THE FEDERATION OF INFECTIOUS DISEASES SOCIETIES OF SOUTHERN AFRICA

FIDSSA Quarterly

Volume 2 Issue 4 1st December 2011

Special points of interest:

- NDM-1 update
- New Influenza re-assortant
- Paediatric TB
- Malaria in Greece

FIDSSA 4WARD, Durban 2011. A vote of thanks!

4WARD 2011
4th FIDSSA CONGRESS
8-11 SEPTEMBER
THE ELANGENI HOTEL
DURBAN • SOUTH AFRICA

The feedback from FIDSSA's 4th biennial conference has been overwhelmingly positive and thanks must go primarily to Professor Prashini Moodley (pictured right) and her organizing team along with Claudette Scholtz and Sue McGuiness of Sue McGuiness Communications and Event Management, not forgetting the ever-helpful staff of the Elangeni Hotel which put on a magnificent event.

Thanks too to our international and local faculty who travelled from afar to give us a wonderful educational experience. We were most fortunate that Dr Sibongile Zungu, Minister of Health for KZN was able to be with us to welcome delegates and officially open the conference and we thank her for taking time out of her busy schedule. The social events were a highlight as ever, with the gala dinner taking place at Moyo. Congratulations to the winners of best oral and poster presentations, who were presented with their prizes at the Gala event.

One of the wonderful things about the FIDSSA conferences is their intimacy in an age of mega-conferences which tend to be impersonal and overwhelming. So our final thanks goes to all the delegates who attended the conference and joined in to make it the success it was. We are always looking for ways to keep improving our conferences so we would encourage anyone with ideas to contact us. We look forward to hosting the next conference in Cape Town in 2013!

News from the FIDSSA Office - Lea Lourens

The festive season is in motion and we cannot believe another year is coming to an end. Thank you to all our members for your support!!

Membership 2012: **It is now time to renew your membership for 2012**.

The membership fees for 2012 stay the same; doctors: R250 p/a, nurses and allied health: R150p/a. Please remember that **everyone** received a **new** FIDSSA membership number at the beginning of 2011. A lot of members are paying the membership fee with the old number and there is no way that we can track it. Rather, when making payment, please use your initials and surname as reference. If you do not receive a confirmation email from the admin office within 2 working days we have not received your proof of payment. Please resend together with your details. info@fidssa.co.za fax: 0866 349 839.

Membership details
When visiting the FIDSSA website please take some time to check your details. Important information we need:
Cell number (for FIDSSA sms' only!)
Postal address (for SAJEI delivery)
Medical / council number (CPD points)
Correct email address – **All our correspondence is via email**

Membership notices
During the next 2 months you will be receiving email and sms reminders to pay your membership fee for 2012. If you have already made payment and you still receive reminders in January, please send us an email with your details so that we can check our database for your payment and update your details.

If you do not want to be a member of FIDSSA anymore, please send the office an email so that we can remove you from the database. If colleagues want to join FIDSSA please refer them to the website where they can fill in a on-line application and even make easy payments.

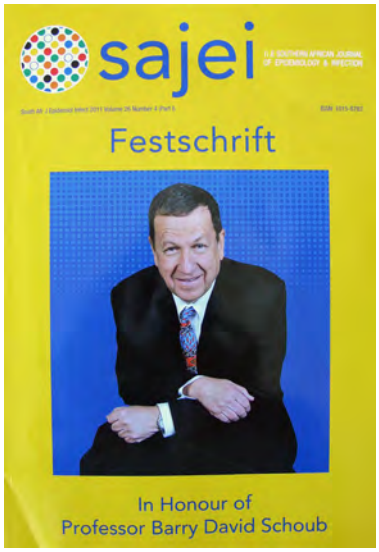
Administration office
Please note that the admin office will be closed from 23 December 2011 and re-opens on 3 January 2012. All queries can be emailed to info@fidssa.co.za.

We wish you a joyous festive season. Be safe and in good spirits.

Barry Schoub's Festschrift

On the 23rd November, friends, colleagues and family gathered at the National Institute for Communicable Diseases to honour Professor Barry Schoub, director of the NICD from its inception in January 2002 and prior to that, director of the NIV from 1976. Barry was presented with a Festschrift by the Poliomyelitis Research Foundation in recognition of his outstanding contributions to the PRF over a period of 34 years.

