International Journal of Infection Control
www.ijic.info ISSN 1996-9783

Editorial

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10.3396/IJIC.v11i4.024.15

The authors of this issue of IJIC are from seven countries in three continents – articles are from India, Singapore, Nigeria, Egypt, Kingdom of Saudi Arabia, Republic of South Africa and Ireland. I hope you will find all these articles interesting and informative.

Air is known as a source and a mode of transmission of microorganisms causing respiratory tract infections and surgical site infections. In this context, Sudharsanam ad co-authors from India performed a microbiological study of indoor air as a source of healthcare associated respiratory and skin/skin and soft tissue infections, during two month period in 2010. Even after such a short period they have found a strain of *Staphylococcus haemolyticus* in the air of an orthopaedic ward closely related to the *S. haemolyticus* strain isolated from an infected wound of a patient in the same ward a week later. The patient was admitted with an open non-infected wound and the initial swab was negative. They compared the two strains using standard *Sma*I restriction and PFGE. Although the authors did not look at other possible sources of infection (e.g. hands of staff or contaminated surfaces), and it is not possible to be sure that the *S. haemolyticus* infecting the wound of the patient come from air, it is anyhow very important addition to our knowledge of air as a possible sources of healthcare associated infections.

Chlorhexidine gluconate bath is generally accepted measure for decrease skin MRSA in MRSA infected/colonised patients and consecutively less MRSA infections in these patients. Willis and co-authors from Singapore present the results of a very interesting three year observational study from their 550-bed general hospital. Their hospital policy was admission MRSA screening of all patients, and MRSA positive patients had daily 4% chlorhexidine gluconate bath throughout their hospital stay in addition to the routine contact precautions. When they have compared MRSA infections in the MRSA screen positive patients and other patients, the difference was actually striking: only 4 patients from the first group acquired MRSA infection while 36 patients from the second group had MRSA infections during their hospitalization. Most patients from the second group were MRSA screen negative, but some of them might also be false negative, or not screened at all. Nevertheless, these results are very promising for settings with high burden of MRSA.

Adejumo and co-authors in a one year prospective study of surgical site infections after abdominal surgery present an incidence of 38.1% surgical site infections (SSI) in adult patients, 74.1% being superficial and 25.9% deep SSI. They give us very detailed tables with patient demographic data, data about the characteristics of operative procedures and indications for surgery, and about the micro-organisms isolated in these infections. The independent risk factors for SSI after abdominal surgery are the same as we encounter in many others studies ("emergency surgery (P=0.01), operative time > 2hours (P=0.02), presence of contaminated and dirty wounds (P=0.05 and < 0.01 respectively), pre-operative physiological status of patients [ASA IV and V] (P=<0.01), retroviral disease [RVD] (P=<0.01) and the use of peritoneal drains (p=<0.01)"). The special value of this article is that the authors started with the problem of SSI in their hospital and then they undertook the one year study to find out why this is occurring and what were the risk factors. In discussion section the authors explained some of the data and risk factors, offering some possible solutions. This is very interesting article showing real life problems in an abdominal surgery ward.

A standardized, validated sterilisation process is a prerequisite of any aseptic procedure done in a hospital. Starting from that point, El-Sokkary and co-authors from Egypt reacted to the reports about defects in sterilisation service to the infection control of their hospital. They have analysed the situation of the sterilisation department in the hospital using FOCUS-PDCA strategy and route cause analysis, then implemented necessary changes and have succeeded to make their sterilisation department "…an efficient production plant…".

Cruz and co-authors from Saudi Arabia performed a questionnaire-based study about knowledge, attitude, practice and self-reported performance of 5 moments for hand hygiene among 223 nursing students (levels 3-8, 112 males and 111 females), searching for gender differences. They have found that there is no difference in knowledge between two groups, but the attitude of female nursing students was significantly better; however, the answers to practice questionnaire showed that male students have significantly better practice of hand hygiene. The fourth part of the questionnaire, self-reported performance of 5 moments, showed that there is no difference in the performance of hand hygiene in the first two moments, but that female students have significantly better performance of the last three moments. The authors conclude that these data are important to plan gender-specific needs in hand hygiene education of nursing students. Besides these results of gender differences in hand hygiene, this article offers comprehensive literature review about compliance with hand hygiene.

In a Practice forum section, van der Westhuizen and co-authors from South Africa present their results of a novel education tool for teaching medical and physiotherapy students (N= 326) how to protect themselves from tuberculosis in a tuberculosis endemic setting. The classic teaching method was through didactic lectures, and a novel method was based on the health belief model …"and included personal testimonials from healthcare workers and an IC expert who had survived occupational TB". Before and after this novel educational approach students were asked to fill in the questionnaire about knowledge, attitudes and practice in tuberculosis infection control. Post-educational knowledge was significantly better than pre-educational (78% vs 58% [p < 0.001]), but students said that negative attitude and practices of senior staff, together with frequent lack of PPE, influenced their practices. In the text there are some very interesting reactions of students, worthy of reading. Also, very interesting is Table II: what students think about who is responsible for them not contracting tuberculosis. The authors conclude that the novel educational method could add to the knowledge and awareness of tuberculosis in an endemic setting, but they also emphasised the role of senior staff in achieving change of students' behaviour.

In a short report Bhuachalla and co-authors from Ireland described transrectal ultrasound guided prostate biopsy pathways, pre-biopsy risk assessment of antimicrobial resistant *Enterobacteriaceae*, antimicrobial prophylaxis and post-biopsy infections, using national based questionnaire. This retrospective study collected data from 2011 to 2013, including ten centres that perform about 90% of all prostate biopsies. The results showed different practices among

centres, based mostly on international guidelines, regarding biopsy, AMR risk assessment, and also different post-biopsy infections. Following this survey a national policy on the prevention and management of infection post transrectal ultrasound-guided prostate biopsy was issued in June 2014. It is very important to see how research can directly influence the practice and make improvement of national standardisation of some procedures.

I thank all above authors for considering IJIC for their work, and hope this sharing of experiences will encourage new authors to send their work to IJIC.

I want use this opportunity to say farewell to you, as I will stop being editor-in-chief with this issue of IJIC. I have started in 2011 (Vol7 No3), after Judith Richards has established a very successful online form of the Journal. I only have continued her work, with the invaluable help of Elizabeth Scicluna, Journal Manager. In these four and a half years we have succeeded to have steady number of four issues per year, thanks to contributions of many authors all over the world. We also have started to change some other things that could bring the journal closer to recognition by bibliographic data bases such as Medline.

Here I thank once again to all authors for choosing IJIC to exchange experiences and ideas in prevention and control of healthcare associated infections with the world scientific and professional society, then I thank very much all IJIC reviewers for their effort to make our manuscripts better, and special thanks to Elizabeth Scicluna for her work with editing most manuscripts during these four and a half years.

I hope and I invite you to continue reading the journal and sending your contribution!