Antibiotic Resistance

– Primary Care: facts and figures

EUROPEAN ANTIBIOTIC AWARENESS DAY

A European Health Initiative

Fact #1

Antibiotic resistance is an increasingly serious patient safety and public health problem in England, Europe and the world [1, 2]. Resistance to antibiotics is increasing. In many countries, resistance rates have more than doubled in five years (Figure 1).

Growing antibiotic resistance threatens the effectiveness of antibiotics now and in the future. In appropriate use of antibiotics not only leads to resistance which increases the risk of treatment failure, hospitalisation and cost of care but can also lead to adverse effects such as thrush, and diarrhoea caused by *Clostridium difficile* infection

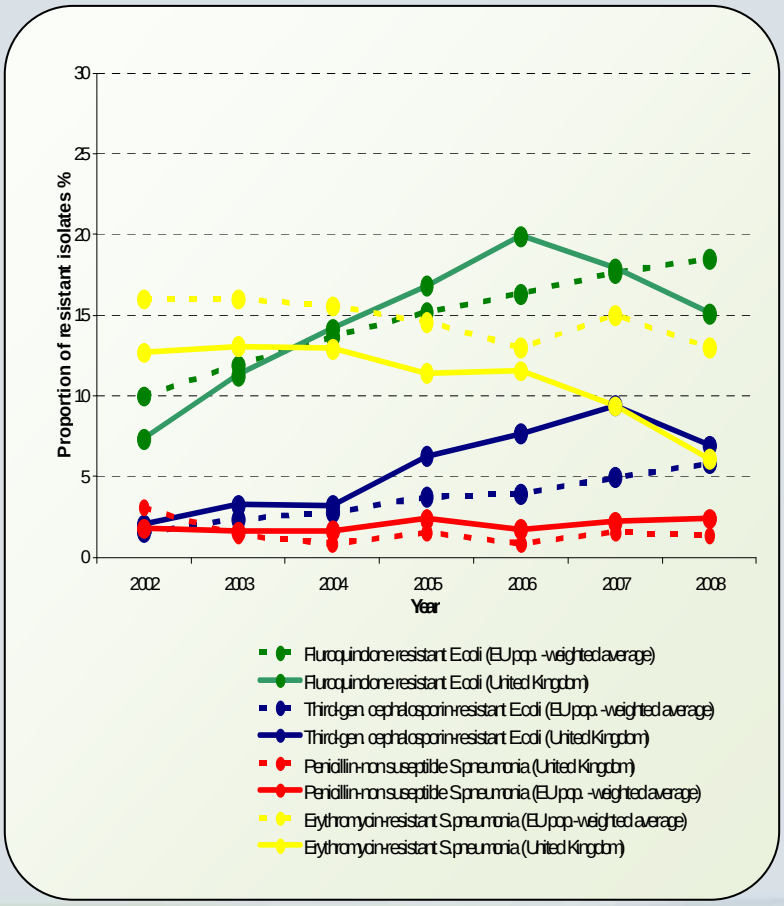
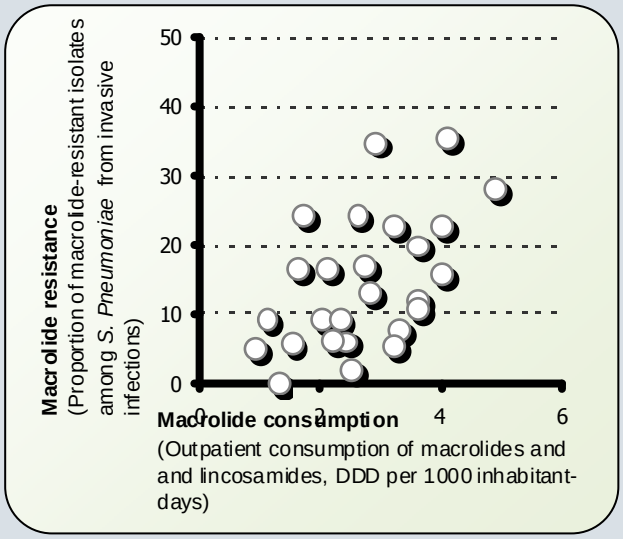


Figure 1. Trends in antibiotic resistance (invasive infections), 2002-2008. Source: EARSS, 2009 [3].

