

## An Assessment of Quality of Care in Inpatients of Multi-Speciality Hospital By Patient Satisfaction Tool

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**Abstracts:** Background: Hospital being major organization in healthcare provider, its quality assessment can be done by important tool which is patient satisfaction. As in our study this multi-speciality hospital being a new and this type of evaluation never been done which carry great value for healthcare analysis. Objectives: To study patient satisfaction in terms of all health care facilities provided by medical, nursing and supporting staff of the hospital and assess impact of demographic profile on patient satisfaction. Methods: An observational study done over the period of 3 months. A semi-structured questionnaire was designed to examine several aspect of hospital care. Various specialties of indoor patient departments (IPD) were included. Results: A total of 104 respondents with mean age was 47.3, male (57.7%) outnumbered the female (42.3%). Amongst 3 category of grading, satisfaction with Doctors care mean found was 3.0, with nursing care 2.97 and with hospital environment 2.93. 95(91.3%) of respondents answered "yes" for recommendation of hospital to others. Compiling the whole analysis in scoring system, 83.7% of respondents come out with 100 score shows 98.1% have overall higher rate of satisfaction. Difference of scoring in relation to age and gender, P value was 0.9212 & 1.0 which was statistically not significant. Conclusion: Majority of respondents were satisfied with doctor's care, nurse care and hospital services. The only thing which dissatisfied minority of people was treatment fee. Considering overall satisfaction scoring majority of people come out with score 100. There is no statistically significant influence of age and gender on scoring pattern. [N Darji, Natl J Integr Res Med, 2018; 9(2):12-16]

**Key Words:** Inpatient, Multispeciality hospital, Patient satisfaction.

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**Introduction:** Hospital is a structured organization which provide health to the community at its best. Health is a major concern to evaluate patient satisfaction. So measurement of satisfaction is thought to be an essential component in quality improvement.<sup>1</sup> Patient satisfaction is one of the established yardsticks to measure success of the services being provided in the health facilities. But it is difficult to measure the satisfaction and gauge responsiveness of the health systems as not only the clinical but also the non-clinical outcomes of care do influence the patient satisfaction.<sup>2</sup>

Patient satisfaction is easy to understand but hard to evaluate. It is a perception and an attitude that a consumer can have or view towards a total experience of health care. It comprises both cognitive and emotional facets and is influenced by previous experience, expectations and social networks. Patient expectations of care and attitudes towards health care system greatly contribute to satisfaction; other psychosocial factors, including pain and depression, are also known to contribute to patient satisfaction scores.<sup>3</sup>

Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his /her perception of the real care(s) he receives.<sup>4</sup> It is a multidimensional aspect, represents a vital key marker for the quality of health care delivery and this is an internationally accepted factor which needs to be studied repeatedly for smooth functioning of the health care systems.<sup>5</sup>

Patients' evaluation of care is a realistic tool to provide opportunity for improvement, enhance strategic decision making, reduce cost, meet patients' expectations, frame strategies for effective management, monitor healthcare performance of health plans and provide benchmarking across the healthcare institutions.<sup>6</sup>

This study was done in shree bajrangdasbapa arogydham hospital, as this setup is newly developed multispecialty hospital in Bhavnagar. There is no such study held before in this setup. So, for evaluation and assessment of quality of care in this hospital from patient prospective the study was carried out. How far they satisfied the patient is major concern of this study.

**Methods:** This is a cross sectional survey based observational study done over the period of 3 months. A semi-structured questionnaire was designed to examine several aspect of hospital care. Questions were modified for convenience in asking (Meaning remain the same) and taken from “Hospital Consumer Assessment of Healthcare Providers and Systems survey” approved by the National Quality Forum.<sup>7</sup> This tool was developed as standard for assessing patients’ experience and the comparison of hospitals. Pilot study was done in 20 patient on the basis of these questionnaires. This tool translated into Gujarati and Hindi for understanding of people. Format of case record form as a preformed questionnaires attached in the “annexure” in the last.

Patients more than 18 years of age admitted in various specialties of indoor patient departments (IPD) were included in the study. Multiple departments like medicine (including general ward, semi-special or special room and ICU), surgery, gynaecology, paediatric, orthopaedic included. Minimum 2 days of hospitalization of patients were included in the study and they were given this questionnaires at the time of discharge. They also given sufficient time and space to feel free for whatever they want to fill up the answers. Written consents were obtained from all respondents. Consent was given by either the patients themselves or one of their relatives. Patients not willing to participate and follow up patients were excluded from the study.