The occasion was also a first for FIDSSA's journal SAJEI, the editorial staff presenting a Festschrift edition for the first time. Congratulations must go to Editor-in-Chief Prof Charles Feldman, Emeritus editor Prof Hendrik Koornhof and ID section editor Prof Lucille Blumberg along with publisher Dr Douw Greef and the mecurial journal secretary Priscilla May, as well as all the contributors for this outstanding publication. Congratulations to you Barry and to all involved. FIDSSA Members should all be receiving their copy. As you can see, mine is already well thumbed!



Update on the emergence and spread of New Delhi Metallo-β-lactamase-1 (NDM-1) in South Africa

Jennifer Coetzee [1], Juanita Smit [2], Louis Marcus [3], Olga Perovic [4], Adrian Brink [1]
Ampath [1], Lancet [2], Vermaak and Partners [3], Centre for Opportunistic, Tropical and Hospital Infections, NICD-NHLS

The first laboratory confirmed case of a NDM-1 infection was detected in SA in early September 2011. At the same time, another laboratory confirmed case was detected at a private hospital in Gauteng, which led to the identification of an ongoing outbreak of NDM-1 positive isolates at the hospital. The microbiological and infection control considerations regarding the emergence of NDM-1, as well as KPC- producing organisms were previously discussed in a FIDSSA alert (1). The purpose of this update is to share a few observations regarding the outbreak and the emergence of NDM-1 in Gauteng:

The origins of the NDM-1 producing isolates both at the Charlotte Maxeke Johannesburg Academic hospital, as well as the private hospital are still unknown at this stage. The patient from the state sector had no putative links to the Indian subcontinent or any other country where the enzyme is endemic. We also do not know when or by whom the NDM-1 carrying *K. pneumoniae* was introduced into the private hospital. This makes it very difficult to anticipate future outbreaks, and to identify high risk patients that should be isolated and screened on admission. It appears from published literature that travel to India is not a prerequisite for acquisition of this genotype.

The NDM-1 gene spreads at an unprecedented rate. While clonal spread of an NDM-1 producing *Klebsiella pneumoniae* has taken place (unpublished data), horizontal transfer of both the plasmid carrying the NDM-1 gene, as well as horizontal transfer of the NDM-1gene itself to different plasmids can play a major role in its dissemination (2). This mobility of the resistance mechanism is making it very difficult to contain, as well as understand the dynamics, of the outbreak. The DNA-fingerprinting tests that are widely used to determine if clonal spread has taken place (e.g. pulsed field gel electrophoresis) is of limited value in this setting. Containing the outbreak has proved virtually impossible, in spite of the implementing of rigorous infection control measures including strict isolation, barrier precautions, terminal disinfection and an active screening program.

Patients have now been diagnosed with NDM-1 infections at three other healthcare institutions in Gauteng. Although all three patients had epidemiological links to the hospital where the outbreak was first detected, it is unknown at this stage if subsequent infections were due to prolonged colonization, or if re-infection had taken place. One of these patients had no documented colonization or infection with an NDM-1 producing bacteria during her first admission at the "index " hospital.

It would appear that colonization may be prolonged. We have seen two cases where patients had been treated for NDM-1 infections, which were subsequently diagnosed with NDM-1 infections 4 weeks and 10 weeks after the initial infection. The implications for infection control are enormous. Once colonized or infected, patients should be considered infectious, regardless of subsequent screening results, for the duration of hospitalization, and for a minimum of six months after discharge. Upon re-admission within this six month period, it is advised that such patients be isolated immediately until two screening samples (stool or rectal swabs) are NDM-1 negative (3). In this regards, inter-hospital transfer of such cases should be accompanied with a notification alert which should ideally be preceded by telephonic consultation not only between IPC practitioners but by the clinicians involved.

Treatment of NDM-1 infection is problematic. Antibiotic treatment with colistin in combination with a second active drug has been advised (4). Of concern is that we are now starting to see colistin resistance emerging. At least one patient, who was treated for a blood stream infection with colistin in combination with tigecycline, has subsequently had an NDM-1 infection with a colistin resistant isolate. The MIC had increased from 0.25 µg/ml for the initial isolate, to 16 µg/ml ten weeks later.

The plasmids which have been described to carry the NDM-1 gene could accommodate up to 14 additional resistance mechanisms, potentially rendering the isolates pan-resistant.

