E Cape: rock the boat, walk the plank?

A redemptive chapter in the ongoing saga of healthcare in the Eastern Cape that now spans nearly 3 years is the tenure and leadership of departmental head, Dr Siva Pillay, an astute, wealthy local businessman and clinician whose value-driven clean-up cost 1 200 jobs and began a slow turnaround.

The former national MP who applied his business, IT and medical skills to save nearly R1 billion in corruption and wastage, inspiring Pretoria to pilot a national multi-agency corruption busting/systems overhaul team in his province, is it seems too radical for the Bhisho establishment. Elements with serious political pull conspired to slowly bleed his vital administrative powers and drain his budget, boosted by a clash between Pillay and his political chief, Health MEC Sicelo Gqobana. Izindaba's Chris Bateman, fascinated by Pillay's unusual boldness in a climate where administrative chiefs tend to keep their heads down and leave the politicians to make excuses, reports on how he came within a hair's breadth of resigning in early June this year, functionally emasculated by politicians who contributed to the disenchantment of the Pretoria supplementary clean-up squad.[1] Only direct intervention by national Health Minister Dr Aaron Motsoaledi and ANC Secretary-General Gwede Mantashe saved the day.

Antibiotics

Four papers[2-5] take a sober look at antibiotic practices and the development of antibiotic-resistant organisms that have serious implications for South Africa.

The antibiotic horse has bolted

Decades of poor medical and veterinary antibiotic prescribing and lack of regard for the practice of infection prevention and control in our hospitals have left South Africa, like the rest of the international community, on the brink of a return to an era of untreatable bacterial infection. In their editorial[2] Mendelson and colleagues paint a sombre picture of the emergence of drug-resistant organisms.

Drug-resistant hospital-acquired infections increase morbidity, mortality and the cost of patient management by increasing the length of hospital stay, often in expensive intensive care units (ICUs), and antibiotic prescribing costs. The situation we find ourselves in with multidrug-resistant (MDR) Gram-negative bacteria such as carbapenem-resistant Enterobacteriaceae (CRE) cannot be blamed on poor patient compliance, or the introduction of resistant strains from foreign climes. It is a home-grown problem, generated and perpetuated by doctors, nurses and allied healthcare workers in South Africa. For resistant Gram-positive bacteria there often remain more expensive antibiotic options. However, the situation for managing CRE is much more serious. We have become reliant on colistin, a nephrotoxic polymixin antibiotic developed in the 1960s. Most worrying of all is the total lack of new antibiotics against Gram-negative infections in the antibiotic pipeline for the next 10 - 20 years. It is not too late to limit the emergence and spread of MDR bacterial infection in South Africa. To achieve this there must be a sea change in practice and a means to control poor prescribing practices in hospitals.

The spread of carbapenem-resistant Enterobacteriaceae

Brink and colleagues[3] examine the emergence and spread of antibiotic-resistant Gram-negative bacteria that it was predicted would occur. This prediction was based on the fact that suboptimal antibiotic management (excessive duration, use of multiple often inappropriate or unnecessary agents, and virtual absence of de-escalation) was rife in clinical practice. CRE have become our 'worst nightmare', locally and internationally.

Antibiotic stewardship programmes are crucial to prevent the emergence of CRE. Cumulative exposure is likely to be the most important factor determining risk of developing a CRE infection. The risk also increases with increasing duration of treatment. Suboptimal dosing may also be a factor contributing to development of resistance. CRE have been identified from device-associated infections, particularly catheter-associated urinary tract infections.

Encouragingly, the authors report that the 'The Best Care … Always' (BCA) campaign, initiated in 2009 to support southern African healthcare organisations in implementing specific, internationally recognised, evidence-based interventions, has shown encouraging results.

Prevalence of infection in ICUs

That the emergence of MDR, extensively resistant and pan-resistant pathogens and the widespread inappropriate use of antibiotics is a global catastrophe receiving increasing attention by health care authorities is reiterated by Paruk and colleagues.[4]

Antibiotics are commonly prescribed to critically ill patients throughout the world, although a large percentage of these are inappropriate. Since the antibiotic prescription practices in public and private ICUs in South Africa are unknown, the authors studied these practices to determine their relationship to patient outcomes. They found that antibiotic prescription practices in South African ICUs are far from acceptable. They conclude that it is crucial that antibiotic stewardship becomes mandatory in South Africa's ICUs, and that this should extend to the prescribing community as a whole.

Vancomycin and methicillin-resistant *Staphylococcus aureus*

Complementing aspects of the above papers, Cheong and colleagues from Malaysia[5] evaluated the relationship between the resolution of methicillin-resistant *Staphylococcus aureus* (MRSA) infections and trough concentrations of vancomycin. In their critically ill population, a vancomycin dose of 15 mg/kg/d was found sufficient to produce optimal trough concentrations to eradicate MRSA infections.

Alcohol, advertising and South Africa's youth

Evidence from burden of disease and economic costing studies amply indicates that the public health burden from hazardous and harmful use of alcohol in South Africa warrants drastic action. The government's threat of banning all alcohol advertising in South Africa receives support from four papers with related themes.[6-9]

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7. Parry C, Burnhams NH, London L. A total ban on alcohol advertising: presenting the public health case. S Afr Med J 2012;102(7):602-604.
8. Ramsoomar L, Morojele NK. Trends in alcohol prevalence, age of initiation and association with alcohol-related harm among South African youth: Implications for policy. S Afr Med J 2012;102(7):609-612.
9. Sorsdahl K, Stein D, Weich L, Fourie D, Myers B. The effectiveness of a hospital-based intervention for patients with substance-use problems in the Western Cape. S Afr Med J 2012;102(7):634-635.