Antimicrobial resistance – time to start spending

The failure of antibiotics to treat common infections is a growing and alarming threat. The possibility that prescribers may soon be turning away patients with, for example, gonorrhoea, may only be a few short years away. On p12, Danny Buckland considers the current state of antimicrobial resistance (AMR) and the efforts being made to curb its devastating consequences.

While researchers are finding novel uses for existing medicines and developing innovative techniques such as nano-engineering to address the problem, a co-ordinated global response from governments, health agencies and the pharmaceutical industry is clearly needed.

WHO has issued a global action plan to tackle AMR containing an admirable set of objectives including reduction of preventable infections and the optimised use of antimicrobial agents but perhaps the most crucial plank of its policy is the call to “develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions.”

The need for urgent targeted investment was also the main conclusion drawn by the UK AMR Review, which published its final report last year. The Review called for the establishment of a “supra-national” entity similar to the WHO, to monitor and oversee the implementation of effective AMR global policies.

Chief among such policies would be the establishment of a global fund to incentivise commercial research and development. Given that the use of new antibiotics must be severely restricted to avoid further resistance, pharmaceutical companies are reluctant to invest in research that will not generate significant financial reward. Some form of pharmaceutical development public subsidy would resolve this issue but achieving agreement on who pays how much will not be easy. A start has been made, with the UK and China collaborating on an AMR fund and the US government supporting both AstraZeneca and Glaxo in antibiotic research. The extension of US drug patents for a further five years will also help. This time last year, the World Economic Forum in Davos saw the top tier of big pharma pledging its commitment to AMR research and development, and in September a ‘Roadmap for Progress’ was signed by 13 major global pharmaceutical companies, which built on the Davos Declaration by setting out undertakings by pharma to tackle AMR on several fronts, including:

• Acting on environmental pollution associated with antibiotic manufacturing
• Supporting improved stewardship of antibiotics
• Supporting affordable access to new and existing antibiotics for the patients who need them
• Increasing open collaboration in antibiotic discovery efforts.

While all of this is promising and gives cause for optimism, it must be acknowledged that time is running out. In its final report, the UK AMR Review described the current situation as “a slow-motion car crash”. It is vital that we grab the wheel if disaster is to be averted. That means putting our hands in our pockets but, given the current trend towards political isolationism, persuading taxpayers to cough up may not be an easy task.

References