

Danish Centre for Evaluation and Health Technology Assessment

## TREATMENT AND CARE AS ASSESSED BY PATIENTS AND HEALTH CARE PROFESSIONALS - AN ANALYSIS BASED ON PATIENTS TREATED FOR COLORECTAL CANCER

A summary

# Summary

## Background

Patient satisfaction studies are increasingly being used as a measure of the quality of the hospital service. In the Danish model for health technology assessment, moreover, the patient perspective is one of the four elements assessed. Patient satisfaction studies are considered to be useful information for future patients and an important quality development tool. A key question then, is whether patient experience actually reflects the quality of the medical treatment that they receive – and conversely, whether the health care professionals' assessment of their own performance corresponds to that of the patients.

It is characteristic of the topic of this report that research within the field is relatively sparse. One of the reasons for performing the study was thus to acquire new knowledge in a relatively under-developed field of research.

## Aim

The overall aim of the study was to investigate how patients and health care professionals (i.e. nurses and doctors) assess the technical, interpersonal (i.e. psychosocial) and organisational aspects of treatment and care and to analyse the degree to which their assessments correlate.

A further aim was to determine to what extent the patients' own assessments of the technical-professional quality provided correlate with their interpersonal and organisational experiences of the treatment and care.

## Material and methods

The study was based on patients operated for colorectal cancer and the healthcare professionals who treated them. Using this patient population enabled the questionnaires used in the study to be correlated with the disease-specific and diagnosis and treatment-related information about the individual patients stored in the Danish Colorectal Cancer Database.

A total of 21 gastrointestinal surgery departments were included in the study from 1 April 2003 to 31 May 2004. During that period the departments operated 527 patients for first time colorectal cancer. The questionnaires were returned by 465 physicians, 463 nurses and 345 patients. Information on 336 of the 527 operated patients (64%) was available in the Danish Colorectal Cancer Database, and the relevant questionnaires had been returned by all three groups. The correlation between the patients' and the health care professionals' experiences was analysed using kappa ( $\kappa$ ) calculations. In order to obtain a more subtle picture of the correlation between the patients' and health care professionals' experience, the distribution of the two groups' answers to the individual questions were analysed using the McNemar test.

To what extent the patients' own assessments of the technical quality of treatment and care were associated with their interpersonal and organisational experiences was determined by multiple logistic regression analysis.

## Results

The analyses of the correlation between patients' and health care professionals' answers generally showed that the correlation between the answers to rather factual questions was characterised from being moderate, over substantial to nearly perfect ( $0.19 \leq \kappa \leq 0.95$ ). On the other hand, the patients' and the healthcare professionals' answers to more subjective questions only correlated weakly ( $-0.01 \leq \kappa \leq 0.22$ ). With several of the factual and subjective questions the distribution of answers differed significantly between the patients and the health care professionals.

The analyses of whether patients differentiate between various aspects of treatment and care showed that in all cases the patients' assessment of technical quality closely correlated with their interpersonal and organisational experiences during their hospital stay. In most cases the correlations were positive.

### **Conclusions and perspectives**

The study provides a slightly ambiguous picture of how well the experiences of these particular patients correlates with those of the health care professionals. The reported disagreement concerning even factual questions indicates that patient assessments should be interpreted with caution and that health care professionals should make greater efforts to ensure that patients understand the medical terms used in the communication with them. In addition, the study indicates that disagreement on subjective questions is unlikely to be due to a lack of medical knowledge among patients or misunderstanding of the quality of the treatment and care provided. To the contrary, a more subtle interpretation of the observed differences indicates that patients' and health care professionals' assessments each contribute to a subtle overall picture of health service quality.

The reported correlations between patient experience indicate that it is highly likely that patients who assess technical-professional quality allow their judgement to be influenced by organisational experiences and the psychosocial interplay that they have had with the personnel during their hospital stay. In a single case, though, the patients' assessment did not correlate exclusively with interpersonal and organisational experiences, but also with an experience of a more technical character. It should be stressed that it is often difficult to determine which variables reflect cause and which reflect effect. In other words the data do not allow the unambiguous conclusion to be drawn that the patients' interpersonal and organisational experiences *predict* their assessment of technical quality. In principle, the opposite cause-effect relationship could apply.

The study underlines the necessity of collecting and comparing several types of information, including the assessments of both patients and health care professionals, if a complete picture of the quality in the Danish health service is desired.