PATIENT SATISFACTION IN PROSTHETIC REHABILITATION PROGRAMME

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ABSTRACT

Patient satisfaction is an important outcome measure independent of other outcomes. Its measurement is important to assess the effectiveness of a programme and to gain insight into the patients' perception of the programme. In this study conducted in a large rehabilitation centre it was found that majority of patients express satisfaction with care inspite of perceived discomfort. Various demographic factors, severity or duration of the disability or the level of rehabilitation do not influence patient satisfaction. Patients express more concern with aspects such as delay in issue of the prosthesis, or hotel component of the hospital services. Patients did not appear too concerned about the level of information provided. Patient satisfaction is an individual reaction to the overall care process and is influenced by the initial expectation level of the patient. Emotional response of the patient appears to be more important determinant of patient satisfaction than the cognitive evaluation. Periodical assessment of patient satisfaction should be an important component of any programme evaluation exercise.

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KEY WORDS : Amputation; Patient satisfaction; Programme evaluation; Prosthesis; Quality of care; Rehabilitation.

Introduction

Measuring the quality of health services is a great challenge for the hospital administrator. Measuring how patients feel about their hospital visit, stay, or total health care experience is much more difficult than measuring, say, the roundness of a tyre in industry, where quality control methods have been developed. Within hospital context, patient satisfaction has emerged as an important component of the quality of care.

Clientele satisfaction is inseparably linked to rehabilitation programmes and is of growing concern for hospitals. Patient satisfaction is important in two aspects [1] :-

1. As an outcome measure important in its own right
2. As important contributor to further health outcomes e.g., continued use of health services, decreased likelihood of malpractice suits, and increased compliance with medical regimen.

Initiatives to measure and improve the quality of care have emerged in most fields of practice and have benefited the patients as well as helped the practitioners to provide better care. However, little work has been done in the field of quality assurance of rehabilitation medicine, especially among amputees. Like any other field in medicine it is important to ascertain the

views of patients in the field of rehabilitation also.

Material And Method

This study is based on 200 patients who were provided prosthesis at Artificial Limb Centre, Pune between August 1998 and December 1998. All the patients provided with prosthesis during this period were included in the study. Artificial Limb Centre, Pune is a premier institution involved in medical rehabilitation of the orthopaedically handicapped in India. All the amputee patients belonging to the Armed Forces including their families and ex-servicemen are provided free treatment at this centre. Civilian patients are called by appointment and have to pay charges for various prostheses.

The study was conducted by means of a structured questionnaire designed to evaluate various aspects of patient satisfaction in rehabilitation. Level of patient satisfaction was assessed based on various variables affecting patient satisfaction, which were included in the questionnaire based on discussions with the patients and providers. The questionnaire was administered immediately before the discharge of the patient. Various questions were scored on Likert's scale ranging from 1 to 5. Inter-relationship of various attributes and variables were analysed using Chi square test, where ever required. Various attributes were also studied for their effect upon the satisfaction level.

Patient satisfaction with the hospital services was very high. Under the circumstances to determine the level of incipient dissatisfaction various variables were ranked in the order in which maximum patients express satisfaction or dissatisfaction. The expression of modest satisfaction was added both to the score of dissatisfaction and satisfaction.

Results

Majority of the patients were below 40 years age group. It was found that majority of patients had sustained amputation between the age of 20-30 years. The mean age of amputation was found to

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be 28.7 years. 74.5% of patients were from rural background. About 49% of patients had education below matriculation level. 73.5% of patients had income of < Rs.5000 per month out of which 21.5% of patients had income below Rs.2500 per month. Demographic factors, such as, age, education level and background were found to have no significant association with patient satisfaction.

No significant association was found between the level of patient satisfaction with the hotel elements of hospital services or the level of comprehensive rehabilitation achieved by the patients (Tables 1, 2 & 3).

Patient satisfaction level was also not influenced by the feeling of prosthetic comfort. Perspiration while wearing the prosthesis and feeling of heaviness are the most important reasons of discomfort. Proportionately, service amputees expressed more complaints on these aspects (Table 4).

