18 November and beyond: observations on the EU Antibiotic Awareness Day

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Antibiotic resistance is among the greatest threats to public health. Public and political concerns have been important drivers of a multifaceted strategy to contain and control this problem. The key components include surveillance of resistant pathogens and more accurate measurement of prescribing practice, in addition to adherence to sound hygiene and infection control practices. With the current inadequate supply of new antibiotics, better use of existing agents is fundamental. An educational strategy must involve the public as well as prescribing professionals. Public educational initiatives and campaigns have been increasingly used, often effectively. To this end, an annual Antibiotic Awareness Day (AAD) has been launched by the European Union (EU) under the leadership of the European Centre for Disease Control. Across Europe, a repertoire of events took place with the aim of raising public and professional awareness of the importance of appropriate antibiotic use. Only time will tell whether the annual 18 November EUAAD will have significant impact. The need to sustain the effectiveness of these drugs suggests that every effort should be made to ensure that it is successful.

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Introduction

The challenge of containing and controlling the threat from antibiotic-resistant pathogens is daunting. However, few would argue with the importance of a task that aims to preserve the effectiveness of existing antimicrobials for the benefit of current and future generations. A multifactorial strategy is required that must be applied, sustained and continuously refined. While the surveillance of resistant pathogens and patterns of antibiotic prescribing need to be defined more accurately, particularly at local and individual prescriber levels, they remain simply the yardstick to inform strategy, policy and practice and in turn be a measure for their effectiveness.

The key components for maintaining effective antimicrobial chemotherapy are better use of existing agents coupled with continuous investment in new and innovative technologies that must include diagnostics and vaccines as well as antimicrobial drugs. To be and remain effective, the use of antimicrobial agents needs to be supported by rigorous application of sound prescribing principles2 in a healthcare environment that strives to minimize the risks of infection by adherence to good hygiene and housekeeping practices. This is especially important at a time when there is a serious concern about the paucity of novel antibiotics, particularly against multiresistant Gram-negative pathogens.2 This is a global challenge and initiatives at a national and international level are needed to encourage investment and strengthen research in this area.2,3

Linking prudent prescribing and sound clinical practice remains a challenge, especially where prescribing remains largely empirical. The importance of rapid diagnostic tests, including near-patient testing, is increasingly supported and realizable. However, obstacles to widespread acceptance include not only cost but also the need for greater flexibility in medical practice to permit their adoption. Another approach that requires further research is the more widespread use of routine datasets that link clinical outcome data to prescribing.

Public education concerning the appropriate use of antibiotics and the risks from antimicrobial-resistant pathogens requires a repertoire of approaches. The increasing recognition of the importance of a partnership between prescriber and patient is significant. Media campaigns have dominated the approach4 and emphasize the importance of clear and positive messages. A structured educational approach within the context of day care nurseries and children undergoing full-time education that also

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Figure 1. James Fawcett’s prize winning poster submitted to coincide with the launch of the first annual EUAAD in England. Reproduced with kind permission of the UK Department of Health.
involves parents and primary care physicians has also been shown to be an effective strategy. Currently, an ambitious schools educational programme (e-Bug) across many European countries and funded by DG SANCO is being conducted.

The European Union Antibiotic Awareness Day (EUAAD)

The EU is strongly supportive of public education initiatives that have been given a boost by the establishment of an annual EUAAD promoted by the European Centre for Disease Control. The first EUAAD was the 18 November 2008 for which each Member State developed its own national programme of activities. In the UK, a number of events took place within the devolved administrations and in many individual Trusts. The Advisory Committee on Antibiotic Resistance and Healthcare Associated Infections (ARHAI) organized an EUAAD symposium in the Science Museum, London, entitled ‘Antibiotic Resistance—Myth Busting’ with the objective of reviewing current problems, national surveillance strategies, the professional responses in human and veterinary medicine and the importance of engaging with the public. In addition, a schools poster competition was launched to coincide with the conference, which was well supported. The brief was to design an eye-catching poster in order to raise public awareness that antibiotics do not work on most coughs, colds and sore throats. In addition, a public education campaign launched earlier in 2008 was also re-run by the Department of Health to reinforce this message and emphasized appropriate use and the seeking of advice from pharmacists when in doubt.

The importance of avoiding unnecessary antibiotic prescribing in relation to viral upper respiratory tract infections has particular importance in connection with paediatric practice and was the stimulus for a parallel symposium hosted by the Royal College of Paediatrics and Child Health. A multidisciplinary audience including pharmacists, GPs and trainee paediatricians was asked to vote whether they would prescribe antibiotics for these infections. This was followed by educational sessions on common childhood infections, after which they were asked to vote again. There was an interesting change with fewer participants voting for antibiotic prescribing, suggesting that targeted information may still have value. This is particularly important when recent evidence suggests that primary care antibiotic prescribing for children may be rising again and that formal guidance [such as the 2008 NICE guidelines for prescribing for upper respiratory tract infection (URTI) in primary care] may be becoming less effective with time.

Can we be reassured that prescribing practice is moving in the right direction? Indicators are that in the UK as a whole, antibiotic prescribing in primary care for acute RTI fell by some 45% between 1994 and 2000. The UK is now firmly in the lower tercile in Europe with regard to quantitative measurements of antibiotic use with minor variations in Scotland, Northern Ireland, Wales and England. Surveillance data suggest that rates of antimicrobial resistance for a few selected pathogens are falling, a phenomenon that until recently would not have been considered possible. ‘The price of liberty is eternal vigilance’ (Thomas Jefferson) and is particularly relevant to maintaining good prescribing practice. The message concerning appropriate use of antibiotics in relation to viral URTIs will require continuous reinforcement and has been graphically captured by James Fawcett in his prize-winning poster submitted to coincide with the launch of the first annual EUAAD in England (Figure 1).

Transparency declarations

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References