**Commentary.**

**Getting the basics right: why we should focus on infection prevention.**

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Infection prevention and infection control have always been one of the cornerstones of fundamental nursing care, and nursing has often led the way in developments in these areas to improve patient outcomes. The importance of ‘getting the basics right’ in terms of infection prevention is once again in the spotlight, with the reality that is antimicrobial resistance (AMR). Warnings on the consequences of the over-use of antibiotics have been issued right from the time they were discovered, with Sir Alexander Fleming predicting this in his 1945 Nobel Prize acceptance speech for the discovery of penicillin (Fleming, 1945). It could be argued that we only have ourselves to blame. As a global society, we have become ‘dependent’ on antimicrobials, and lulled into a false sense of security that all infections can be treated. Perhaps the increase in the prevalence of sepsis in the UK, and increasing number of lives lost (NHS England, 2015) is just one indicator of this? Whilst we know that the more exposure a population has to antibiotics the greater the bacterial resistance seen, the problem is more complex than that. Most nurses are very familiar with the concept of antibiotic stewardship, and the need to restrict the use of antibiotics, but this is not just a problem caused by the medical use of antimicrobials. More antibiotics are being used in agriculture to boost food production than for treating human disease. This largely ‘unseen’ antibiotic ends up in the food chain, and the wider environment, increasing both our, and bacteria, exposure to antibiotics, thus increasing the opportunities for resistance to develop. So many aspects have contributed to the ‘perfect storm’ we are heading for, with many international groups suggesting we are facing the greatest threat to human health (World Economic Forum, 2013), and a return to the ‘dark days’ of a pre-antibiotic era.

The publication of the UK Five Year Antimicrobial Resistance Strategy 2013 to 2018 (DH, 2013) has been a good focal point for driving actions and innovation to reduce the threat of AMR. The strategy highlights that the prevention of infection (i.e. the basics) remains the most effective weapon in reducing the impact of AMR on human health, but requires renewed focus, strategic management and collaboration. Concerns have been expressed that infection prevention and infection control do not appear to be delivered in a coherent fashion within the NHS, and that the integration of antimicrobial resistance measures will be more difficult in the absence of a coherent policy across the NHS, especially in the current economic climate. Despite the numerous grim warnings, an optimistic view still prevails, that new antibiotics will be discovered, that we can stop microbes developing resistance, and that we can change ingrained behaviours to ward off the predicted ‘apocalypse’, but how realistic is this? Certainly, there are some good examples of where a concerted effort has demonstrated good effects, such as the reduction in *C.diff* and MRSA infections in UK hospitals, mostly achieved by paying attention to the basics of infection prevention and control. So is there a need to think differently and consider alternative approaches to the AMR threat, particularly if the optimistic view fails to materialise and we have left it too late.

In 2015, the Network for Antimicrobial Resistance and Infection Prevention (NAMRIP), chaired by Prof Tim Leighton FRS, was established as a strategic research group at the University of Southampton ([www.southampton.ac.uk/namrip](http://www.southampton.ac.uk/namrip)). This covers all faculties and disciplines across the university, and brings together interdisciplinary teams consisting of clinicians and academics, all with a common interest, tackling AMR in its broadest sense. Collaborations have been formed composed of some interesting disciplines, such as nursing, engineering, medicine, microbiology, chemistry, social sciences, management, law, geography and the arts. At first glance, such a network might not seem to be of relevance to clinical nursing, but relevant it is, and the clue is in the name, with infection prevention being prominent. One of the main aims of the group is to look at ways to reduce the contact of people to pathogens and prevent infection. The relevance is further enhanced, and the nursing contribution made more visible by having nursing academics on the NAMRIP steering committee, and leading many of the cross-disciplinary projects undertaken. Through this several exciting projects ranging from novel ways to reduce infection associated with urinary catheters and safer ways to disinfect endoscopes, through to novel devices and methods to remove biofilm in chronic wounds, and more effective ways to clean hospital environments, are ongoing and beginning the process of translation into clinical practice. Throughout all of this we are fortunate to have a good collaborative relationship with clinical colleagues to ensure the message from the ‘bedside’ is heard loud and clear, and that we continue to focus on infection prevention.

References

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