Detection of NDM-1 producing isolates:
All the major private laboratories in SA, as well as the Centre for Opportunistic, Tropical and Hospital Infections (COTHI) at the NICD, have the capability to detect NDM-1 by real-time PCR.

Active surveillance, i.e. screening of patients to detect colonization, can be performed on either a rectal swab or a stool sample. Swabs that are submitted directly for PCR screening must be dry swabs, without any gel transport medium. The gel transport medium interferes with the PCR reaction, and false positive as well as false negative results have been observed.

Furthermore, clinical microbiologists and IPC practitioners must be on high alert whenever carbapenem- resistant Enterobacteriaceae are isolated from clinical samples. This would include resistance to any or all of the carbapenems, incl. monoresistance to ertapenem. Phenotypic expression of resistance may vary, and we have, for example, observed NDM-1 positive isolates that were sensitive to imipenem. These carbapenem resistant isolates should be screened for NDM-1, as well as KPC production if possible, preferably by means of PCR. In view of our current experience regarding the emergence of NDM-1 in Gauteng, the importance of early detection of this resistance mechanism and institutional infection control strategies, cannot be overemphasized.

Finally, it is crucial noting that although currently prevalent, NDM-1 is not the only carbapenemase that is causing carbapenem resistance in South Africa. We have recently confirmed a second case of a KPC-positive isolate from a urine sample, as well as the first case of the OXA-48 (Class D) carbapenemase in South Africa (unpublished data).

References:

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Unpredictable Influenza virus re-assorts again

In 2009, the Influenza A/H1N1 (pH1N1) pandemic became the first influenza pandemic of the 21st century. pH1N1 was a reassortant virus in swine, combining elements of classic swine influenza derived from the 1918 strain, a North American avian influenza strain, human H3N2 and lastly a Eurasian avian-like influenza virus circulating in swine. The resultant virus caused a pandemic characterized by the majority of cases presenting with influenza-like illness (ILI) rather than severe acute respiratory illness (SARI), although deaths from pH1N1 occurred in a significant percentage of previously healthy persons.

With all eyes now back on avian H5N1, the ever-unpredictable influenza virus has once again reassorted in swine to produce a novel swine triple reassortant influenza A H3N2 (S-OtrH3N2), which contains the M gene from pH1N1, that has caused human infection in the United States. The CDC report 18 human infections with S-OtrH3N2 since July 2009, 15 of which are thought to have resulted from transmission from close contact with pigs. However, the last 3 cases that were reported from Iowa in previously healthy young children and causing mild ILI appear to have resulted from person-to-person spread[1]. An outbreak study found no contact with pigs and the source of the index case's infection is unknown. All 3 children had been at the same gathering on day 1 of the index case's illness. 5 other children also present plus adults have not been infected, suggesting that although human-to-human transmission occurred, it was limited. Current information suggests that S-OtrH3N2 retains sensitivity to neuraminidase inhibitors such as oseltamivir, but like pH1N1 is resistant to amantadine and rimantadine. The 2011-2012 seasonal influenza vaccine is expected to provide limited protections from the S-OtrH3N2 virus for adults, but none for young children. CDC has developed a candidate vaccine virus that could be used to produce a human influenza vaccine against S-OtrH3N2

The unpredictability of the influenza virus and this latest potential health security threat is a timely reminder for us in Southern Africa not to be complacent and to ensure that our 'pandemic preparedness' is up-to-date and functioning. The 2009 pandemic put enormous strain on the South African health service, particularly at 2 critical points; the emergency units and the Intensive care units. Due to the high rate of ILI rather than SARI, general wards were spared in the main, yet the worried-well and the small number of very sick SARI with ARDS requiring prolonged mechanical ventilation kept both the EU and ICUs stretched to breaking point. Targeting our preparedness planning to ensure that we are ready for the next instalment is key. Moreover, preparedness needs to include all stakeholders and we should be looking at emergency exercises to test the plans that we have in place so that we can improve on our reaction and be ready to respond should the need arise, rather than the usual state of affairs where we find ourselves playing catch-up.

1. CDC. Limited human-to-human transmission of novel Influenza A (H3N2) virus - Iowa, November 2011. MMWR; November 23, Vol 60, 2011.

What's new and topical in paediatric tuberculosis?

