# A study of patient satisfaction and expectation in a newly established tertiary-care teaching hospital: a cross-sectional study

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Received October 27, 2015. Accepted December 28, 2015

### Abstract

**Background:** AIIMS in Patna, India, was started as a tertiary-care center under Pradhanmantri Swasthyay Surakshha Yojna scheme of Government of India. For a newly developing institute, patients' satisfaction regarding clinical services is of utmost importance for the overall growth of the institute.

**Objective:** To find out the level of patient satisfaction related to different parameters of quality health care in a newly established tertiary-care hospital and to understand the expectation of the patients with respect to quality of delivered health-care services.

**Materials and Methods:** A cross-sectional study was conducted among the patients attending OPD of AIIMS, Patna. Total number of patients interviewed using questionnaires were 445 from different departments.

**Result:** Around 47% patients told that more than 10 min were given to them during consultation and 95.5% patients were satisfied with the time given to them. Around 82% patients thought that treatment/suggestion given to them were either excellent or good. Around 74% patients were satisfied with treatment plan discussed with them. Around 86% had told that attitude of doctors at AIIMS, Patna, was better than doctors at other institutes where they had visited previously. Mean rating to doctors and other health staffs on the basis of advice/treatment given by them was 8.30 and 8.01, respectively, on a 0–10 scale. Around 55% patients thought that drugs should be free to them. Around 63% patients thought that investigations should be free to them and 59% thought that this institute should work as tertiary center but see all the patients who come to OPD.

**Conclusion:** Patient's satisfaction from health care decides the fate of health-care providers and health-care delivery system. The institute management need to ensure that the quality care is being provided and a standard is maintained by routine patient feedbacks and evaluation. Training of the faculty needs to be organized routinely.

KEY WORDS: Patient, satisfaction, expectation, tertiary-care center

Access this article online			
Website: http://www.ijmsph.com	Quick Response Code:		
DOI: 10.5455/ijmsph.2016.27102015302			

# Introduction

Patients are fundamental to health-care services, yet, at many instances, their viewpoints and input have not been taken by providers. Patients have started to care more for them, and patient-oriented health care has evolved as a chief area of quality.

In the perspective of health care, patient satisfaction has been defined as a combination of experiences, expectations,

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and needs perceived.<sup>[1]</sup> It has also been defined as the patients' subjective assessment of their cognitive and emotional reactions owing to the interaction between their hopes concerning ideal care and their insights of the real care.<sup>[2]</sup> It is recommended that hard work to enhance health care will be unused unless they reproduce what patients need from the service.<sup>[3]</sup>

Patients' satisfaction is based on several factors such as quality of clinical services delivered, accessibility of medicine, behavior of doctor and other health staffs, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences.<sup>[4]</sup> Patients are always judging—and they judge an organization against their own personal set of expectations. When persons enquire friends and family members for suggestions, they do not enquire for reports on the occurrence of precise events. Instead, they enquirek, "How was the care? Were you satisfied? Would you recommend this hospital?".<sup>[5]</sup>

All India Institute of Medical Sciences (AIIMS), Patna, started as a tertiary-care center under Pradhanmantri Swasthyay Surakshha Yojna scheme of Government of India. The idea behind setting up institute of national importance within different regions of the country was to provide state of art health care and specialized services at government run institute at most of the places in the country. Patients attending each hospital are responsible for spreading the good image of the hospital, and, therefore, satisfaction of patients attending the hospital is equally important for hospital management.

Taking all these into account, this study was conducted to find out the level of patient satisfaction related to different parameters of quality health care in a newly established tertiarycare hospital and to understand the expectation of the patients with respect to quality of delivered health-care services.

## **Materials and Methods**

This study was a cross-sectional study conducted among the patients attending the outpatient department (OPD) of AIIMS, Patna, India.

#### Sample Size

The sample size was calculated using the formula,  $n = Z^2(1 - \alpha/2)pq/d^2$  where  $Z(1 - \alpha/2) = 1.96$  at 95% confidence; p = prevalence of patient satisfaction, q = 1 - p; and d = absolute allowable error. For this study, we presumed maximum variability; hence, p = 0.5; q = 0.5; and d = 5%. Sample size thus yielded was 384. Adding a 10% for nonresponse and incomplete answers, the total number came out to be 422.