Data was entered into Microsoft excel 2013 and data was analysed by using Statistical package for social & sciences (SPSS 21.0 IBM corporation, California). “Unpaired t-test” was used to compare high score (>50) and low score (≤50) in age group. “Fisher’s exact test” was used to identify the difference between male & female in high score and low score group. P value less than 0.05 was consider statistically significant.

**Result:** A total number of 104 respondents participate in the study. Some avoid to participate as in hurry to go home so they were not force to fill up the form. So this participation is totally on willingness of respondents.

Total 120 indoor people given this questionnaires’ among them 104 responded so on that basis response rate is 86.6% found. Mean age of total respondents is 47.3. Considering gender, male 60 (57.7%) outnumbered the female 44 (42.3%).

**Questionnaires assessment:** Out of 104 total respondents, the number of respondents who gave answer of the questionnaires’ are shown in table 1. This categorised in 3 category 1) satisfied, 2) Average and 3) Poor. Table shows number and percentage of response towards doctor’s aspect, nurse aspect and all over hospital environment.

**Table: 1 Grading of satisfaction level to each of the questions**

Questionnaires’	Satisfied n=104 (%)	Average=104 (%)	Poor n=104 (%)
Doctor given sufficient time for checking	101(97.1)	3 (2.9)	0 (0)
Doctor listen carefully	102 (98.0)	2(2)	0 (0)
Doctor give answer the calls quickly	101 (97.1)	3 (2.9)	0 (0)
Doctor explain things in understandable way	101 (97.1)	3 (2.9)	0 (0)
Satisfaction with doctors diagnosis	100 (96.2)	3 (2.9)	1 (0.9)
Nurse has treat nicely and respectfully	102 (98.0)	2 (2)	0 (0)
Nurse listen carefully	102 (98.0)	2 (2)	0 (0)
Nurse give answer the calls quickly	101 (97.1)	2 (2)	1 (0.9)
Nurse explain things in understandable way	102 (98.0)	2 (2)	0 (0)
Nurse has check everything before giving treatment?	101 (97.1)	2 (2)	1 (0.9)
How was the reception desk of the hospital?	99 (95.2)	5 (4.8)	0 (0)
Easily identification to each and every department?	102 (98.0)	2 (2)	0 (0)
How was the staff behaviour?	100 (96.2)	4 (3.8)	0 (0)
How was your room or bed?	100 (96.2)	4 (3.8)	0 (0)
How was your bathroom?	96 (92.3)	6 (5.7)	2 (2)
How was service regarding laboratory technician?	100 (96.2)	3 (2.9)	1 (0.9)
Convenient visiting hours?	100 (96.2)	3 (2.9)	1 (0.9)
Easily accessible to medical speciality if needed?	99 (95.3)	4 (3.8)	1 (0.9)

To get appointment easily	98 (94.3)	5 (4.8)	1 (0.9)
Wait too long for treatment	98 (94.2)	4 (3.8)	2 (2)
Treatment fees	92 (88.6)	6 (5.7)	6 (5.7)
How do you rate overall services of the hospital?	101 (97.1)	3 (2.9)	0 (0)

Amongst 3 category of grading, considering “Satisfied” grade, the highest percentage of those who answered “satisfied” was for the question “Doctor listen carefully”, “Nurse has treat nicely and respectfully”, “Nurse listen carefully”, “Nurse explain things in understandable way”, Easily identification to each and every department” which is 98% in every question. This evaluate that respondents have higher level of satisfaction regarding doctor’s and nurse service as well as hospital cleanliness, waiting time and management. The “Poor” grade found in relation to “Treatment fee” question which is 5.7% though 88.6% of respondents was graded in “satisfied” category. So this must be shows some people have much more less fees expectation. “Overall services of hospital” grade who answered in “Satisfied” is 97.1% where as “Average” response found in 2.9% of respondents. This reflect hospital as whole regarding cleanliness, management, waiting time, response of staff etc.

On basis of satisfaction with Doctors care mean found was 3.0, satisfaction with nursing care 2.97 and with hospital environment 2.93.

Another analysis last 23<sup>rd</sup> question asked “Do you recommend this hospital to others even if you have many options?” the result shows that 95(91.3%) of respondents answered “yes” while 9 (8.6%) answered “no”. So on this basis we can say this hospital able to provide satisfaction in majority of population and it can lead as healthcare service provider in the particular area.

