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National guidelines for the use of antibiotics in hospitalised adult patients: the SWAB guidelines revisited

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ABSTRACT

Since 1996, the Dutch Working Party on Antibiotic Policy (Stichting Werkgroep AntibioticaBeleid, SWAB) has been developing national guidelines for the use of antibiotics in hospitalised adult patients. As a result of both an inventory of the wishes of the users of these guidelines and the recently developed criteria for evidence-based guideline development, we have revised our format for the development of SWAB guidelines. By involving the members of the relevant professional societies and giving them the opportunity to comment on the guidelines at an early stage, we are aiming for a successful implementation of the guidelines in the hospitals.

KEYWORDS

Antibiotic policy, antibiotics, guidelines, infections

INTRODUCTION

In this issue of the *Netherlands Journal of Medicine* you will find the revised SWAB guideline for community-acquired pneumonia.¹ The Dutch Working Party on Antibiotic Policy (Stichting Werkgroep AntibioticaBeleid, SWAB) was founded in 1996 as an initiative of the Dutch Society for Medical Microbiology (NVMM), the Dutch Society for Infectious Diseases (VIZ) and the Dutch

Association of Hospital Pharmacists (NVZA). Its major goal is to contribute to the containment of antimicrobial resistance and the expanding costs of the use of antibiotics. This is achieved by optimising the use of antibiotics by means of guideline development, education, and surveillance of antibiotic use and resistance.

In 2001, the SWAB was designated by the Ministry of Health to coordinate the surveillance of antibiotic resistance. In addition, the SWAB coordinates the surveillance of the use of antibiotics. Nethmap 2003, the first report with new information about consumption of antimicrobial agents and antimicrobial resistance among medically important bacteria in the Netherlands, was presented in April 2003, during the SWAB symposium 2003 in Utrecht.² Nethmap is updated annually (<http://www.swab.nl> → professional).

SWAB GUIDELINES

Since its conception, the SWAB has developed national guidelines for the use of antibiotics, which are aimed at the hospitalised adult patient. Guidelines are published in a Dutch medical journal (*Nederlands Tijdschrift voor Geneeskunde*).^{3,7} Until now, the contents of these guidelines were prepared by a writing committee, consisting of five to ten experts. A proposal for the guideline was prepared by this committee and sent out for review to approximately 30 experts (medical microbiologists, infectious diseases

specialists, hospital pharmacists and medical specialists relevant to the specific topic). Based on their comments, a final guideline was prepared.

In 2001, a survey among hospital antibiotic policy committees revealed that the majority of respondents were aware of SWAB's guidelines, but it was suggested that the guideline concept should be made more broadly available, e.g. on the internet, and with a clearer method for grading the strength of the evidence on which the guideline was based.⁸

DEVELOPMENT OF GUIDELINES – RECENT INSIGHTS

As the number of clinical practice guidelines increases, there is a growing need to ensure that they satisfy certain minimum requirements. The AGREE (Appraisal of Guidelines, REsearch and Evaluation) collaboration has developed and validated an instrument that can be used to improve the quality of guideline development.⁹ Six pivotal criteria of high-quality clinical practice guidelines have been identified:

- Scope and purpose: the overall objective, clinical questions, and target population should be specified.
- Stakeholder involvement: the composition, discipline, and expertise of the guideline development group should be specified. Target users should be defined.
- Rigour of development: the search strategy, inclusion/exclusion criteria for selecting the evidence, and the methods used to formulate the recommendations should be given. The recommendations should be externally reviewed before publication, and the information should be updated regularly.
- Clarity and presentation: the recommendations should be specific and unambiguous, different options should be presented, and key recommendations should be easily identifiable.
- Applicability: the organisational changes and cost implications of applying the recommendations should be discussed. Review criteria to monitor the use of the guidelines should be given.
- Editorial independence: the final recommendations should be independent of the views or interests of the funding body, and conflicts of interests should be stated.

A review of the development of clinical practice guidelines, especially in the field of infectious diseases, was published recently in this journal.¹⁰ A distinct and specific feature of guidelines for infectious diseases is that local epidemiology and resistance data must be taken into account.

SWAB GUIDELINES: NEW FORMAT

As a result of both the survey of the users of the guidelines and the introduction of the evidence-based guideline development mentioned above, we recently revised the procedures for the development of SWAB guidelines (<http://www.swab.nl> → professionals → richtlijnen).

Crucial elements in these procedures are:

- For each guideline, a writing committee is composed of members of all professional organisations involved: the Dutch Society for Medical Microbiology (NVMM), the Dutch Society for Infectious Diseases (VIZ) and the Dutch Association of Hospital Pharmacists (NVZA), the Dutch College of General Practitioners (NHG), and any other specialities that are relevant for the specific guideline under development.
- One of the first steps of the writing committee is to establish the main questions that should be addressed. Based on these questions, a systematic search of the literature is performed, according to the principles for literature searches described earlier.^{9,11} This results in a systematic review, in which the literature is graded and the strength of the resulting conclusions is graded according to the level of evidence. Based on this systematic review, a draft guideline is proposed by the writing committee.
- This draft guideline is made available to all members of the professional societies involved in the development of the guideline. They can access the concept guideline through the SWAB website (www.swab.editline.nl) and the websites of the respective societies, and they can comment on the proposal through this website. Based on these comments, the writing committee finalises the guideline.
- As the hospitalised patients are the target population, local antibiotic policy committees remain the target users of the guidelines, because they are essential for the interpretation, the adaptation to local resistance patterns and policies, and the implementation of infectious diseases guidelines.¹⁰
- The final systematic review will be published in the *Netherlands Journal of Medicine*, or in other journals if applicable, for instance in the case of endocarditis, in *Hartbulletin*. A shortened version of the guideline will, as before, be submitted for publication in *Het Nederlands Tijdschrift voor Geneeskunde*.

In conclusion, this new procedure meets the criteria for evidence-based guideline development. By involving the membership of the relevant professional societies, and giving them the opportunity to comment on the guidelines at an early stage, we can also aim for a successful implementation of the guidelines in the hospitals. The new SWAB guidelines that have been fully developed

according to the above-mentioned procedures will be published in the coming year: guidelines on community-acquired pneumonia, acute infectious diarrhoea, and urinary tract infections.

NOTE

The authors are Board Members of the Dutch Working Party on Antibiotic Policy (Stichting Werkgroep AntibioticaBeleid, SWAB).

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