Update from the 42ND UNION WORLD CONFERENCE ON LUNG HEALTH, LILLE, FRANCE, 26-30 OCT 2011

Elisabetta Walters FCPaed(SA), Desmond Tutu TB Centre, Stellenbosch University, Cape Town

The 42nd Union Conference in Lille saw paediatric tuberculosis being given considerable prominence, pointing to an improved awareness of the significant burden of tuberculosis disease borne by children.

The Conference opened with the StopTB symposium, "**Meeting the unmet needs of women and children for TB prevention, diagnosis and care: expanding our horizons".** The TB burden experienced by women and children remains unacceptably high and severely under-reported. In 2010, over 3 million new TB cases and half a million deaths from TB were reported among women.

Ten million children were orphaned due to TB in 2010. 17% of all TB notifications in Africa were among children[1]. Studies also show that the risk of death increases twofold in African infants born to mothers with HIV and TB co-infection[2]. The health of children is inextricably linked to that of their mothers. Greater efforts need to be made to integrate care of mothers and children. This should include programmes to prevent, diagnose and treat HIV and TB in an integrated manner in pregnant and child-rearing women and their offspring. In particular, strategies for TB screening during pregnancy should be researched and developed, and linked to IPT implementation programmes in child contacts.

A post-graduate workshop was held on childhood TB training, chaired by Prof Ben Marais. The course addressed important aspects of training in child TB, with the aim of providing tools to train health care workers in the diagnosis and management of childhood TB. The workshop proposed a framework for training on the assessment of child TB suspects and the evaluation of chest radiographs in children.

A number of sessions focused on IPT implementation. Consistently, studies find that approximately 50% of children with a TB diagnosis had close contact with an adult TB source case, and failed to be identified and receive prophylaxis. However, many operational barriers to implementing IPT are still present in developing countries. Tools for monitoring delivery of IPT were proposed (Hill, New Zealand). Among studies presented at the conference, adherence to IPT among recipients was reported to be higher than is generally documented in the field (>70% children completing 6 months of IPT by Gomes et al, Guinea Bissau). The protective effect of IPT was variable: a relative risk for TB of 0.04 (p=0.002) was observed in Taiwan (Chan et al), whereas both IPT and no IPT had similar low rates of incident TB in child contacts in Tanzania (Fair et al). J. Seddon outlined the many uncertainties around prophylactic therapy to MDR TB contacts, including drug options and formulations, duration of prophylaxis, monitoring and appropriate level of care.

A symposium on paediatric multi-drug resistant TB was held on Friday 28th. C. Perez-Velez listed reasons for paediatric MDR TB being so poorly reported: poor access to health care and accurate diagnostics, including limited availability of drug susceptibility testing in developing countries, poor quality surveillance data (mostly retrospective) and fragmented health systems. The symposium further outlined the considerable challenges of administering MDR regimens to young children, including a high pill burden, no paediatric formulations, and uncertainties regarding treatment regimens, such as dosages, duration of therapy and adverse events. In another session, Prof H.S. Schaaf outlined the findings of the latest MDR survey conducted at Tygerberg Hospital, Cape Town. Rates of isoniazid and rifampicin mono-resistance and of multi-drug resistant TB (5.6%, 1.8% and 7% respectively) remained stable among culture positive cases. However, an alarming proportion of ofloxacin-resistant isolates was identified (22%- 5/23) - a marker of pre-XDR TB. Prof Schaaf cautioned against the use of Ethionamide in confirmed MDR cases, due to high levels of cross-resistance with Isoniazid.

Some pharmacokinetic data were also presented. S. Thee demonstrated that in children <2 years of age, serum levels of first line TB drugs delivered according to the latest WHO recommendations[3] are significantly higher than by the previous guidelines, and fall within the therapeutic range. Soumya Swaminathan showed that Indian children with growth stunting have lower serum levels of rifampicin and pyrazinamide (sub-therapeutic) than their peers. HIV-infected children had the lowest levels of rifampicin. However, the 6 month clinical outcome was good in the majority of children regardless of drug levels. Long term outcomes were not reported.

