How do we tackle the problem of overuse of antibiotics?

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Part of NHS England’s Quality Premium is to reduce the number of antibiotics prescribed. A targeted approach, timelier diagnostics and tailored prescribing are just some of the issues we need to address to tackle the complexities surrounding this problem.

Antibiotic resistance is already well recognised as a public health issue and is a concern on a global scale, but the problem is increasing.

In its recently published English Surveillance Programme for Antimicrobial Utilisation and Resistance, Public Health England (PHE) reported a 6 per cent increase in total antibiotic prescribing between 2010 and 2013. During this period the resistance to antibiotics also increased. The highest rates of antibiotic resistance were seen in those areas with the highest rate of antibiotic prescribing, supporting the association between increased antibiotic prescribing and increased antibiotic resistance.

Currently, the future appears to hold little hope for the treatment of bacterial infections, potentially taking us a step back into the pre-antibiotic era. Undeniably the prescribing of unnecessary and inappropriate antibiotics needs to decrease if we are to retain the usefulness of these drugs. This will lead to reductions in antimicrobial resistance as well as adverse reactions and a decrease in GP workload and NHS prescribing costs.

NHS Quality Premium

NHS England’s “Quality Premium” is intended to reward CCGs for improvements in the quality of the services that they commission and for associated improvements in health outcomes and reductions in inequalities in access. In the 2015/16 guidance1 improving antibiotic prescribing in primary and secondary care accounts for 10 per cent of the premium and is broken down into three parts:

- Reduction in the number of antibiotics prescribed in primary care by 1 per cent (or greater) from each CCG’s 2013/14 value. Individual practice reduction to be agreed by the CCG with each practice (50 per cent of the antibiotic prescribing target).
- Number of co-amoxiclav, cephalosporins and quinolones as a percentage of the total number of selected antibiotics prescribed in primary care to be reduced by 10 per cent from each CCG’s 2013/14 value, or to be below the 2013/14 median proportion for English CCGs (11.3 per cent), whichever represents the smallest reduction for the CCG in question (30 per cent of the antibiotic prescribing target).
- Secondary care providers with 10 per cent or more of their activity being commissioned by the relevant CCG have validated their total antibiotic prescribing data as certified by PHE (20 per cent of the antibiotic prescribing target).

The way forward

CCGs are able to target specific areas and concentrate their efforts on those areas/practices where the prescribing rates are high. A good relationship, understanding and dialogue between CCGs and GP practices is essential for success. Outlining the key issues, using available data and formulating plans to resolve them in partnership is the way forward.

This strategy is a step forward to preserving our essential armory to combat bacterial infections, but may lead to unintended domino effects, such as an increase in the number of infection-related admissions to secondary care. This phenomenon has been shown when restricting antibiotics due to adverse effects such as resistance and healthcare-associated infections. Taking the pressure off one system can unintentionally transfer it to another.

We need a targeted approach and better quality information. Improved and timelier diagnostics are a necessary adjuvant in order to tailor prescribing according to the type of organism(s) one intends to treat. Additionally, enhanced data systems with the ability to capture and assess appropriateness of prescribing according to set guidelines would be beneficial and informative, and would support NICE recommendations. Strategies and measures could then be directed to areas that require improvement. Further resources are necessary if we are to see the longevity of current antibiotics and overcome the catastrophe that we are potentially facing.

References


Declaration of interests

None to declare.

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