

## **Editorial**

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I would like to introduce to you the spring issue of IFIC journal. Here we have nine articles from seven countries mixing up experiences in infection prevention and control from all over the world: Brazil, Canada, Malta, Egypt, India, United Arab Emirates and United States of America.

Three original articles are dealing with the healthcare environment. We are more and more aware of the importance healthcare environment has in transmission of hospital pathogens. So Safdar and co-authors described the bacterial contamination of patient-ready cleaned reusable telemetry leads. Multiple organisms were recovered from leads, with 1/50 leads being positive for MRSA and 3/50 leads positive for VRE. One storage container was also positive for VRE; they were screened for *Clostridium difficile* too, but did not recover any. Based on these results their hospital has changed the policy and started to use disposable telemetry leads.

Badr and colleagues reported that nearly all mobile phones used inside hospital were contaminated with hospital pathogens. Healthcare workers (HCW) were asked to disinfect their hands, then microbiological analysis was done (hands showed no bacterial growth), than HCWs used their mobile phones and microbiological analysis was repeated: from 93.7% of HCW hand the same flora was isolated as from their respective mobile phones.

Deshaies and co-workers tried to answer a question of efficacy of manufacturer-recommended use-dilution disinfectant concentrations against different pathogens, compared with minimal lethal concentration of particular disinfectant, discussing different errors that could occur in the real hospital work, with the concentrations at off-recommended strengths of particular disinfectant. They have also found that different disinfectants have very different potency against different hospital pathogens so when planning use of disinfectant one should take into account potential pathogen in a particular situation.

In a prospective questionnaire-based study of percutaneous injuries during periodontal procedures, Bali and co-authors found that in 612 periodontal procedure during one year, 12 residents (trainees) suffered from on average 4 percutaneous injuries/year (from 2-7 injuries per resident), which is higher than in

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other literature references (maybe because they were trainees with no high experience in the procedure). They described in detail the conditions when injuries occur (type of procedure, location of procedure, time of the day, site of injury) and concluded that such detailed analysis of percutaneous injuries in periodontal procedures could help in planning how to avoid it.

Ng Wai Khuan showed how hand hygiene could substantially be improved in hospital using multimodal and multidisciplinary strategies, with the engagement of the executive team, marketing team and infection preventionists of the hospital. The rate of healthcareassociated infections (HAI) was at the beginning 1.6/1000 patient days, and hand hygiene compliance was 22%. After they have first determined what were the reasons of hand hygiene non-compliance in a very thorough analysis, and also what were the potential driving and restraining forces to improve hand hygiene compliance, they have started what they called "massive" hand hygiene campaign. After 15 months hand hygiene compliance rose to 86% and the infection rate decreased to 0.4/1000 patient days. They have concluded that the compliance to hand hygiene could influence the HAI rates, although the patients' comorbidity is a factor that should be taken into account. Nevertheless, the huge increase of hand hygiene compliance was a consequence of a campaign involving all parts of the hospital.

On the other hand, in the letter "What is the distance between saying and doing?", Carneiro and co-authors ask why so many healthcare workers throughout the world, although they are aware of the significance of hand hygiene, do not perform hand hygiene as they should. They propose a new health education strategies to transform rules into habits, and one of the successful strategies, (actually very similar to the WHO strategy) is presented here in the Ng Wai Khuan article.

We have two articles in the Practice Forum section. In the first one, Tartari Bonnici showed good results in decreasing infections related to peripheral intravenous catheters by better catheter management. This is a before-after interventional study. The surveillance of 132 PVC in the pre-intervention and of 153 PVC in the post-intervention phase has been done (insertion

date, quality of dressing, duration of catheter and visual infusion phlebitis (VIP) score). Intervention consisted of introduction VIP score document for daily catheter assessment and duration not exceeding 72 hours, education of doctors and nurses and regular feedback of surveillance results. Results were very good: the phlebitis rate decreased from 22.7% before intervention to 6.5% in the post-intervention phase.

In the second Practice Forum article Ratnamani describes the success in decreasing HAI they have achieved with the in-service education of frontline nurses in the whole hospital. The infection control practitioners in the hospital observed that the main area of improvement would be the education of frontline nurses. They developed an education programme for senior nurses that become then master trainers, and they in turn have to further train five nurses each and so all nurses were educated in basic principles of infection control. In the same time, they performed a continuous surveillance of HAI. They have started the education programme in April 2006, and showed a decrease of all HAI from August 2006 (7.2%) till August 2007 (4.2%), as well as a decrease of VAP and CAUTI, and an increase of hand hygiene compliance from less than 30% to 57%. This work once again corroborates a value of multimodal strategy to decrease HAI in a hospital.

We have a short report written by Padmaja and colleagues reminding us about the importance of nebulizers in transmission of hospital pathogens. They described a case of a postoperative patient with *Acinetobacter baumannii* pneumonia who was superinfected with a *Chryseobacterium indologenes* found in the nebulizer that was used for colistin therapy of this patient. The source of *C. indologenes* was most probably the nebulizer (inlet and outlet of nebulizer grew *C. indologenes*), although it has not been found how the nebulizer was contaminated. The route of infection was not clear – was it colonization of lungs first or of skin and central venous catheter? Nevertheless, this is surely a warning for the risk of using nebulizers in severe ill patients.

I thank all the above authors for considering IJIC for their work, and hope this interesting sharing of experiences will encourage new authors to send their work to IJIC and hope you find these articles informative.