

Editorial

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The infection prevention and control experiences presented in this issue of the Journal, ranging from IP&C in long care facilities for the elderly in Hungary to problems encountered in neonatal intensive care facilities in Brazil remind us once again that infections are no respecters of age. Two papers also stress the importance of IP&C in community settings, and bring to the fore the close relationship between public health issues and effective control of infections outside hospital settings. Education, both of the patient and the healthcare worker, continues to be a high priority, and the relevant role of the microbiology department is highlighted in one other paper.

Major social changes have meant a huge increase in the numbers of elderly people living in long term care facilities. Added to this, delivery of health care has resulted in fewer acute hospital beds, and earlier discharges from the acute sector. The European Centre for Disease Prevention and Control (ECDC) seen this a potential for increases in health care associated infections, and funded the HALT project, a large pan-European review of facilities aiming to estimate the burden of infections, use of antimicrobials, and current infection control practices across Europe. This study reported by Szabo and co-workers was part of the HALT phase 2 study, and focuses on prevention

and control practices in LTCFs in Hungary. Their findings of low numbers of trained practitioners, lack of national guidelines, and poor institutional programmes for surveillance and education highlight a problem that is becoming universal, extensive, and likely to become more so as social changes and increase longevity add to the burden of these LTCFs.

At the other end of the age spectrum, Araujo da Silva *et al.* report on the findings in a paediatric intensive care unit in Rio de Janeiro, Brazil. Surveillance of nosocomial infections in hospitals with 10 or more ICU beds is mandatory in Brazil. However, the authors stress that local data to determine prevalent pathogens and their sensitivity patterns is necessary to guide appropriate therapy and control measures. High levels of multi resistant Gram positive bacteria were detected in PICU (22%) and NICU (13.6%). MDR Gram negative organisms were detected at even higher levels (PICUs 49.3% and NICU 56%). The authors focus was on the high levels of MDR Gram negatives in VAP, and prompted changes in practices. The introduction of oral chlorhexidine, and the incorporation of bacteriological filters in the expiration phase, recommended for adult ICUs, were introduced in this hospital's PICU and NICU as part of care bundles as the most effective way of ensuring appropriate care. The results are yet to be fully evaluated.

Three different papers, from India, Ethiopia, and Saudi Arabia highlight once more the importance of education of HCWs in the correct application of IP&C practices. Each on its own, whether analysing the effectiveness of introducing an infection control module for undergraduate medical students in rural India (Singh *et al.*); assessing the risk of occupational exposure to HIV in Ethiopia (Beyene and Tadesse); or evaluating IP&C practices amongst dental workers in Saudi Arabia (Sedky), stress the need for mandatory on going infection control educational programmes. In countries where the risk of occupational exposure to HIV is high, it is still worrying that in spite of so many publications in the international literature, re-capping of needles and lack of opportunities for training are still presented as a significant risk. It is encouraging to find that Indian medical students benefited from the incorporation of an IP&C module into their under graduate curriculum, and to have the students themselves reporting in such a positive way to this experience.

Moving on to community and public health care, it is crucial to be reminded that effective IP&C requires the support of good microbiology laboratory facilities. Cholera is still one of the major public health threats in the world, spreading rapidly in Africa and Asia, especially in refugee camps. On- going laboratory based surveillance of resistance patterns can make important contributions to global knowledge, especially in these days of fast travel, and risk of global epidemics. This paper by Kuma *et al.* from Ghana, stresses the significant role microbiology plays in helping to identify problems of antibiotic resistance. As there is no, or limited, continuous surveillance in Ghana, this retrospective study, evaluating the changing sensitivity rates of *V. cholerae*

01 from 2010 to 2012, brings useful information when planning therapy. Significantly high resistance rates to co-trimoxazole (96.3%), trimethoprim (96%) and erythromycin (94.4%), and increases even in this short time period in resistance to most antimicrobials evaluated except ciprofloxacin, identify ciprofloxacin, azithromycin, doxycycline and tetracycline as useful alternatives during cholera outbreaks. The results of this survey should not only help to provide useful data regarding the resistance of a common organism to major groups of antimicrobials, but of course help to manage patients at local level.

The management of HIV is essential to the wellbeing of millions living in countries with a high prevalence of this disease, or in close contact with it. Strict adherence to complicated protocols are not always easy to achieve, but are crucial to ensure suppression of viral loads and increase CD4+ T-cell recovery, as well as reducing the risks of drug resistance. The study by Kasumu and Balogun reported in this issue was conducted in Nigeria. Age, sex and cultural background all had a significant bearing in patients' attitudes to treatment and compliance with the drug regimes. It was encouraging to note their results indicating that 78.4% of patients reported adherence to treatment, with 98.1% showing a positive attitude towards ART. Extensive, high profile counselling programmes may account for this, and their recommendation to enhance counselling for younger patients to ensure better compliance is timely, given the large number of HIV positive children now coming onto teenage and adult years.

We hope our readers will find the mix of articles, and the messages they bring, of interest and stimulate them to submit their own papers to share their experiences.