TABLE 1

Comprehensive rehabilitation and patient satisfaction (civilian amputees)

Comprehensive → Satisfaction ↓	Extremely poor	Poor	Average	Good	Excellent	Total
Highly unsatisfactory	0	0	0	0	0	0
Very unsatisfactory	0	0	0	0	0	0
Satisfactory	0	0	1	5	0	6
Very satisfactory	0	0	0	21	10	31
Highly satisfactory	0	0	1	17	6	24
Total	0	0	2	43	16	61

$\chi^2 = 0.0309$, $df = 1$, $P > 0.05$ (For the purpose of calculation figures in column 1 to 4 and rows 1 to 4 were grouped together.)

TABLE 2

Comprehensive rehabilitation and patient satisfaction (service amputees)

Comprehensive → Satisfaction ↓	Extremely poor	Poor	Average	Good	Excellent	Total
Highly unsatisfactory	0	0	0	0	0	0
Very unsatisfactory	0	0	1	0	0	1
Satisfactory	0	1	5	17	2	25
Very satisfactory	0	0	10	52	11	73
Highly satisfactory	0	0	6	29	5	40
Total	0	1	22	98	18	139

$\chi^2 = 2.6287$, $df = 2$, $P > 0.05$ (For the purpose of calculation figures in column 1 to 3, 4 and 5 and rows 1 to 3 were grouped together.)

TABLE 3

Level of patients satisfaction with hospital services and process of care

Level of satisfaction	Civilian	Service	Total
Highly unsatisfactory	0	0	0
Very unsatisfactory	0	1	1
Satisfactory	2 (3.28%)	22 (15.83%)	24 (12%)
Very satisfactory	43 (70.49%)	98 (70.5%)	141 (70.5%)
Highly satisfactory	16 (26.23%)	18 (12.95%)	34 (17%)
Total	61	139	200

No significant association was found between severity or dura-

TABLE 4

Dissatisfaction / difficulty experienced with prosthesis

Aspect of prosthesis	Civilian	Service	Total
Perspiration while wearing	22 (36%)	82 (59%)	104 (52%)
Heavy	18 (29.5%)	59 (42.4%)	77 (38.5%)
Noise while walking	7 (11.47%)	40 (28.78%)	47 (23.5%)
Problem in putting steps	7 (11.47%)	36 (25.9%)	43 (21.5%)
Appearance	9 (14.75%)	21 (15.1%)	30 (15%)
Comfort in wearing	7 (11.48%)	25 (18%)	32 (16%)

tion of disability and patient satisfaction.

Patient satisfaction level was lower among those patients who received prosthesis late if they were hospitalised or the total duration of the process of the issue of prosthesis took long as in case of service amputees. However no such association was found among those who were not hospitalised for the whole duration and anticipated delay.

Dietary services, vocational training, recreational facilities, and linen services were among relatively high dissatisfiers. Interaction with doctors, admission procedure and cleanliness were among relatively high satisfiers, with the behaviour of staff and visitors policy being relatively moderate satisfiers. It appears that patients were indifferent to aspects such as effect of VIP visits and information about treatment.

Discussion

Satisfaction has been defined as a dynamic flow of multidimensional interactions in cognitive and affective domains after a service experience [2]. *Patient satisfaction* is healthcare recipient's reaction to his care, a reaction that is composed of both a cognitive evaluation and an emotional response [3].

Health care professionals generally think of quality solely in terms of clinical outcomes, but quality of care is more than excellent medicine - it is also the experience of the patients and the value perceived by them.

Determination of patient satisfaction

Several attempts have been made to identify meaningful determinants of patients satisfaction. While the specific categories used for organisation have varied from author to author, four major determinants of patient satisfaction are identified consistently. These are:

- Characteristics of patients, including socio-demographic characteristics, expectation of the medical encounter, and health status.
- Characteristics of providers, including personality traits, 'art' and 'technical' quality of care dispensed.
- Aspects of the physician-patient relationship, including the clarity and completeness of communication between patient and provider and the 'outcome' of the encounter.

iv. Structural and setting factors, including accessibility, mode of payment, and treatment length etc.

