Use of tracer conditions in assessing quality of patient care in medical wards of the National Hospital of Sri Lanka

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Abstract

Objectives: to assess the level of satisfaction by patients regarding the physical facilities of the wards and the courtesy of staff members. To elicit the information provided to patients by the staff of the ward regarding follow up care.

Methodology: a descriptive study was conducted on patients with diabetes mellitus, bronchial asthma and ischaemic heart disease (tracer conditions), in selected medical wards of the National Hospital of Sri Lanka. An interviewer administered questionnaire and visual analogue scales were used for collection of information. Principal investigator trained in the use of study instruments and 6 pre-intern medical graduates collected data.

Results: A total of 162 patients were studied. A majority of patients have not received information about the duration of follow up treatment. One hundred and five (68.8%) had not informed about the need for home care. The majority of patients were satisfied with the courtesy of all categories of staff. They were least satisfied with the cleanliness of the toilets, followed by the quality of food provided.

Introduction

Quality of patient care is of growing concern nationally as well as internationally. The need to pay more attention to ensuring and assessing the quality of patient care in hospitals also well documented (1,2,3). Excellence of care, ethical considerations, cost saving measures and meeting patient needs and expectations have been highlighted. However, health managers are often hesitant in confronting quality issues due to the misconception that assessment of quality is a complicated affair, that may uncover complex problems that would be costly or impossible to solve.

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The professional opposition to quality of care measurement may also be due to the fact that such assessment is often been misapplied and used to affix blame and punish those responsible.
The commitment to improve quality of care at national level is reflected in the National Health Policy of Sri Lanka which has focused on quality of health care as a priority area (4). It also highlights the need to improve the efficacy and cost effectiveness of the service while endeavouring to ensure a reasonable quality of care.

Hospitals form an important and integral component of any national health system and the largest share of national health expenditure is spent on hospitals regardless of the health status or the income of the country (5). Thus assurance of effective and efficient care acceptable to the consumer within this hospital setting is very important.

In an assessment of the quality of medical services three aspects have to be considered. They are, inputs (money human resources and equipment), the process (whether the patients are appropriately treated with courtesy and dignity) and outcome (whether the hospital stay was beneficial to the patient). The concept of quality has also been expanded to include customer responsiveness. Thus quality is also determined by the individual receiving the product of service (6). However, the way that quality is assessed by patients and physicians markedly differ from one another. Patients may evaluate quality in terms of availability of service facilities, arrangement of appointments, convenience of admissions and discharge procedures etc. Other important aspects are attention paid to early relief of symptoms, friendly communication, and appreciation of the dignity of patients.

It is important to consider all these aspects in a comprehensive evaluation. However, it is not feasible in an evaluation to examine all this issues all and all illnesses for which care is sought. In such circumstances, selected illnesses can be used as tracer conditions (7). It has been found that the review of certain activities related to tracer conditions can throw light on the functioning of an entire health care system (8). The use of tracer conditions also offers a special opportunity to identify frequent and important problems of patient care management (9).

This method has been used earlier in Sri Lanka to evaluate the service of Primary Health Care personnel and to assess the training received by them. This study has revealed the feasibility of using

a selected number of tracers to evaluate a programme of large magnitude. (10).

Several limited studies have been carried out in Sri Lanka to assess patient satisfaction in hospital care (11,12). However, comprehensive studies that assessed the quality of in- patient care are scarce. This study was designed to describe and assess the information provided by patients regarding the level of patient satisfaction on physical facilities of the wards and courtesy of staff members and follow-up care.

Methodology

The study was carried out in the National Hospital of Sri Lanka. There are 12 medical wards and 01 casualty medical ward in the medical section of the National Hospital. Patients with a diagnosis of bronchial asthma, diabetes mellitus or ischemic heart disease (which were the tracer conditions used in the study), were interviewed on discharge from the ward using an interviewer administered questionnaire. Other relevant information was extracted from the patient's bed head ticket (BHT) and the diagnosis card, using a checklist.