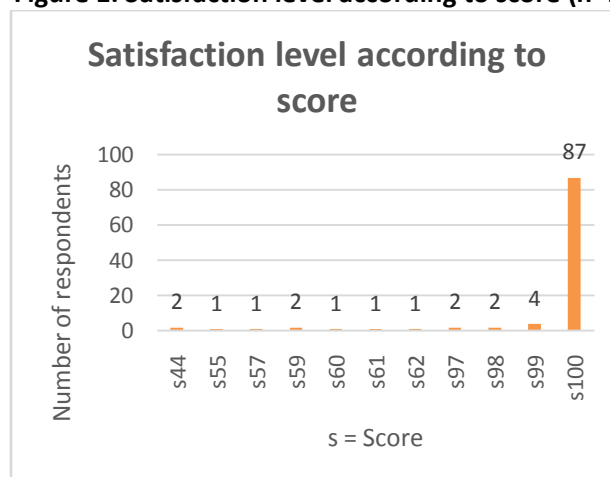
For further evaluation, grade has been given to particular scoring for assessment of satisfaction level in total instead of individual. So that category “Satisfied” is given score 3, “Average” is given score 2 and “Poor” is given score 1 for all 22 questions and for 23<sup>rd</sup> question categorized into “34 score for Yes” and “0 for No” answer. So total out of 100 score it was evaluated. According to this analysis total satisfaction scenario was 83.7% of respondents come out with 100 score and 14.4% of come out with 51-99 score, so total of 98.1% of respondents which shows overall higher rate of satisfaction and only 1.9% of respondents have lowest satisfaction.(Table 2).

**Table 2: Total satisfaction level according to Score**

Score	Number of respondents (n=104)
≤50 (Low)	2 (1.9%)
>50 (High)	102 (98.1%)

Maximum number of respondents 87 in number given score 100. As this indicate that overall satisfaction level is good in this hospital (Figure 1).

**Figure 1: Satisfaction level according to score (n=104)**



To calculate the difference of scoring in relation to age was done by using “unpaired t-test” in which P<0.05 was taken statistically significant. In our study P value between group with less than 50 score and more than 50 score was 0.9212 which was statistically not significant (Table 3). That means age does not affect scoring pattern. The respondents with good score (>50) were seen in all the age groups.

**Table 3: Influence of age on scoring**

	<50 score	>50 score
Age (mean±SD)	46±8	47.3±18.2

P value = 0.9212. Not significant

To calculate the difference of scoring in relation to gender was done by using “Fisher exact test”. In which P<0.05 was taken statistically significant. In our study P value between group with less than 50 score and more than 50 score was 1.0 which was statistically not significant. It shows that gender does not affect scoring pattern. The respondents with good score (>50) was seen in all respondents irrespective of gender (Table 4).

**Table 4: Influence of gender on Scoring**

	<50 grade	>50 grade
Male	1	59
Female	1	53

P value = 1.0 Not significant

**Discussion:** This survey based on patient centred study for hospital evaluation to improve patient health care services. By this study we get useful data which can help in improvement and also for leading the hospital ahead. It has also been shown that patients' satisfaction is associated with clinician satisfaction and less burnout.<sup>8,9</sup> Patient satisfaction is also known to be positively influenced by friendliness and the provision of information on the part of the physician.

There are such previous studies done by different researchers at setup and places. Here there is one more try to compare our study data with them to strengthen my study. Though it is obviously not similar results are found. As so many deviation of results are there. Ours is a first kind of study to evaluate influence of age and gender in scoring pattern.

A study done by Arvind Sharma et al, showed mean age of respondents was 42.9 years which is in accordance to our study that is 47.3 years.<sup>10</sup> Another study which strongly support our study is Minoti Baruah et al study with 47.78 years mean age.<sup>11</sup>

Among the questionnaires based on doctor aspect, nurse aspect and all over hospital environment 98% of respondents were satisfied regarding doctor's attention, nurse service and finding out any department. The study done by jawahar SK correlate with our study shows 90-95% of patients were satisfied with the service offered in the hospital.<sup>12</sup> They took parameters in their questionnaires were waiting time, facilities, perception about the performance of staff, appointment system, behaviour of staff, support service. This study was done in outpatient so some parameters like hospital cleanliness and administration could not found. Ours was inpatient study and in private setup and this is a first kind of study so it cover all the aspect of hospital.

Comparing our data with study done by Shivani Shekhawat et all, satisfaction with doctors care mean (Mean 3.97), satisfaction with nursing care (Mean 3.8), satisfaction with hospital care (Mean 3.79) and

ours are 3.0, 2.97 and 2.93 respectively which support the present study.<sup>13</sup>

In accordance with the study done by M V Kulkarni et al 75% were satisfied with overall services available in the hospital where as ours data shows 97.1% were satisfied.<sup>14</sup> These much of difference seen may be because of kulkarni study done at tertiary care hospital while ours was in private setup. So ours setup have good satisfaction regarding hospital services the only need to maintain these.