Generally only a subset of these dimensions is used in assessing patient satisfaction based upon characteristics such as inpatient versus outpatient setting characteristics of the patient population, purpose of the survey, and additional criteria.

Effect of demographic factors on patient satisfaction

The relationship between patient characteristics and patient satisfaction has been reported to be inconsistent. Most of the studies do not reveal any relationship between age and patient satisfaction [4,5]. Some authors report that older patients report more satisfaction with care [6].

Hulka et al [7] and Zastowny et al [8] reported positive relationship between educational attainment and patient satisfaction, while others have reported it to be lower among more highly educated [9,10]. Some studies report no correlation [7].

Some workers have reported income and patient satisfaction to be unrelated [5], whereas others have reported less satisfaction in the lower income group [10].

In the present study no relationship could be established between various demographic factors and rehabilitation.

Effect of physical condition of the patient

Psychologically distressed patients report more dissatisfaction. Patients who do not admit emotional or personal problems are markedly more dissatisfied [6]. Patient satisfaction measures have been found to be positively related to positive health perception and less time spent in bed due to health problems [11].

In their study, Patrick et al found that the disability status at the time of screening, place of birth, household size, number of drugs prescribed, and the level of emotional support did not appear to be associated significantly with dissatisfaction of any kind. Disabled respondents were less likely to be dissatisfied with doctors in general than those without disability [12].

In the present study also no relationship could be established between the rehabilitation status, and duration of disability with overall satisfaction.

Effect of technical or professional standards

Patient satisfaction is reported to be poorly related to technical effectiveness or professional standards. Higher level of satisfaction was seen where more personal care is provided [13]. In the present study it was found that patients place greater emphasis on period of

hospitalisation and certain aspects of prosthesis for which they seek improvement, even though their physical rehabilitation level is high.

Dissatisfaction with a particular category of staff appears to be a reflection of the total care process, eg. delay in prosthesis delivery is attributed to the staff involved in manufacturing and fitting of the prosthesis.

Effect of physician-patient communication on patient satisfaction

Snell et al reported that most patients thought interaction with their physician was the most important aspect of medical care [14]. Patients generally express better satisfaction with the staff with whom they have more interactions than others. It is also influenced by the patients' expectations with a particular category of staff.

Effect of structural factors on patient satisfaction

Patients' satisfaction with the process and level of rehabilitation is not related to the satisfaction with the structural variables, such as dietary services, linen services, available facilities etc. Their identification is still important as even well rehabilitated patients may be discontented and lead to bad publicity. They also assist the administration in identification of facilities which are considered important by patients, though administration may not give the same importance, eg., vocational rehabilitation training.

Patient perceptions of the care process are not static uniformly. They appear to be influenced more by the emotional response of the patient rather than the cognitive evaluation of the care process. Measurement of patient perception provides valuable insight into certain aspects that may be overlooked if attention is focused only on the clinical outcomes.

The satisfaction of the client with the past and present care is partly an outcome of the quality of that care. Client satisfaction is also a judgement by the client on aspect of quality that the client is particularly capable of appreciating. Patient satisfaction depends upon the congruence between what is expected by the patient and what occurs to the patient. A well rehabilitated patient may be discontented whereas a poorly rehabilitated patient may show high level of satisfaction. A change in satisfaction does not necessarily mean dissatisfaction because a patient may start out with very low expectation of the standard of care. This also results in high level of expressed satisfaction when the expectations are low.

Health care organisations that aspire to excell

should also constantly assess the quality of their service experience through their patients' eyes. The challenge for managers of such health care organisation is to ask the right questions at the right time of from the right group of patients to obtain the information they need to meet and accept patient expectations regarding service quality. What gets measured gets managed. Therefore, measuring the perception of patients provides a starting point for effectively managing patient service quality.

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