The study population included the patients with selected tracer conditions admitted to the general medical wards during the months of July, August and September 1997. The average number of patients, discharged from the medicine wards, with each tracer condition was 2500, for a period of three months. The calculated sample size at 95% confidence level was 182. The final sample was limited to 162 patients due to resource and other practical constraints.

Data collection instruments

Information was collected using an interviewer-administered questionnaire

Information comprised basic socio-demographic characteristics, quality of instructions given on discharge by different categories of staff, the opinion of the patients regarding the courtesy of staff members, sanitary condition of the ward, and quality of food and bed linen provided. Inquiries were also made about the illness (tracer condition) for which they came to be warded in the hospital.

A visual analogue scale was used to assess the degree of understanding of the follow-up instructions. The contained a scale of 10 points ranging from 0 to 10 with 0 as no understanding and 10 as understanding very well.

A second visual analogue scale was used to assess the opinion of the patients regarding the courtesy of medical specialists, other medical officers, nurses, attendants and labourers. This visual scale ranged from −10 to +10 with −10 as worst level, 0 as neutral and +10 as the best level. The same scale was used also to assess the opinion of the patents regarding cleanliness of the ward, bed linen, toilets and food.

Six pre-intern medical graduates and the principal investigator participated in data collection. All six medical graduates had previously participated in similar research and hence had some experience in interviewing patients. For this study they were trained further to interview patients and to use the visual analogue scale, by the principal investigator.

Interviewers visited the selected wards and reviewed the bed head tickets of the discharged patients with the help of a house officer and staff nurses. Those with tracer conditions were identified. They were interviewed before the visiting hours open to relations of the patients.

Results

A total of 162 patients with one or more of the selected tracer conditions were studied. There were 54 (33.3%) patients with bronchial asthma, 51 (31.5%) with diabetes mellitus and 57 (35.2%) with ischaemic heart disease. There were 48 (29.6%) female patients and 144 (70.4%) male patients.

It was seen that a major proportion of the instructions at the time of discharge were given by the house officer. The majority (69.7%) of patients had been informed that they need to make follow up visits. A majority of patients (67.9%) have not received information about the duration of follow up treatment. Forty six (28.5%) patients had not been told about the need for home treatment (Table 1). One hundred and five (68.8%) patients had not been informed about the need for home care other than taking medicines.

Table 1. Distribution of the type of information and the personnel who provided information to the patients at the time of discharge. N=162

Type of information	Specialist	HO	Nurse	None
Need for home treatment	19 (11.7)	89 (54.9)	8 (4.9)	46 (28.5)
Place to obtain drugs	6 (3.7)	51 (31.5)	22 (13.6)	83 (51.2)
Duration of follow up	3 (1.9)	48	1 (0.6)	110

treatment		(29.6)		(67.9)
Need for home care	2 (1.2)	52 (32.1)	3 (1.9)	105 (64.8)
Need for follow up visits	13 (8.0)	91 (56.2)	9 (5.5)	49 (30.3)

Of those who admitted to receiving information, the degree of understanding of different types of information was measured using a visual analogue scale ranging from 1 to 10. The results of this are shown in table 2. the best understood information was the fact that the patient needed home care (mean = 7.1 SD = 2.5). Understanding of all other information was poor especially the need for follow up visits.

Table 2. Distribution of the type of information and the extent to which information was comprehensive to the patients

Type of information	Points in the visual analogue scale					
	1-3	4-6	7-10	Total	Mean	SD
Need for home treatment	12	46	57	115	7.1	2.5
Place to obtain drugs	79	9		88	2.6	1.3
Duration of follow up treatment	52	14		66	2.8	1.7
Nature of home care	57	11		68	2.7	1.5
Need for follow up	113	2		115	2.0	0.7
Other	5				5	2.0

