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SUMMARY

CHOICE AND USE OF MEDICATIONS IN BELGIAN HOSPITALS

ACTIVITIES OF THE DRUG AND THERAPEUTIC COMMITTEES

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1. INTRODUCTION

The introduction of a drug budget in the Belgian hospitals will imply a pro-active management from the directions and the health care workers. In order to promote the quality of care, the drug selection must be rational and a monitoring of consumption will be required. Until now, the monitoring of drug consumption was not regarded as a priority by hospitals because the actual financing system is based on a fee-for-service. Cause of this system hospitals have not developed mechanisms for stimulating and monitoring a rational consumption. This is in contradiction with the promotional activities of the pharmaceutical industry — whose is in favour of a high consumption. In the absence of this corrective actions drug expenditure is constantly increasing. Notwithstanding the introducing of new innovative drugs, many new molecules were introduced with little or no added value.

2. OBJECTIVES OF THE STUDY

The first objective was to analyze the processes of influencing the behaviour of the prescribers and their attitude towards drug promotion. In addition the need for guidelines and objective information was evaluated.

The second objective was to evaluate the experience and the attitude of physicians towards instruments that enhance a more rational drug consumption. A practical model was presented as an example.

3. GUIDELINES

3.1. DEVELOPING GUIDELINES

Evidence based clinical guidelines are important to pursue a rational pharmacotherapy. In order to be a support for rational prescribing clinical guidelines must be rigorous to be acceptable for physicians. Five steps can be distinguished when developing guidelines: the choice of the subject, the constitution of a workgroup, evaluation of the literature, developing practical guidelines with gradation of evidence, validation and update of the guideline. The hierarchy of the evidence and the gradation of the recommendations give physicians an estimation of the guidelines' validity. It is not always possible to have guidelines based on randomized studies (level Ia). In that case expert's advice based on clinical experience will be essential (level IV). The AGREE Collaboration (appraisal of guidelines research as evaluation for Europe) proposes a framework for evaluating guidelines. The Guidelines International Network joins guidelines originating from 52 organizations from 27 countries. It is clear that actually many rigorous clinical guidelines are available for Drug and Therapeutic Committees (DTC). When these are not available the DTC can develop their own guidelines in accordance with the methodology prescribed.

3.2. EXPERIENCES WITH A PARTIAL BUDGET FOR THE ANTIBIOTIC PROPHYLAXIS IN SURGERY

The introduction of a partial budget for the antibiotic prophylaxis in surgery was combined with evidence based guidelines. A structured interview and the evaluation of the consumption data, shows that these guidelines were successful implemented in the hospitals. This study indicates that the majority of hospitals adapted their prescriptive behaviour and that the over and under-consumption approach the average. The fact that the reimbursement of the prophylactic antibiotic consumption was calculated on the basis of an antibiotic which prophylactic effect was evidence based was an important incentive. However, clinical situations for which it is possible to precisely define medications associated with a surgical act (RIZIV nomenclature for surgical operation) are rather rare.

3.3. IMPLEMENTING GUIDELINES

3.3.1. THE INFLUENCE PROCESS

In the report is clearly described how guidelines can be developed implemented and evaluated. Developing and writing guidelines are an essential but relatively small step. The implementation of guidelines is more complex. Different interventions are described in the literature: guidelines towards professionals, financial incentives, and organizational and regulatory interventions. According to the literature, combination of interventions - preferably personalized - is necessary to influence the behaviour of prescribing. Psychology is important in the influence process. Elements as reciprocity, approval, consistency, social pressure, authority, scarcity can have an unconsciously influence. When the DTC wants to communicate, it must be aware that not only the content but also the presentation of the message is important. In order to introduce behaviour's change, investments in an adequate communication platform are crucial. Good will only is not enough to realise this. A structure, framework and a strategy are necessary.

3.3.2. MEASURING THE IMPACT OF INTERVENTIONS

Interventions have the intention to have impact. This impact must be evaluated and quantified. It is essential to define clearly the final outcome in order to know what has to be measured. The process of care can be measured. The ceiling effect can be evaluated. Self-reporting or objective measurement can be implemented. Confounding factors (bias) can interfere with the measurement of interventions. Observational studies, quasi-experimental studies (before and after studies, interrupted time series) are sometimes the only possible methodologies when the "golden standard", i.e. randomized trials, are impossible. Randomization is possible on patient or cluster level. The last methodology can be used to compare two sites: one site where the intervention is finished and one site where the intervention is programmed in the future. Several statistical analyses can mathematically express the reliability of the results like mentioned in the report.

3.3.3. CHECKLIST FOR IMPLEMENTING AND MONITORING INTERVENTIONS

In most Belgian hospitals it is not possible to perform randomized trials. Nevertheless is it useful to describe the impact of interventions. The Cochrane Effective Practice and Organization of Care Review Changing Professional Practice give a theoretical framework where implementation methods can be introduced: WHO (sender) says WHAT (message) to WHOM (receiver) HOW (medium), WHEN (at what moment) and WHERE (under which circumstances). The checklist in the report serves as a starting point for DTC 's who wants to implement and monitor interventions.