Exciting findings on novel diagnostic strategies were reported by C. Perez-Velez, Colombia, in Saturday's late breaker session. He used the Nasogastric String Test and Aspirate (NSTA) method (string wrapped around the nasogastric tube), as well as induced sputum (IS), in combination with solid and liquid culture and in-house PCR for the diagnosis of children with suspected TB enrolled from both in- and out-patient facilities in Colombia. 9 samples (3 string, 3 gastric aspirates (GA) and 3 IS) were collected from each child. The test with highest yield against a clinical TB diagnosis (3 of 4 WHO criteria for childhood TB) was the string test in combination with PCR, detecting 51% of all cases. The highest total yield was achieved by combining GA, IS and string test and PCR (74% yield). By comparison, GA, IS and string test with culture achieved 11% yield. These findings are notable as paediatric TB is considered to be paucibacillary, with a reported culture yield of 10-30%. A novel sampling strategy and diagnostic test that can achieve over 50% positive yield deserves further study, as it could significantly impact on TB case finding and reporting, and ultimately the care, of children with TB.

Useful websites related to childhood TB promoted at the conference:

http://ghsm.hms.harvard.edu/sentinel/ This is a newly launched site for collaborative networking among clinicians and health care workers involved in the management of children with MDR TB.

http://www.theunion.org Under "Membership-Scientific Sections and Working Groups", the Childhood TB Training Tools Working group will post guidelines and tools aimed at training health care professionals on the management of childhood TB.

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1. *Global Tuberculosis Report.* Geneva: World Health Organization 2011.
2. Gupta A, Nayak U, Ram M, et al. Postpartum Tuberculosis Incidence and Mortality among HIV-Infected Women and Their Infants in Pune, India, 2002-2005. *Clinical Infectious Diseases.* 2007;45(2):241-249.
3. *Rapid Advice: Treatment of Tuberculosis in Children.*Geneva, Switzerland: World Health Organization; 2010.

Scaling up of HIV Prevention globally - Meeting the Challenge

Highlights from 12th IUSTI WORLD Congress 2-5 November 2011 New Delhi, India, by Frans Radebe, NICD

Three decades into the emergence of the HIV epidemic, centuries into the appearance of other sexually transmitted infections (STIs), and despite the development of many efficacious individual, group and structural level interventions, it is clear that advances made in the prevention of HIV and other STI have not been sufficient to get ahead of the epidemics. The emerging consensus points to the focus on a singular prevention strategies and the formidable gap between innovations and health program delivery. Combination prevention which combine biomedical, behavioral and structural interventions, and implementation science, which provides a scientific framework to guide the delivery and scale-up of preventive interventions have been identified as current needs. The addition of a third component, "Programme science" which was the highlight of this congress **"Promoting Sexual Health: Basic Science to Best Practices",** may further enhance the power of this current approach to affect population level health outcomes and achieve impact.

It is estimated by the UNAIDS that between 2001 to 2009, there has been some general stabilization and decline of up to 25% in HIV infections in countries such as South Africa, Ethiopia, Zambia, Zimbabwe and Nigeria. The new proposition by UNAIDS is to get to zero target by the turn of this century. This is the best of times due to new development in science and also the worst of times because of the ongoing financial crisis in most and especially donor countries.

The most challenging question to ask is; are our investment in research programmes matching the epidemic? Global fund financing programmes for HIV prevention are limited and mostly target the behavioral aspect prevention of the epidemic. The UNAIDS target is to avert 12.2 million new infections between 2011 and 2020.

Does our footprint match the epidemic? Available resources need to focus on achieving greater impact by targeting over 20 countries with over 70% of new infections.

Are we focusing on the wood rather than the trees? Focusing on major cities could have a greater impact, for example in South Africa, only four provinces account for nearly half of all new infections. If those provinces are targeted for prevention, this will have a greater impact on the whole country. The urban HIV epidemic where the new infections are concentrated in urban areas and spread quickly to rural areas should be taken into consideration. We need to put our effort in the right places by prioritizing certain sub-populations and places (Geographic Prioritization Hotspots) that are the drivers of the epidemic such as uncircumcised men.

The is also the need for the right leadership and good partnership (both political and social).

There is a need to develop "Programme science" to fight the epidemic by :

- Discovering new technologies and biomedical interventions.
- Building knowledge about what creates and sustains epidemics.
- Assessing the efficacy of the programmes such as interrupting HIV transmission at the individual level.
- Moving from efficacy to impact of the programmes, i.e moving from prevention to strategy implementation
- Providing science-based guidance and evidence for resource allocations for prevention for an example, we have science –based evidence that early start of ART reduces risk of HIV transmission to partners.