To assess the opinion of the patients about the courtesy shown by each category of health personnel, a visual analogue scale was used ranging from –10 to +10. as indicated in table 3. The majority of patients appeared to be satisfied with the level of courtesy of all categories of health personnel as shown by mean scores ranging from 5.4 for labourers and attendants to 7.1 for doctors other than specialists. Of all categories of staff, medical officers were perceived as the most courteous (Table 3)

Table 3 Distribution of the courtesy of different categories of staff in the ward

Points in the visual analogue scale	Category of staff			
	Specialists	Other MOs	Nurse	Minor staff
-10 to-6	0 (0.0)	3 (1.8)	5 (3.1)	6 (3.6)
-5 to –1	2 (1.2)	0 (0.0)	1 (0.6)	7 (4.3)
0	7 (4.3)	2 (1.2)	4 (2.5)	7 (4.3)
1 to 5	14 (8.6)	15 (9.3)	27 (16.7)	37 (22.8)
6 to 10	129 (79.6)	141 (87.0)	124 (76.5)	103 (63.6)
No opinion	10 (6.2)	1 (0.6)	1 (0.6)	2 (1.2)
Total	162 (100.0)	162 (100.0)	162 (100.0)	162 (100.0)
Mean	7.0	7.1	6.4	5.4
SD	2.4	2.7	3.5	4.1

Patients were least satisfied with the cleanliness of the toilets as shown by the smallest mean which is 2.9. Quality of food was the other concern as shown by a mean score of 3.4. They were relatively more satisfied with the other facilities (Table 4).

Table 4 Distribution of the level of satisfaction about the physical facilities available in the ward

Points in the visual analogue scale	Facilities			
	Quality of food	Cleanliness of toilets	Cleanliness of ward	Cleanliness of beds
-10 to –6	12 (7.4)	15 (9.3)	3 (1.5)	7 (4.3)
-5 to –1	8 (4.9)	19 (11.7)	5 (3.1)	9 (5.6)
0	9 (5.6)	6 (3.7)	4 (2.5)	4 (2.5)
1 to 5	60 (37.0)	67 (41.4)	63 (38.9)	40 (24.7)
6 to 10	53 (32.7)	54 (33.3)	86 (53.1)	95 (58.6)
No opinion	20 (12.3)	1 (0.6)	1 (0.6)	7 (4.3)
Total	162 (100.0)	162 (100.0)	162 (100.0)	162 (100.00
Mean	3.4	2.9	5.2	5.1
SD	4.7	4.9	3.5	4.3

Discussion

As overall assessment of the quality of patient care in a hospital is complex and not feasible within a limited time frame, selected tracer conditions were used. Patients with a wider range of diseases are admitted to the medical wards of the National Hospital of Sri Lanka. The reasons for selecting bronchial asthma, diabetes mellitus and ischaemic heart disease were many. These three diseases are common conditions that need frequent admission to the hospital. All three are non-communicable diseases with an increasing prevalence in Sri Lanka. Quality of patient care is especially important in these three conditions as they are long-term illnesses in which the quality of care given is likely to influence the outcome and occurrence of complications. As education of patients is a duty of hospital staff, knowledge of patients about their disease can be considered an important indicator of this aspect of care.

The patients were interviewed on discharge because they would be more comfortable at that time to comment on the quality of services either than when they were still in the ward. Reluctance to make

adverse comments on the services is minimized to an extent by interviewing them after discharge.

A medical ward is staffed by one specialist, an average of about five medical officers, nurses, attendants and labourers. Many of these staff members are trained to educate patients in a multitude of ways. Nevertheless, education of patients is an aspect that had notable deficiencies in the medical wards studied. As education of patients is an essential part of the long-term management of the illnesses under study, improving this aspect of care needs greater attention.

The amount of information given by the health care workers to the patients on discharge was unsatisfactory. Patients' opinion on the degree of courtesy of each category of staff was favourable. It is suggested that medical and nursing staff devote more time to educate the patients about their illnesses.

The quality of education should be improved by training the ward staff on communication techniques and requirements for educating patients. With better patient care the quality of life of patients can be improved which in turn will reduce the burden on the health services.

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