# A Study on Managing Hospital Services in a Rural Hospital by Assessing Patients Expectations and Satisfaction Level

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## ABSTRACT

**Introduction**: Health care means a wide and intensive form of service, which will be related to well-being of human beings. Patient satisfaction is a widely used health care quality metric. However, the relationship between patient satisfaction and health care utilization, expenditures, and outcome remains ill defined. Patient satisfaction is playing an increasingly important role in quality-of-care reforms and health care delivery. Aim: The purpose of this study was to examine and analyse the effects of patient's perspectives and expectations of the services and make appropriate improvements accordingly to increase the efficiency of the management of hospital services.

**Material and methods**: The study was conducted as descriptive based research including designing questionnaire for collection of data through field study, direct interview with the patients, then processing and analysing the data.

**Results and conclusion**: From the patient point, good results showed with overall health care services but improvement is needed in technology updating, cooperation from hospital staff and reducing the time delay and expenditure to get appropriate treatment.


**Keywords:** Health, Medical, Care, Insurance, Equipment, Satisfaction.

## INTRODUCTION

The major inputs of the health care sector are hospitals, health insurance, medical software and technology, research and development. The sector is considered as social sector which is governed at state level with the assistance of central government. The health care industry of India functions with the help of both public and private sector. The services and facilities governed by the government comes under public health care system. This system is helpful in a way as it provides varied number of services and other facilities at free of cost or at concessional rates to the people of rural areas as well as to the people of lower socio- economic group in the urban areas.[1]

Health care sector consists of many segments including hospital, nursing and residential care, medical and diagnostic lab and other ambulatory health care services. The various factors which are responsible for attracting big corporate houses in health care sector are recognition of healthcare as an industry. Socioeconomic changes like rise in the level of literacy, rising levels of income, and increase in awareness because of wider media coverage.[2]

In Indian scenario 60% of the health expenditure comes from self-paid category in comparison to government expenditure of 25 to 30%. As we know that private hospitals are quite expensive for lower- or middle-class people, in this regard the emergence of insurance sector is supposed to give a bounce to majority.[3]

Patient participation is increasingly being linked with improvements in the quality of healthcare and improve in healthcare outcomes. There is an increasing impetus for shared decision making and person patient centre care.[4]

There is a general trend towards increasingly focus on improvement of processes and outcomes of care. Effective consumer feedback strategies make organizations more aware of significant areas of dissatisfaction with care and services. It gives staff new insights into how people perceive accepts of their care and increase patient confidence.

Satisfaction like any other psychological concept is easy to understand but hard to define. The concept of satisfaction overlaps with similar themes such as happiness, containment and quality of life. Satisfaction is not some pre-existing phenomena waiting to be measured but a judgment people form overtime as they reflect on their experiences. A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved. Patient satisfaction is an attitude – a person's general orientation towards a total experience of health care. Satisfaction comprises both cognitive and emotional facets and relates to previous experiences, expectations and social networks. Satisfaction has been shown to change over time and there are a set of issues about how comfortable consumers feel in commenting adversely on their care while in hospital [5]. When including patient satisfaction mechanisms, it should take account of the capacity of users to understand what is being asked to them and to communicate their feelings and opinions effectively. Important factors influencing patients in this regard include literacy levels, intellectual and physical /sensory disability levels and difficulties with language proficiency and ethnic and cultural diversity.

## MATERIAL AND METHODS

Aim of the study was to assess the patient's expectations

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and satisfaction level about the hospital services. There are various factors associated with management of hospital services. Some of the factors are monitoring the patient 's health with special equipment, availability of special equipment, short term hospitalization, emergency room services and laboratory services. Most of the hospitals are providing hospital services to their patients but they failed to manage them effectively. This study mainly focuses on the management of hospital services at Uttar Pradesh University of Medical Sciences, Saifai. In order to measure the efficacy of the management of hospital services and to measure the patient expectation and satisfaction about the hospital services. This project is descriptive study. It includes designing questionnaire for the collection of data through field study, collecting data from target respondents, processing and analysing the data and arriving at conclusions.

**Sampling method** This study was based on the sample drawn from the patients. The study was confined to opd patients and ipd patients. Sample size was 1000. The project was completed within the duration of 3 months. The data collection was through questionnaire only. The sampling was done at rural institute. So, it cannot resemble the entire population of India. The patients were not ready to answer few questions.

For this study, random sampling method was adapted to choose target respondents for conducting survey through questionnaire. Method of data collection: Primary data for the study was collected through direct interview with the hospital patients guided by a designed questionnaire. Secondary data was from published journals, books and websites related to managing hospital services.