4. PRACTICAL CONSIDERATIONS

4.1. IMPLEMENTING GUIDELINES FOR SEQUENTIAL THERAPY

The theoretical concepts described were applied in the management of antibiotics in the hospital. A monocenter study demonstrated that a more active diffusion of guidelines could increase the impact on the prescribers. In this study, the research group has evaluated how a simple guideline, in particular the switch from intravenous to oral antibiotics, could be implemented. This sequential therapy has a direct impact on the consumption of drugs by substitution with a cheaper oral antibiotic without compromising the clinical outcome. Several methods of implementation were compared: the publication of guidelines, the organization of information staffs for physicians and a pro-active management by a clinician pharmacist. The results show that a pro-active management results in a significant reduction of the duration of the intravenous treatment, and a reduction of the treatment cost. With this simple guideline, each hospital can successful influence the attitude of the prescribers. This can be a useful experience before considering more complex behaviour change.

4.2. THE ATTITUDE OF PHYSICIANS TOWARDS DRUG INFORMATION

A questionnaire towards hospital physicians concerning drug information confirms the prominent role of the pharmaceutical industry in the promotion of drugs. This promotion consists of many and repeated visits to the physicians, mainly focused on the clinical-pharmacological aspects with special attention for claimed advantages. Economical and financial aspects are rarely discussed neither ratio added value/ extra cost. In contradiction with these data the questionnaire shows that the information given by the DTC is not often used. However the role of the DTC should be important as 40% of the new drugs introduced in Belgium have no added value but are mostly more expensive.

4.3. MEASURING THE IMPACT OF OBJECTIVE INFORMATION

A proposal to measure the impact of objective information was developed. The idea was that objective drug information, with a critical analysis of advantages and disadvantages, available before the commercialization of the product, should protect the physicians against the commercial promotion. An experiment in one hospital showed that this information limited the impact of a strong promotional campaign by the pharmaceutical industry. Independent and objective information is essential knowing the fact that 83% of the formulary requests for new molecules are accepted

by the DTC. It is probably not possible that each individual hospital can perform this work by lack of time and competence. Exchange of information is therefore essential and multicentric collaboration is desirable.

5. DRUG CONSUMPTION FEEDBACK

5.1. DATA BANK

Drug consumption feedback towards physicians is one of the instruments to enhance the responsibility of the prescribers. Feedback must be, accessible, comprehensible and useful. It allows the DTC to identify priorities. In order to be interesting for individual prescibers the data must be detailed on patient level. The instrument allowing structuring the data must be simple and flexible in order to make relations.

A user-friendly feedback with drug consumption related to pathologies was developed by the research group and presented to the participating hospitals. Without knowledge in data processing, the drug consumption in a hospital can be compared with the national average. It is possible to check where and for which pathology, the variations of drugs' consumption are the highest.

5.2. INDICATORS

In the feedback indicators are proposed. These indicators are proportions of pharmacological groups that allow comparisons with the national data. This information can indicate if there is potential for a more rational drug consumption. Examples described in the report are: the diffusion of new drugs, the intravenous antibiotic consumption, and the use of parenteral nutrition. The utilization of indicators is an important instrument to identify variations in the consumption.

Beside quantitative indicators based on consumption data, also indicators for the evaluation of structure, process and outcome of health care were developed. The government wants to have easy, available, reliable and valid indicators that allow the evaluation of the quality of care. Several international organizations have developed indicators in accreditation standards. In Belgium, Pharmanet (a subdivision of the RIZIV that is responsible for the collection of consumption data) has developed a first set of indicators.
In the margin of this study, a set of 25 indicators were developed which are used by the Belgian Antibiotic Policy Coordination Committee (BAPCOC) as an evaluation instrument for the Belgian Antibiotic Policy Groups

6. SEMI-DIRECTED INTERVIEWS ABOUT THE ATTITUDE OF HEALT CARE WORKERS TOWARDS A FIXED BUDGET

In conclusion, this report describes the results of 47 semi-directed interviews about the attitude of health care workers towards a fixed budget concerning the introduction of a drug budget. Physicians and pharmacists agree that a new reimbursement system is necessary in order to enhance a rational drug use. However, the physicians are concerned the fact that they will not have anymore the possibility to prescribe a good treatment for their patients.

The pharmacists affirm that a fixed budget can give opportunities to develop new activities. This will be supported by the fact that rational drug consumption will have immediately consequences for the hospitals budget. Physicians and pharmacists are aware that more rationalization, implementation of guidelines, an optimal stock management and monitoring of drug consumption is necessary.
The semi-directed interviews confirm that the instruments described in this study to facilitate this process are useful for hospitals and the government. The quality of the individual patient care must remain central in this new reimbursement system