

Antibiotic Resistance

– facts and figures

Fact #1

Antibiotic resistance is an increasingly serious public health problem in Europe [1, 2]. Resistance to antibiotics is often high and increasing. In many countries, resistance rates have more than doubled in the past five years.

Growing antibiotic resistance threatens the effectiveness of antibiotics now and in the future.

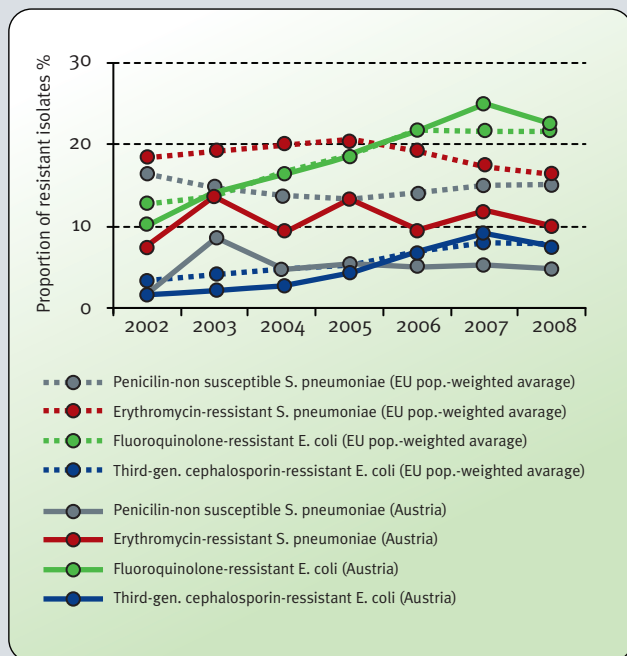


Figure 1. Trends in antibiotic resistance (invasive infections), 2002-2008. Source: EARSS, 2009 [3].

Fact #2

Antibiotic exposure leads to emergence of antibiotic resistance [4]. The overall uptake of antibiotics in a population, as well as how antibiotics are consumed, has an impact on antibiotic resistance [5, 6].

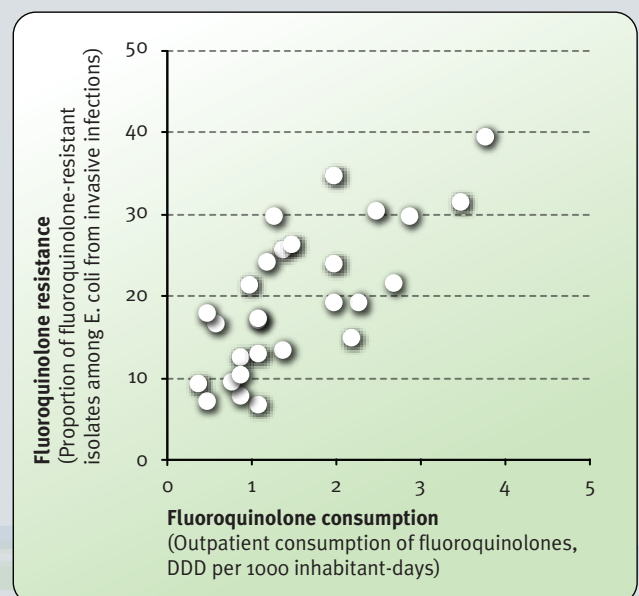
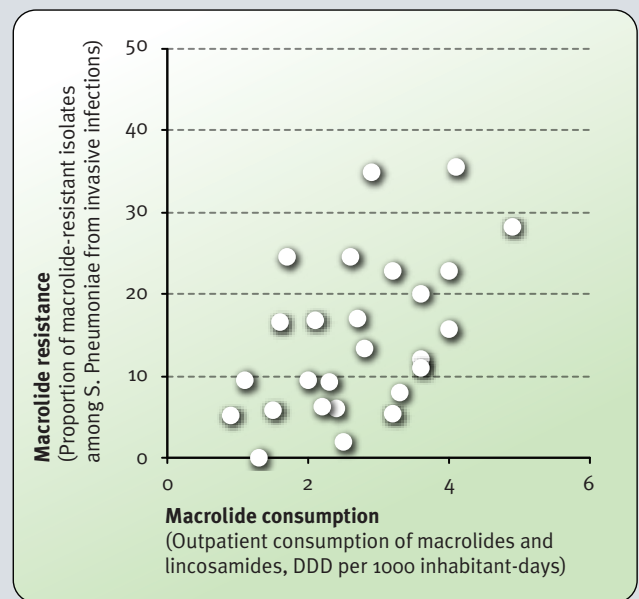


Figure 2. The link between antibiotic consumption and antibiotic resistance, 2007 (or latest available year, each data point represents one country) [3, 7]

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Fact #3

Antibiotic prescribing and consumption varies between European countries [7, 8]. Primary care accounts for about 80 to 90% of all antibiotic prescriptions, mainly for respiratory tract infections [5, 9].

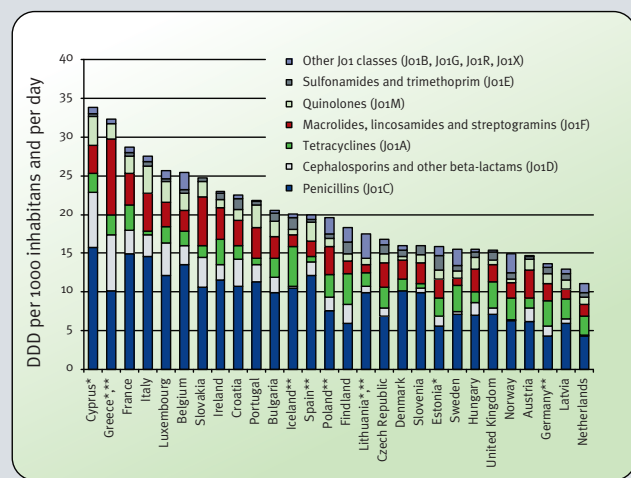


Figure 3. Outpatient antibiotic consumption in 28 European countries in 2007 (reported in Defined Daily Doses (DDD) per 1000 inhabitants and per day). Source: ESAC, 2009 [7]. *Total use, i.e. including inpatients, for Cyprus, Estonia, Greece and Lithuania. **2006 data for Germany, Greece, Iceland and Lithuania; 2005 data for Poland and United Kingdom. ***Reimbursement data, which do not include over-the-counter sales without a prescription for Spain.

Fact #4

Communicating with patients is key. Professional medical advice impacts patients' perceptions and attitude towards their illness and perceived need for antibiotics.

Studies show that patient satisfaction in primary care settings depends more on effective communication than on receiving an antibiotic prescription [10-12] and that prescribing an antibiotic for an upper respiratory tract infection does not decrease the rate of subsequent return visits [13].

Professional medical advice impacts patients' perceptions and attitude towards their illness and perceived need for antibiotics, in particular when they are advised on what to expect in the course of the illness, including the realistic recovery time and self-management strategies [14].

Primary care prescribers do not need to allocate more time for consultations that involve offering alternatives to antibiotic prescribing. Studies show that this can be done within the same average consultation time while maintaining a high degree of patient satisfaction [9, 15, 16].

References

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