Patient questionnaire: Total 14 questions were asked about the satisfaction level of the patient with respect to hospital services, treatment provided, outpatient care, surgical services, medical services, emergency services, laboratory investigations services, pharmacy, blood bank services, cooperation of technical and paramedical staff, doctors care, maintenance of hospital services, technical equipment provided for the treatment and waste management and sanitation of hospital. Satisfaction level was divided into five categories: 1 highly satisfied 2. Satisfied 3. neither satisfied nor dissatisfied 4. dissatisfied 5. highly dissatisfied. The patients were asked for suggestion for the problem he/she faced regarding the respective hospital services question. The last question in the questionnaire was regarding suggestions to improve the hospital services.

**Analysis**

***1. percentage analysis***

Percentage analysis is the method to represent raw streams of data as a percentage for better understanding of the collected data. Percentage (%) = Number of respondents/ total respondents

***2. Weighted average method***

An average in which each quantity to be averaged is assigned a weight. These weights determine the relative importance of each quantity on the average. Weighting is the equivalent of having that many like items with the same value involved in the average.

$X = \sum XW / \sum W$

XW = weighted arithmetic mean, X = variable.

***3. Chi-Square Analysis***

Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. The name Chi-square is generally denoted y the symbol ($\chi 2$). The chi-square test is given by the formula $^2 = \chi 2\ (Oi - Ei)^2 / E$

Where, Oi = Observed frequency, Ei = Expected frequency

## RESULT

Satisfaction of the patients with overall health facilities services from the figure 1, 35% of the respondents are highly satisfied, 24% of the respondents are satisfied, 16% of the respondents are neither satisfied nor dissatisfied, 16% of the respondents are dissatisfied and 9% of the respondents are highly dissatisfied with overall health facility services.

The respondents ranked the hospital services as shown in the table 2. Chi-square analysis of respondent's gender and satisfaction about overall facility services Hypothesis:

Ho – There is relation between respondent's gender and satisfaction about overall facility services

Ha - There is no relation between respondent's gender and satisfaction about overall facility services

From the table 3: Degrees of Freedom: (m-1) × (n-1) = (2-1) × (5-1) = 4

Tabulated value of degrees of freedom (4) @ 5% level of significance = 9.49 Calculated value < tabulated value Therefore Ho is accepted.

**Inference:** There is no relation between respondent's gender

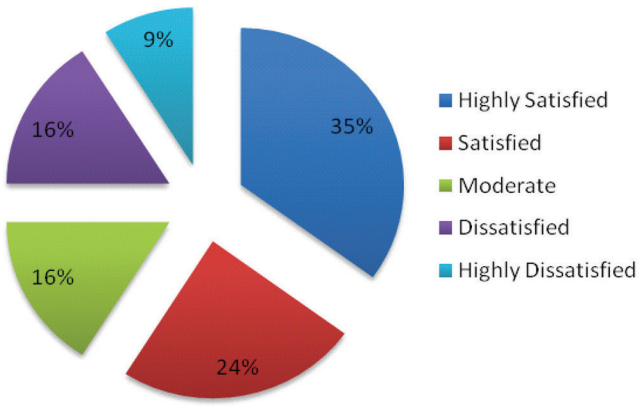


**Figure-1:** Satisfaction with the overall facility services.

| No | Particulars | No of Respondents | Percentage |
|---|---|---|---|
| 1 | Highly Satisfied | 350 | 35 |
| 2 | Satisfied | 240 | 24 |
| 3 | Moderate | 160 | 16 |
| 4 | Dissatisfied | 160 | 16 |
| 5 | Highly Dissatisfied | 90 | 9 |
| | Total | 1000 | 100 |

**Table-1:** Satisfaction with the overall facility services.

| | Strongly Agree (5) | Agree (4) | Neither Agree nor Disagree (3) | Disagree (2) | Strongly disagree (1) | ∑Xi Wi | ∑Xi WI /15 | RANK |
|---|---|---|---|---|---|---|---|---|
| Outpatient care | 1900 | 1600 | 360 | 100 | 50 | 4010 | 267.333 | 1 |
| Surgical services | 1800 | 1560 | 420 | 120 | 50 | 3950 | 263.333 | 2 |
| Medical services | 1750 | 1520 | 480 | 160 | 30 | 3940 | 262.667 | 3 |
| Emergency services | 700 | 1520 | 720 | 300 | 90 | 3330 | 222 | 5 |
| Basic health care | 550 | 1040 | 1020 | 320 | 130 | 3060 | 204 | 6 |
| Facility services | 1750 | 960 | 480 | 320 | 90 | 3600 | 240 | 4 |
| W=∑ Xi * Wi/∑ Wi<br>∑Wi=5+4+3+2+1=15 | | | | | | | | |

