Health-care-associated infections - Authors' reply

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Role of co-trimoxazole for urinary tract infections in developing countries

We read James Church and colleagues’ recent Review1 with great interest. The authors comprehensively described the roles of an old antimicrobial, co-trimoxazole. However, one of the main uses of this drug has been the treatment of urinary tract infections, which was not mentioned in their report.

Increasing rates of resistance to co-trimoxazole in Escherichia coli isolates, which are the main cause of urinary tract infections, have been a challenge in its empirical use. As described in Church and colleagues’ paper, the rate of resistance in urinary isolates in developing countries is high. Since this rate exceeded 20%, which is the accepted safety level for empirical use, the use of co-trimoxazole should be restricted to the treatment of the strains with known sensitivity to the drug.2 Cystitis might be an exception: the likelihood of cure for uncomplicated cystitis with co-trimoxazole treatment is 89%, 86%, 82%, and 79% when the resistance rates to co-trimoxazole are 0%, 10%, 20%, and 30%, respectively.3 Because of the high concentration of the drug in the urine and the favourable course of uncomplicated cystitis, a 3-day treatment of co-trimoxazole can be given to patients with this disease.

Even in regions where co-trimoxazole resistance is lower than 20%, concerns still persist about its use, especially in people who have recently used co-trimoxazole or another antimicrobial and have travelled recently to an area with high rates of co-trimoxazole resistance.4 International travel seems to be a risk factor for infections with resistant bacteria, and co-trimoxazole has been reported to carry high rates of resistance among travellers.5 This situation presents a challenge for countries with low rates of resistance since the drug can be used freely there without consideration of the high rates of resistance associated with this drug.