

**EXAMINATION OF PATIENTS HOSPITALIZED WITH CHRONIC HEART
FAILURE – AN EVIDENCE-BASED ANALYSIS ACCORDING TO CLINICAL
PRACTICE GUIDELINES**

Summary of Ph.D. Thesis

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Introduction

Currently the quality and the appropriateness of health care is in the focus of interest. Evidence-based clinical guidelines are important considering both quality and appropriateness. There are no traditions in Hungary developing evidence-based clinical guidelines, thus in 1996 the Hungarian Ministry of Welfare initiated a project on the implementation and adaptation of practice guidelines developed by the US Agency for Health Care Policy and Research (AHCPR) to Hungarian conditions.

The aim of this research was to study the applicability and adaptability of clinical practice guidelines “Heart Failure: Evaluation and Care of Patients with Left-Ventricular Systolic Dysfunction” to Hungarian conditions. We examined the clinical care of patients hospitalized with the suspicion of chronic heart failure in some Hungarian hospitals before and after the dissemination of the guidelines.

Materials and methods

A ‘before – after’ controlled epidemiological study was used to examine the health care practice before and after the dissemination of the guideline (before period: 1 January 1997 to 28 February 1998 – before the dissemination of the guidelines, after period: 15 March 1998 to 15 March 1999 – after the dissemination of the guidelines).

Six voluntarily participating hospitals, chosen by the Ministry of Welfare, took part in the study (H1-H6) representing each level of in-patient health care in Hungary. A total of 1222 patients admitted with an initial diagnosis of chronic heart failure or any primary causative factor of it were involved in the study.

Data collection was based on hospital documentation. A pilot study was carried out to examine the availability of data in the hospital documents that describe the actual clinical practice, which are needed to study the impact of the guidelines. Data processing was carried out using SPSS 9.0 for Windows.

Results and discussion

The AHCPR practice guidelines contain several clear-cut recommendations for the care, the examination and the medical treatment of patients suffering from chronic heart failure. To follow the performance of these activities the patient documentation of hospitals proved to be appropriate, thus it was possible for us to evaluate the process of patient care.

Setting up the right diagnosis is of cardinal importance in providing proper care. Patients should be thoroughly examined in all cases, other diseases with similar symptoms should be excluded. In our survey, we found that the performance of ECG was most adequate for guideline recommendations as it was done to 99.1% and 98% of all patients. Chest X-ray was not performed in either period in at least 90% of all patients. Echocardiography was performed in slightly more than 50% of all cases, and the use of the test was influenced by several factors, the most important of which are age, sex and admitting hospitals. The research period was not significant by itself.

The other group of the studied medical activities was laboratory tests, which are imperative in setting up the proper diagnosis, selecting the right therapy and following the condition of the patient. We found that hemoglobin and hematocrit tests, and serum electrolytes (sodium and potassium) were tested in an appropriate number in each hospital.

Characteristics of practical care and examination findings are especially informative if there is a difference in time, geographical area or patient groups. Our study primarily compares the hospitals involved in the study, and we found expressive differences in the examination of patients suffering from heart failure according to the different Hungarian hospitals.

Optimalization of the hospital care process, and when required the changing of it is the primary aim of development, dissemination and application of clinical practice guidelines. Concerning the tendency of the changes, we can see that the number of examinations per patient and the performance rate – with some exceptions – decreased or did not change in the after period, and the difference in patient care between the involved hospitals remained constant.

In our survey, we used quality indicators – performance rate and performance index – to evaluate the features of hospital documentation and hospital care, and to detect the adequacy of actual clinical care to practice guidelines.

Conclusion

After the dissemination of the clinical practice guidelines the direction of changes in health care was the opposite of the expected results based on the recommendations of the guideline. Though clinical practice does not meet the international requirements in several hospitals. Everyday practice in Hungary is partly determined by attempts to cut costs. Although changes would be required, it is not an easy task to modify the existing clinical practice and to apply guideline recommendations in everyday practice.

Evidence-based guideline development and implementation should be basic in the Hungarian health care as the use of these guidelines is essential for raising the level of quality in health care. On the other hand, we need considerable human and financial resources to establish better health care based on these guidelines. Therefore it is not only a medical dilemma but it should also be a sociopolitical decision.