The "Poor" grade found in relation to "Treatment fee" which is 5.7%. Though the charges are not so much high but as we are living in developing country, all the patients can't afford some higher level services and some also expecting free of cost services.

The recommendation rate (to others) in our study is lower (91.3%) than the study done by Salih A. in which it was 98.8%.<sup>1</sup>

A total of 98.1% of respondents which shows overall higher rate of satisfaction and only 1.9% of respondents have lowest satisfaction. Another evaluation with statistical analysis shows that age and gender does not affect a scoring pattern. This unique kind of survey first time done in the present study.

**Conclusion:** To conclude this study we can stat that majority of respondents were satisfied with doctor's care, nurse care and hospital services. The only thing which dissatisfied minority of people was treatment fee. Although it can affordable by average people. Considering overall satisfaction scoring majority of people come out with score 100. There is no statistically significant influence of age and gender on scoring pattern. There are many studies done regarding patient satisfaction in outpatient tertiary care hospital but fewer study done in the private setup so the fruitful result of present study can support the future studies for further evaluation and improvement of healthcare services.

**Acknowledgment:** I convey my thanks to doctors & paramedical staff of all the departmental wards who offered their help to me as and when required. Above all I sincerely thank all patients who have kindly shared their personal experience & made this work possible.

**References:**

1. Salih A. Binsalih, Abdelkarim O. Wanness, Hani M. Tamim et al. Inpatients' care experience and satisfaction study. *J Family Community Med.* 2011 SepDec;18(3): 111–117.
2. Sumeet Singh 1, Paramjeet Kaur 2, Ritu Rochwani. Patient satisfaction levels in a tertiary care medical college hospital in Punjab, North India. *Int J Res Dev Health.* November 2013; Vol 1(4): 172-82.
3. Tirsit Retta Woldeyohanes, Tewodros Eyob Woldehaimanot et al. Perceived patient satisfaction with in-patient services at Jimma University Specialized Hospital, Southwest Ethiopia. Woldeyohanes et al. *BMC Res Notes* (2015) 8:285.
4. Aragon SJ, Gesell SB. A patient satisfaction theory and its robustness across gender in emergency departments. : A multi group structural equation modeling investigation. *Am J of Med Quality* 2003; 18: 229-40.
5. Ahmad I, Siraj-ud-din. Patients' satisfaction from the health care services. *Gomel Journal of Medical Sciences.* January-June 2010, Vol. 8, No. 1.
6. Rashid Al-Abri and Amina Al-Balushi. Patient Satisfaction Survey as a Tool Towards Quality Improvement. *Oman Medical Journal* (2014) Vol. 29, No. 1:3-7.
7. HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey. [last accessed on 2017 Feb 2] Available from: <http://www.anesthesiallc.com/images/eAlertsSource/HCAHPS-Survey-Questions.pdf>.
8. Scotti DJ, Harmon J, Behson SJ. Links among highperformance work environment, service quality, and customer satisfaction: An extension to the healthcare sector. *J Healthc Manag.* 2007;52:109–24.
9. Glickman SW, Baggett KA, Krubert CG, Peterson ED, Schulman KA. Promoting quality: The health care organization from a management perspective. *Int J Qual Health Care.* 2007;19:341–8.
10. Arvind Sharma, P K Kasar, Richa Sharma. patient satisfaction about hospital services: a study from the outpatient department of tertiary care hospital, jabalpur, Madhya pradesh, india. *National Journal of Community Medicine.* Volume 5; Issue 2, Apr – June 2014.
11. Minoti Baruah, Kaveeta Dawka, Amal C. Katak. Patient satisfaction: a tool for quality control. *International Journal of Community Medicine and Public Health.* May 2016; Vol 3, Issue 5. Page 1215-18.
12. Jawahar SK. A Study on Out Patient Satisfaction at a Super Specialty Hospital in India. *Internet Journal of Medical Update* 2007 Jul-Dec;2(2):13-7.
13. Shivani Shekhawat, Swati Garg, Drishti Jain, Urvashi Sharma. Inpatient satisfaction level survey at a tertiary care hospital. *International Journal of Research in Medical Sciences.* January 2017, Vol 5; Issue 1. Page 240-44.
14. M V Kulkarni, S Dasgupta, A R Deoke1, Nayse. Study of satisfaction of patients admitted in a tertiary care hospital in nagpur. *national journal of community medicine* 2011; Volume 2, Issue 1.

Conflict of interest: None
Funding: None
Cite this Article as: N Darji, B Gohil, D Shukla. An Assessment of Quality of Care in Inpatients of Multi-Speciality Hospital By Patient Satisfaction Tool. <i>Natl J Integr Res Med</i> 2018; 9(2):12-16