The rule is " Know your epidemic, know your response analysis"

There is a need for a paradigm shift to achieve prevention goals because there is a danger of loosing the battle due to time-frame. This can be achieved by systematic application of scientific knowledge to improve the design, implementation and evaluation of public health programmes. For an example in the US, the national HIV/AIDS strategy of June 2010 took the following resolutions:

- Stable HIV incidence is not acceptable, zero target is the solution
- Too many individuals at risk are not reached.
- Urgent need to modernize surveillance/monitoring & for high impact prevention & feasibility of full-scale implementation.

Using evidence for managing large HIV prevention programs (An Experience from Avahan, India)

Even though there is a global success story today with marked decline in new infections in most parts of the world, there is a sense of urgency to do more in terms of designing, executing and sustaining the programs. "We should not be afraid to peel the onion".

- We should focus on the population most at risk with simultaneous and rapid scale-up while prioritizing.
- We should start at large cities, towns and village and listen to our partcipants/customers and interact with their demands.
- Data gathered doing research should be used real-time
- Recognise the ability to make mistakes and act immediately on them.
- Programme leaders should be on the field all the time for the programs to make impact

Strong role of community mobilization and reduction in sex stigma.

Infection Control Society News

Firstly, the recent FIDSSA congress was a great success, and the feedback we have had to date has been very positive. I would like to thank all those who presented at the congress as well as all those who attended. It was great to get a chance to meet some new face as well as catch up with the old (and not so old…). At the ICSSA AGM, one of the items that came up was the issue of the presidency. My term ends in 2013, and according to the constitution I must stand aside (office bearers can serve a maximum of two four-year terms) and we need to start considering who will be available to take over. Please start thinking about who you would like to see in the position, and feel free to communicate with the ExCo about this, via Lesley Devenish (lesley.devenish@netcare.co.za). We will send out a formal call for nominations in due course.

In the last newsletter, I discussed the national Department of Health's efforts to get Infection Control recognised as a speciality by the SA Nursing Council. As a start, a curriculum for a Standardised National Infection Prevention and Control Qualification (which will take the form of an Advanced Diploma) has been proposed by

the Units at Universities of Kwa-Zulu Natal and the Witwatersrand, with input from University of Stellenbosch and members of ICSSA. This curriculum has been forwarded to the Department of Health who will submit it to SANC. The process is likely to be slow but it has, at last, started.

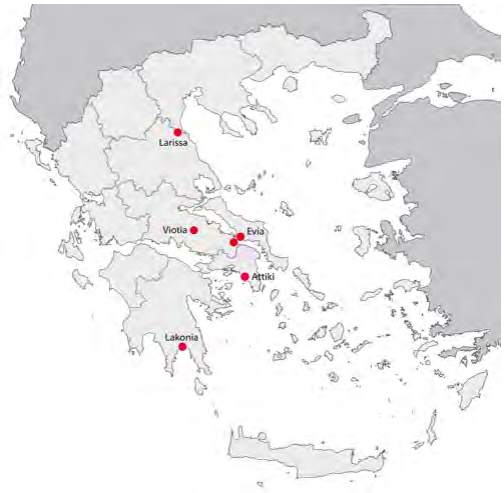
The Eastern Cape chapter of the Infection Control Society has been going for just over a year now (they started in Oct 2010), and they have held 4 workshops over the year. Congratulations to the committee, and we hope you continue to grow and promote infection control In the E. Cape. The W. Cape Society has been similarly active, as have GICS and the PIF. The Free State Multi-Disciplinary Infection Control Indaba (MICI) continues to operate as an electronic network. Lesley Devenish made contact with the chairperson of the Infection Control Association of Zimbabwe (ICAZ) at the recent IPCAN congress. They are trying to revitalise themselves, and we will be keeping in touch with them and hopefully be able to learn from each other. This is a very positive step, and expanding to our neighbours is something the ICSSA committee has been discussing recently, so Lesley's meeting Anna at IPCAN was most fortuitous. Lesley also made contact with Joyce Namahuja, based in Windhoek; unfortunately the society in Namibia is somewhat defunct, and needs some impetus to get going again.

While on the topic of Africa, I would like to encourage everyone to look at the latest WHO patient Safety Newsletter (available on the ICSSA section of the FIDSSA website). This issue focuses on Africa, and as such is well worth browsing.