Fact #2

Antibiotic exposure leads to emergence of antibiotic resistance [4]. The overall uptake of antibiotics in an individual and the population, as well as how antibiotics are consumed, has an impact on antibiotic resistance [5, 6, 7]. The presence of antibiotic resistant bacteria for urinary, respiratory and skin infections in individual patients has been strongly linked to the number and duration of antibiotic courses prescribed in the previous 12 months [7].



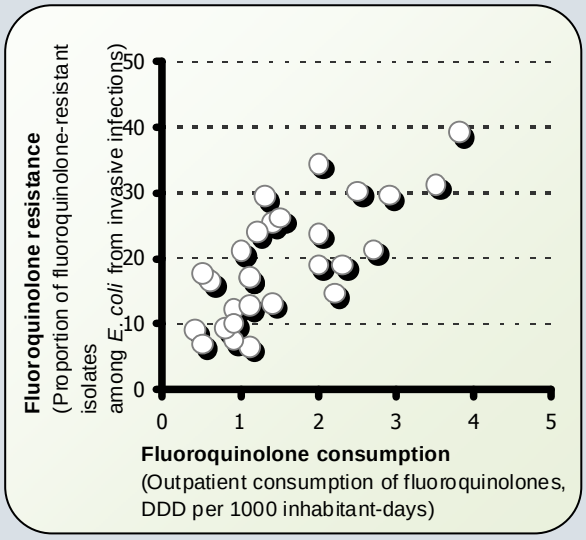


Figure 2. The link between antibiotic consumption and antibiotic resistance, 2007 (or latest available year, each data point represents one country) [3,11]

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Fact #3

In England, primary care accounts for about 80 % of all antibiotic prescriptions, mainly for respiratory tract infections [5]. Antibiotic prescribing and consumption varies between GP practices in England and between European countries [8-11]. Although there has been a reduction in prescribing of fluroquinolones and cephalosporins, total usage of antibiotics in England continues to rise (Figure 3).

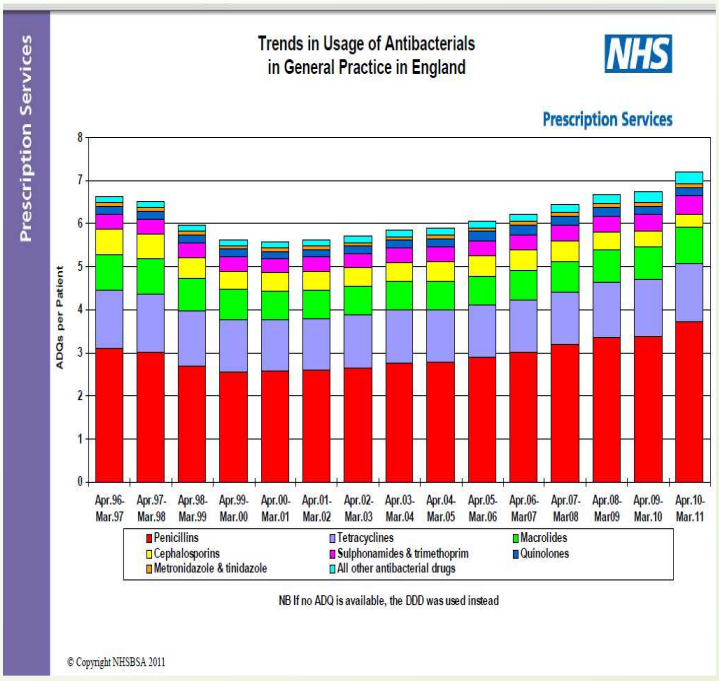

Figure 3. Trends in usage of antimicrobials in general practice in England (Courtesy NHSBSA) http://www.nhsbsa.nhs.uk/PrescriptionServices/Documents/PPDPrescribingAnalysisCharts/Antibiotics_Jun_11

Fact #4

Communicating with patients is key.

Professional medical advice impacts patients' perceptions and attitudes towards their illness and perceived need for antibiotics, particularly if they are advised on what to expect in the course of the illness, including realistic recovery time and self-management strategies [12-18].

Patient satisfaction in primary care settings depends more on effective communication than on receiving an antibiotic prescription [12-18]. Prescribing an antibiotic for acute respiratory tract infections, medicalises illness and increases reconsultation rates [14-18].

Primary care prescribers do not need to allocate more time for consultations that involve offering alternatives such as delayed prescriptions and written advice/information on why an antibiotic was not prescribed (e.g. Non prescription pads). Studies show that this can be done within the same average consultation time while maintaining a high degree of patient satisfaction [12, 19-22].

References

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