Annual reports of antibiotic use and resistance - for whom?

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ABSTRACT

Sweden, Denmark and the Netherlands, countries with low antibiotic use and low antimicrobial resistance, issue yearly reports on antimicrobial consumption and resistance. In these countries the reports have political priority and aim to disseminate information and promote antibiotic strategies within and between countries.

The current worldwide increase of antibiotic-resistant bacteria and the simultaneous downward trend in the development of new antibiotics have serious implications. Although antibiotic resistance is increasingly affecting the management of infectious diseases, effective action to contain it has been largely lacking. In many parts of the world the problem is still not regarded as a challenge deserving priority action at the political level.

In the Netherlands and the Scandinavian countries, the awareness of antibiotic resistance as a potential threat to public health is high and funds have been allocated for surveillance programmes. A second edition of the report on consumption of antimicrobial agents and antimicrobial resistance among medically important bacteria in the Netherlands – NETHMAP 2004 – is now available. Similar annual reports have been published in Sweden (SWEDRES), Denmark (DANMAP) and Norway (NORM). What are the objectives of these reports and who should read them?

The overall aim of a national antibiotic strategy is to contain antibiotic resistance and thereby preserve the possibility of effective antibacterial treatment when it is needed. It is thus evident that the problem (resistance rates and trends) needs to be measured. For the same reasons, monitoring antibiotic use – the major cause of the problem – is important. Studies linking prescriptions to diagnosis should be encouraged to better evaluate the quality of antibiotic use. However, surveillance systems in themselves do not do any good unless the data are used for action. Antibiotic therapy is still mostly empirical and needs to be based on local guidelines. It is not likely that physicians will benefit from these national reports in their daily practice, but they may help to increase the general awareness of the problem and increase interest in local surveillance and consumption data. On the national level, the reports provide important feedback to ‘those who need to know’, for example members of drug and therapeutics committees, professional organisations and other bodies where the reports form a knowledge base for policy decisions, guidelines, interventions and research strategies.

Scandinavia and the Netherlands have managed to keep resistance rates and antibiotic use low and this fact is attracting a continuously increasing interest from many parts of the world. Since 2001, the European Surveillance of Antibiotic Consumption (ESAC) project has collected standardised and comparable data on antibiotic consumption. The Netherlands is a ‘leading star’ with the lowest antibiotic usage in all of Europe. In this context, the Dutch guidelines for restricted antibiotic use in otitis media and other respiratory tract infections are becoming well known and discussed at international meetings.

The annual report on antibiotic use and resistance clearly marks the problem as one of political priority and is a
valuable tool to spread information about the resistance problem to prescribers, healthcare administrators, politicians, patients and parents. Resistance that develops in one part of the world may easily spread to other areas through migration, trade and travel. No country can isolate itself from resistant bacteria. Another important objective of the annual report is therefore to disseminate information and promote successful strategies between countries. To contain the resistance problem a global concerted action is needed.