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Editorial

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I would like to introduce to you the autumn issue of IFIC journal. Here we have seven articles from seven countries mixing up experiences in infection prevention and control from all over the world: Australia, Canada, Egypt, India, Nepal, Singapore and Ukraine.

In the first article, Chughtai and co-authors present a very comprehensive review of the use of cloth masks in prevention of respiratory infections in healthcare workers (HCW) and in patients. Although the use of cloth masks as a protection of HCW has been decreasing in high income countries by the use of respirators and disposable surgical masks, contemporary use is still high in low and middle income countries. There are very different cloth masks in the use, and their efficacy is dependent on many variables. It is important how effective cloth masks are, and the authors give us data of clinical and laboratory research from 1918 to 1975. In 21st century, only three studies were done, all in laboratory settings. Very detailed presentation of those results are made within the comprehensive table. The authors warn that there is a lack of evidence of efficacy of cloth masks (there is no randomized clinical trials), but also the lack of recommendations of their use in different guidelines and policies, in spite they are widely used as prevention of respiratory infections in HCWs and patients.

Second and third articles are dealing with the environment cleaning and disinfection. Assanta and colleagues present a research they have made on the influence of surfaces in healthcare institutions and of the cloth used for cleaning on mechanical removal of meticillin-resistant *Staphylococcus aureus*. They have compared cotton and microfiber cleaning cloths and stainless steel, melamine and Formica laminate as surfaces. The results are interesting: in presence of soil, microfiber cloth was only slightly more effective, and melamine surface was the most difficult to clean.

Chow Wai Leng and co-workers did another interesting study about the hospital environment. They examined the efficacy of photocatalytic titanium dioxide (TiO_2) coating in reducing environmental MRSA contamination. TiO_2 is known to have an extended antibacterial activity. This was a big study during 24 months, including 698 bacteriological samples from TiO_2 treated and untreated surfaces. The conclusion however was that photocatalytic titanium dioxide did not influence positive culture results. The authors recommend more research to evaluate the lack of titanium dioxide to prevent bacterial contamination in this study.

In the next article, Pidubna describes the distribution of HIV infection among different population groups in Sumy region of North-Eastern Ukraine from 2001 till 2011, based on sero-epidemiology. The author has found that the overall rate of HIV-infected persons was below the national average; the most positive results were found in patients screened for clinical disease, then in prisoners and intravenous drug users. In the discussion some differences from state results are explained with the specific cultural and behavioural phenomena in that region of Ukraine.

Mahadik and co-authors did very interesting study about the role of targeted antimicrobial prophylaxis in hysterectomy for benign gynaecological diseases. They have performed vaginal swabs prior to the surgery, and gave targeted prophylaxis if they found pathogenic bacteria, or ampicillin if they found non-pathogenic bacteria only. The result was that patients with non-pathogenic bacteria had significantly more postoperative infections than patients with the pathogenic bacteria isolates. This paradox was explained with the fact that pathogenic bacteria could be present in the vagina in very low numbers, and not revealed by the laboratory, but can anyhow cause postoperative infection; on the other hand, ampicillin could not cover all potential pathogenic bacteria in vagina. So the authors question ampicillin prophylaxis alone in hysterectomy for benign gynaecological disease.

Kong and colleagues did a small scale exercise of the plan-do-study-act cycle for improvement of hand hygiene in their hospital. They have started with the hand hygiene compliance observation, then they have educated the staff and have provided alcohol gel, and then again they have done hand hygiene observation. They have found a 3.6 fold improvement of hand hygiene.

Finally, Badr and co-authors show the main results of a three year study of catheter-related bloodstream infections in neonatal ICU. Overall infection rate was 21.4 per 1,000 CVC days, and an important fact here was a huge antibiotic resistance from the isolated pathogens. The logistic regression showed that total parenteral nutrition, low birth weight and length of CVC *in situ* were independent risk factors for developing catheter-related bloodstream infections in neonatal ICU patients.

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