I think everyone in the infection control field is aware of the isolation of the carbapenemase-producing Klebsiella in Johannesburg. A lot has been written about it, and although it is a cause for concern, we also need to remember "A Hitchhiker's Guide to the Galaxy", and "**Don't Panic**"! What it does mean is that infection control specialists (as well as microbiology laboratories) need to be on the alert for these organisms, and have clearly defined plans of action for when they are identified – including how to transport the patients and how to hand over to the receiving hospital (an often overlooked aspect of infection control. Some of this was covered in the most recent case of the month, and if you haven't yet seen it, please log onto the FIDSSA website (www.fidssa.co.za) and read through the discussion points.

Malaria outbreak in Greece; a cause for concern in travellers?

South African Society of Travel Medicine
SASTM



Eurosurveillance reported on an outbreak of *P. vivax* infection in Greek citizens. Of the 61 cases that were reported between May and October, 33 were Greek citizens without travel history to an endemic country. Twenty seven cases were reported from the area of Evrotas, which is located in the district of Lakonia in Peloponnese in southern Greece, the remaining six cases being from the municipalities of Attiki, Evoia, Viotia and Larissa. A further 28 cases of *P. vivax* infection were reported in migrant workers from the area of Evrotas.

At the present, due to the arrival of the winter season and the available epidemiological and entomological data, the intensity of malaria transmission in the Evrotas is very low and is expected to cease. For this reason, chemoprophylaxis for visitors to this area is not recommended.

At the time of the peak of cases, did this pose a threat for travellers? Should travellers have been advised to then, use chemoprophylaxis? There would have been a number of factors that need to be considered when any advice is given in this regard, for any situation.

1.The areas affected are not tourist destinations.
2. Accommodation, length of stay, nature of activity, needs to be taken into account.
3. Is there effective chemoprophylaxis available for travellers from South Africa?

There are three medications available in South Africa that could be used for malaria chemoprophylaxis:

1.Doxycycline 100 mg daily, commencing 24 hours before entering the malarious area, taken daily whilst in the area and thereafter daily for four weeks.
2.Mefloquine taken 7 days prior to entering the malarious area (some authorities advise two weeks to determine whether any adverse events occur), then weekly whilst in the area and weekly for four weeks after departing the area.
3.Atovaquone/proguanil combination, taken 24 hours prior to entering the area, daily whilst in the area and daily for seven days after leaving the malarious area .

The next question to answer is: how effective are any of the above in the prevention of *P vivax* malaria? The answer is simple: **None**.

These medications will only delay the onset of the infection and this could be by several months. In a returning traveller presenting with a fever some six months after travel the likelihood of malaria being one of the differential diagnoses is low, which will further delay the onset of treatment.

It is important that before one considers any action, complete epidemiological information is required to determine what action is to be taken.

Source: European Centre for Disease Prevention and Control.

FIDSSA - GlaxoSmithKline Research Fellowships

The winners of the inaugural FIDSSA - GlaxoSmithkline Research Fellowships were announced at the FIDSSA 4-Ward Conference gala dinner at Moyo in September. The 2 recipients, Dr Angela Dramowski and Dr Warren Lowman received their R100,000 fellowships for projects detailed below. Fifty percent of the original applications were sent out for review by 2 independent international and national reviewers, before a short-list was compiled, and a final judging was undertaken by a panel of clinicians and scientists. Many congratulations to the winners and to all applicants. The standard was very high and it was a very difficult decision to make. Thanks to the panel for all their work and a special thank you to GSK for their extraordinary generosity.

Non-vertical HIV transmission in children: Case investigation, active case-finding and development of a national registry.

Dr Angela Dramowski is a paediatric infectious diseases sub-specialist in the department of Paediatrics and Child Health at Stellenbosch University's Faculty of Health Science.

Project Synopsis: Most children acquire infection through mother-to-child transmission of HIV during pregnancy, labour and breastfeeding. However, cases of non-vertical HIV transmission (NVHT) are increasingly recognized with reported prevalence rates of 3-5% among children attending two Southern African paediatric ART clinics. Known routes of NVHT include sexual abuse, contaminated blood products, re-use of needles and syringes, donor expressed breast milk, surrogate breast feeding and pre-mastication of food.

In many cases the route of infection is not established, although unsafe injection practice is thought to be a major contributor. Investigation of NVHT is important in order to identify and intervene in potentially pervasive, unsafe health-care and household practices that contribute to HIV transmission among children. This research project will investigate the rate and routes of NVHT through passive and active case-finding, establish a national registry for reporting of cases and make recommendations for the prevention of inadvertent HIV transmission in children.

