

Guidelines do not implement themselves.

What do we have to do to get doctors to follow the guidelines for treatment with antibiotics?

Use of antibiotics gives cause for concern

■ Medical developments move rapidly, and it is difficult to maintain an overview of the best treatment and balance it against the pharmaceutical industry's marketing. The authorities in many countries have therefore published guidelines for the treatment of common illnesses (1). There are stringent criteria for drawing up these guidelines in order to assure their quality (2).

The first Norwegian national guidelines for treatment with antibiotics in general practice were published in 2000 and distributed to all general practitioners. Because the resistance situation in Norway was and is favourable, it is recommended that «old-fashioned», narrow-spectrum antibiotics be used (3). Ciprofloxacin, clindamycin and the new macrolides lead more rapidly to the development of resistance than the penicillins, and are only recommended as a last resort.

The authorities often use sales figures as a basis for their antibiotics policy. Clinical studies of the use of antibiotics relative to diagnosis are needed to provide more detailed knowledge. Fagan and Skotheim's study of the use of fluoroquinolone in nursing homes in this number of the Journal of the Norwegian Medical Association shows that consumption of ciprofloxacin is substantially higher than the recommendations would indicate (4). Quinolones have many adverse effects on the environment and should be reserved for serious and complicated urinary tract infections (5). Many nursing home residents have underlying illnesses that may contribute to infections and the use of antibiotics. Multi-pathology and atypical symptom pictures may make a definite diagnosis difficult, and access to bacteriological tests in nursing homes is more limited than it is in hospitals. This may lead to over-treatment and incorrect treatment with antibiotics and cause increased resistance (6).

Whether guidelines can change clinical practice depends on their validity and how they are marketed and implemented (7). Some doctors do not know the guidelines, or disagree with their recommendations. Others may have difficulty in changing established prescription practice (8). Patients' views of the treatment they receive may run counter to the guidelines, particularly in the case of self-limiting infections. Input from the Norwegian health authorities in this area has been virtually zero.

The effect of passive dissemination of printed guidelines is limited at best (7). If they are to influence the prescription pattern, time and funding must be allocated to implement them (9). The most effective way of influencing doctors is to let specially trained persons provide guidance for prescribers in their own environment (10). This is called «academic detailing» and has been used successfully in a peer group academic detailing project (KTV), where 450 Norwegian general practitioners discussed and changed their practice of prescribing antibiotics for respiratory tract infections (11).

About 90 % of antibiotics consumption in Norway takes place in general practice. Despite the fact that guidelines in the area have existed for over ten years, both the overall use of antibiotics and the use of broad-spectrum drugs that drive the development of resistance are increasing (6). In our view this is largely due to a lack of instructions and allocations from the health authorities who publish the guidelines.

The next time guidelines are published, funding must be set aside for their implementation (1). The Norwegian National Institute of Public Health could for example prepare «packages» of lectures, background material etc., with specific programmes for teaching small groups, seminars and courses. It should be possible to use chief municipal medical officers and infection prevention doctors in this work, as they are in Sweden. Courses in the use of antibiotics should be mandatory for retaining a specialisation in general practice. In the past, all doctors who had trained outside Norway used to get a course in the use of antibiotics, but «somebody» discontinued this, in the interests of harmony with EU rules. Because of the unique Norwegian resistance situation, this course must be reintroduced. We must pursue our own research, and we propose that funding be earmarked for clinical research on antibiotics. Information campaigns aimed at the general public should also be developed. Measures to improve the use of antibiotics are cost-effective. In France, where there are major resistance problems, the authorities spend billions on influencing doctors and patients – in order to reduce the use of antibiotics.

The recommendations concerning the use of narrow-spectrum antibiotics were retained in the revised edition of the national guidelines from 2008 (12). There is a separate chapter on antibiotics in nursing homes. The aim is to reduce both the use of antibiotics as a whole and the use of broad-spectrum antibiotics. Since neither the pharmaceuticals industry nor the authorities are developing new antibiotics products, this is the only way in which we can retain antibiotics as effective drugs.

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Conflicts of interest: Both authors have embarked on research work with Mark Fagan, and are co-authors of his next article on antibiotics.

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