**Table-2:** Weighted Average Calculation

| S. No. | Observed Frequency (O) | Expected Frequency (E) | (O-E) | (O-E) ^2 | (O-E) ^2/E |
|---|---|---|---|---|---|
| 1 | 25 | 20 | 5 | 25 | 1.25 |
| 2 | 12 | 13 | -1 | 1 | 0.076 |
| 3 | 10 | 13 | -3 | 9 | 0.69 |
| 4 | 8 | 9 | -1 | 1 | 0.11 |
| 5 | 5 | 5 | 0 | 0 | 0 |
| 6 | 10 | 15 | -5 | 25 | 1.66 |
| 7 | 12 | 11 | 1 | 1 | 0.09 |
| 8 | 6 | 3 | 3 | 9 | 3 |
| 9 | 8 | 7 | 1 | 1 | 0.14 |
| 10 | 4 | 4 | 0 | 0 | 0 |
| Total | | | | | 7.016 |

**Table-3:** Chi-Square Analysis

and satisfaction about overall facility services.

## DISCUSSION

There is always a need to provide quality health services irrespective of the level of care be it a primary, secondary, or tertiary and one of the determinants to assess the quality of health care is patient's satisfaction. Consumers have a democratic right to exercise a voice about their health treatment and their health services, but also that hearing the voices of consumers is an effective way for hospitals to get good information about what needs to be done to improve the quality of their services[6]. In the public health sector, this aspect is not concerned much due to overburdened health facilities with limited resources. In addition, compliance to treatment modality and service utilization to some extent also depends on patient satisfaction toward the services rendered by the health care system. The health care sector has made leaps and bands when it comes to survey design and asking the right questions. Survey needs to keep pace with changing technology and healthcare delivery to capture the data needed to make meaningful, measurable improvements. Despite quantitative and qualitative factors motivating organizations to prioritize patient satisfaction, many in the industry are still sceptical due to conflicting research. Some studies indicate patient-experience measures have no relation to the quality of care. But some studies found that better patient experiences—even more than adherence to clinical guidelines—are associated with better outcomes[7]. This study uses patient satisfaction as a balance measure, not a driver for outcomes. Balance measures empower health systems to make significant quality of care improvements in one area, without losing insight of potential negative impacts in other areas. This survey emphasis on overall care experience, to capture data as a whole rather than asking pointed questions about individual care specialty. A patient experience comes from more than just the patient clinician interaction, it is influenced by everyone and everything within a health system, from the admitting clerk to clean room. Contrary to the findings of the studies done by Lolovska et al.[8], alqatri et al.[9], Almujali et al.[10], Prasanna et al.[11], which showed age, gender, the level of education, and marital status as the predictors of patient satisfaction with hospital health care, this present study also revealed that sociodemographic variables had no influential role in determining patient satisfaction. The main limitation of this study is subjective variability in the determination of patient satisfaction. Patients come with different expectations and their perceptions also vary toward satisfaction.

### Future scope/ suggestions and recommendations

The health services in the hospital should be improved by keeping in mind the dissatisfied sectors in the hospital. Cooperation of the technical staff and paramedics to the patient should be improved. Technology updation and more counters with increase manpower to accommodate large queues effectively. Recruitment of the doctors, paramedical staff and technical staff as per needed to accommodate the increased workload of the patients. Short-term hospitalisation and availability of the drugs should be given priority. More

and more research with large sample size should be done to reach an effective conclusion and improve the quality of treatment and services in the hospital. Future research with qualitative study design as well as having a component of health workers' attitude can be done.

## CONCLUSION

The effectiveness of managing the hospital services was measured using the relevant data collected from the patients. In this point of view, good results showed within the various services in the hospital like outpatient care, surgical services, medical services and Basic health services. A lot of improvement is required in increasing the quality of services provided in the emergency, Pharmacy and lab investigation. The overall cooperation from the technical, para medical staff and doctors is good and can be improved further. At the same time some of the patients have not shown good sign on those services. In the feedback asked the patients showed dissatisfaction mainly with the time delay to get appropriate treatment, availability of the drugs and the long queue at various counters in the hospital. The hospital management should find out the reason for such inconvenience of patients and it should be rectified to continue the good management of the hospital services.

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