Optimizing antimicrobial treatment in the ICU; the importance of the pathogen.

Dr Warren Lowman is a consultant pathologist in Microbiology and Infection Prevention Control at the University of the Witwatersrand Infection Control Services Laboratory (NHLS).

Project Synopsis: Antibiotic resistance in bacteria is a daily part of clinical practice and directly impacts on patient management. The current situation of escalating resistance and no promise of new antimicrobial agents in the next 10 – 20 years means that it is imperative to preserve our current armamentarium. The World Health Organisation has recognized this need and has developed a six-point policy package to address this very issue. An integral part of this package is to strengthen surveillance and laboratory capacity. This study aims to provide enhanced antimicrobial surveillance of ICU-acquired Gram-negative bacteraemic pathogens, at a local hospital level. This will entail MIC testing of isolates against a panel of clinically relevant Gram-negative antimicrobial agents, coupled with molecular characterization of ß-lactam resistance mechanisms. This data will then be used prospectively to validate phenotypic methods for determination of resistance mechanisms. The data will then be used both retrospectively and prospectively in the assessment of current ICU prescribing practices in the context of hospital-associated infections, and current laboratory practices for accurate and relevant reporting of resistance.

New Honorary Life Members of FIDSSA

We are delighted to announce that Dr Steve Oliver and Professors Charles Feldman and Barry Schoub have been made honorary life members of FIDSSA, joining a select list of people who have made an outstanding contribution to the field of Infectious Disesaes in its broadest sense and to the Federation itself. All 3 are worthy recipients of this award and we congratulate them most heartily. Full details of their achievements and those of the other honorary members can be viewed on the FIDSSA website 'honorary life members' page under the 'About FIDSSA' tab

Professor Charles Feldman
Charles is the Editor-in-Chief of FIDSSA's journal The Southern African Journal of Epidemiology and Infection, having taken over from Professor Hendrik Koornhof. Charles has worked tirelessly to develop and improve the journal which is FIDSSA's flagship, and he is recognized for his outstanding contribution to the society in this regard, as well as the many accolades for which he is known both nationally and on the international stage. He is an 'A' rated scientist and a internationally-recognized leader in the field of pulmonology.

Dr Steve Oliver
Steve has made an outstanding contribution to Medical Microbiology in South Africa, as a practitioner, and as a teacher and mentor. He has been a tireless supporter of Infection Control, Microbiology, Infectious Diseases and numerous societies including FIDSSA itself. His quiet, calm and professional approach has won him innumerable friends and admirers throughout his career and his retirement will leave the South African Microbiology, Infection Control and Infectious Diseases community much the poorer.

Professor Barry Schoub

Throughout his illustrious career, Barry Schoub has quietly gone about making an immense contribution to the medicine and science of virology and infectious diseases in its broadest sense. He was director of the National Institute of Virology and became the first Director of the NICD helping to build it into the force it now is in South Africa and the African continent. His thoughtfulness, dedication and humble approach to the many tasks that he has been set is an example to us all. He has made multiple invaluable contributions to FIDSSA and its individual societies over the years.

And finally.....

Unbelievable as it is, the end of the year is upon us and therefore, the last word needs to be a vote of thanks to all the people that have contributed to the FIDSSA Quarterly over the past year. The ongoing support for our newsletter is wonderful and I am extremely grateful to all those involved. A special mention must go to the individual society coordinators, Mark Cotton, Mark Nicol, Frans Radebe, Garth Brink and Andrew Whitelaw for their dogged persistence when the call comes. Thank you too to Lea Lourens our FIDSSA administrator not only for her contributions to the Quarterly, but more for her tremendous support for all things administrative.

2011 has seen many successes for FIDSSA, not least of which was our biennial conference. The awarding of the FIDSSA-GSK Research Fellowships mark a real first for FIDSSA in supporting ID-related research in its broadest sense and we hope that many more awards will be made in the future. Our website continues to grow in content and hopefully, by being continually updated remains a vibrant and highly relevant resource. In 2012, I hope that FIDSSA will take on a much greater role in Infectious Diseases outside of our own borders, and in so doing, become more relevant to Southern Africa as a whole.

From all of us at FIDSSA, we wish you, our members, colleagues and friends a very happy festive season and look forward to seeing you in the New Year.