imperative to improve our understanding of the pathogenesis of EIDs, and thus improve patient care and outcomes. However, due to their sporadic nature and tendency to occur in ill-prepared settings, communications with front-line clinicians, and thus the technical support they require during EID outbreaks, is often haphazard and sub-optimal. Furthermore, since systematically collected data to inform best practices for EIDs are often not available and many EIDs may never have been seen by the clinician before an outbreak occurs, front-line clinicians are often unfamiliar with the EID management. Support is therefore needed for front-line clinicians to assure early detection and optimum case management and patient outcome as well as to assure clinician safety from healthcare-associated infection. To this end, WHO and partners have formed **EDCARN**, specific objectives of which will be:

1. Strengthen global communication and collaboration between clinicians, researchers, and public health experts in order to achieve the EDCARN goal of enhancing optimal and safe patient management to control epidemics of EIDs as soon as they are identified
2. Identify key priorities to improve clinical management and patient outcome and support frontline healthcare during EID epidemics
3. Discuss and agree on potential terms of references for EDCARN, including draft overall structure, membership criteria, and work plan
4. Establish an up-to-date roster of international experts to provide technical guidance in affected countries during EID epidemics

News from the Wits Academic Complex

Dr Pru Ive, Helen Joseph Hospital (HJH) & Dr Kim Roberg at Chris Baragwanath Academic Hospital (CHBAH) have joined the ID Specialist staff within Wits. Congratulations to them both. Antimicrobial stewardship activities at Wits are increasing, with HJH using a dedicated prescription chart and Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) finalizing theirs, both allowing better audit of important interventions such as improving hang time, and hopefully, helping to reduced interruptions in therapy.

CHBAH initially piloted a motivation form in Internal Medicine, has now modified it to include paediatric medication and restrictions and remains standard where the form can be filled in by an intern, medical officer or registrar but has to be countersigned by the consultant in the unit, who has to ensure that the dose, duration, indications, supporting microbiology results are all correct/attached prior to signing off. This is a way of holding all consultants accountable for the drugs being motivated for. The pharmacist then checks these forms before the drug is dispensed.

CHBAH has just experienced an outbreak of *E.Coli* CRE in the medical wards. The current concern is the development of colistin resistant organisms in the neonatal and adult intensive care units as well as the haematology oncology wards. The difficulties includes, overcrowding, lack of isolation facilities and poor compliance of health care workers to IPC protocols. Awareness programmes around waste management and disposal, TB and Hand Hygiene are being planned for March and May 2016 respectively.

The management of CHBAH has agreed to an isolation ward, an old ward was recommissioned and has undergone extensive renovation to house 18 patients in isolation cubicles. We are currently in the process of commissioning UV lights as well as negative pressure. The completion of the ward is estimated to be mid-2016.

SASPID News

From the SASPID President, Nicolette du Plessis

New year…

SASPID has a new face. After the male-dominant presidential chairs of the last few years, we are happy that the paediatric ID ladies are playing a more prominent role in the new executive committee. Following the SASPID annual general meeting at the 6th FIDSSA Congress 2015, the executive committee would like to welcome Drs. Melissa Lawler and Ute Hallbauer as newly- and re-elected members for the next term. Prof Nicolette du Plessis is the newly elected president, whilst prof Mark Cotton will continue as vice-president. Drs Angela Dramowski, Mo Archary and James Nuttall will continue as executive committee members for their second terms.

In collaboration with the South African Paediatric Society (SAPA), SASPID will host a workshop and parallel sessions during the Biennial SAPA and SAAPS Conference from 1-4 September 2016 at the Elangeni & Maharani Hotel, Durban. No doubt SASPID members will also be playing an important role in the upcoming Southern African HIV Clinicians Society 3rd Biennial Conference 13 – 16 April 2016 at the Sandton Convention Centre.

New challenges…old solutions…

South America seems to be the focus of both emerging infectious diseases threats as well as infectious diseases prevention through registration of a new vaccine.

Zika virus seems to be of particular importance for paediatricians. Zika Virus (ZIKV), a mosquito-borne flavivirus, was first identified in Zika Forest of Uganda in 1947 in rhesus monkeys and in 1968 in humans. Although different outbreaks have been recorded in Africa, the Americas, Asia and the Pacific, the current morbidity and mortality - 3174 cases and 38 deaths - from microcephaly in Brazil (21 October 2015) raises questions about the pathogenesis of congenital infections and possible preventative strategies.

The first dengue virus vaccine was registered in Mexico in December, 2015. As the growing global epidemic of dengue is of mounting concern, and a safe and effective vaccine is urgently needed, this is welcome news. CYD-TDV is a live recombinant tetravalent dengue vaccine that has been evaluated as a 3-dose series on a 0/6/12 month schedule in Phase III clinical studies. It has been registered for use in individuals 9-45 years of age living in endemic areas. It is expected that the WHO Strategic Advisory Group of Experts (SAGE) on Immunization will discuss CYD-TDV at its April 2016 meeting to provide recommendations for use.

In the words of Albert Einstein: “To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science.”