Finally, a total of 445 patients, attending the OPD of AIIMS, Patna, were selected randomly from different departments. These patients were interviewed using a structured questionnaire containing both close-ended and open-ended questions. The questionnaire was pretested. It covered the information related to patient's socioeconomic characteristics, satisfaction with health care provided in hospital, and expectations of patient with hospital. The informed consent was obtained from the patients.

## Results

Around 32% patients were of below 25 years age, and majority of patients were male (57.3%) subjects. Majority (61.6%) of them had obtained education up to or above 10th standard. Around 49% patients used public transport to arrive at AIIMS. Only 21% of patients found quality of public transport good [Table 1].

Table 1: General	characteristics	of	patients	and	their	mode	of
transportation at A	IIMS, Patna						

transportation at AIIMS, Patha					
Characteristics	Frequency	Percentage			
Age group (years)		00 <i>i</i>			
<25	143	32.1			
25–35	87	19.6			
35–45	81	18.2			
45–55	89	20.0			
55–65	45	10.1			
Gender					
Male	255	57.3			
Female	190	42.7			
Religion					
Hindu	390	87.6			
Muslim	55	12.4			
Education					
Illiterate	69	15.5			
Primary	36	8.1			
Secondary	66	14.8			
10th standard and above	274	61.6			
Occupation					
Government/private job	134	30.1			
Business	35	7.9			
Student	101	22.7			
Housewife	145	32.6			
Others	30	6.7			
Family income					
<1000/month	32	7.2			
1001-10,000/month	153	34.4			
10,001-25,000/month	105	23.6			
>25,000/month	155	34.8			
Mode of arrival to AIIMS Patna					
Through own vehicle	214	48.1			
Through public transport	216	48.6			
Through ambulance	6	1.3			
By foot	9	2.0			
Quality of public transport for this hospital					
Good	95	21.3			
Fair	99	22.3			
Bad	173	38.9			
Cannot say	78	17.5			

Characteristics	Frequency	Percentage
Time given by doctor to you		
Less than 2 min	9	2.0
2–5 min	91	20.5
6–10 min	134	30.1
More than 10 min	211	47.4
In your opinion time given by doctor to you was		
Adequate	425	95.5
Inadequate (more time should be given)	16	3.6
Cannot say	4	0.9
Satisfaction with the treatment/suggestion given by doctor in OPD		
Excellent	66	14.8
Good	299	67.2
Need to be improved	26	5.8
Cannot say	54	12.2
Explanation of disease status by doctor		
Explained properly and fully understood	231	51.9
Explained properly but did not fully understood	145	32.6
Not explained properly	69	15.5
Treatment plan discussed properly		
Yes	330	74.1
No	101	22.7
Cannot say	14	3.2
Attitude of doctors at AIIMS Patna in comparison with other center		
Better than previous experience	381	85.6
Same as previous experience	49	11.0
Bad than previous experience	6	1.3
Very bad than previous experience	9	2.1
Rating to doctors on a scale of 1–10 on the basis of advice/treatment given (mean and SD)	8.30 (1.73)	
Rating to other health staffs on a scale of 1–10 on the basis of advice given (mean and SD)	8.01 (1.83)	

Table 2: Patients' satisfaction with the care provided to them at AIIMS Patna

Around 47% patients told that more than 10 min were given to them during consultation, and 95.5% patients were satisfied with the time given to them. Around 82% patients thought that treatment/suggestion given to them were either excellent or good. Around 74% patients were satisfied with treatment plan discussed with them. Around 86% had told that attitude of doctors at AIIMS Patna was better than doctors at other institutes where they had visited previously. Mean rating to doctors and other health staffs on the basis of advice/treatment given by them was 8.30 and 8.01, respectively, on a 0-10 scale [Table 2].

Majority of patients expect that consultation should be free of cost and number of patient should unrestricted in OPD. Around 55% patients thought that drug should be free to them. Around 63% patients thought that investigations should be free to them and 59% thought that this institute should work as tertiary center but see all the patients who come to OPD [Table 3].

# Discussion

In an upcoming institute, it is important that, along with good facility made available to patients inside the hospital, some smaller looking points have to be kept in mind. Easily accessibility and approach to the health-care facility is equally important. Unless until the health-care facility is approachable, it is not going to be of any help to the public. We have to keep in mind that majority of our patient population is going to be from lower socioeconomic background and will be using public transport. In our survey, most of the patients mention that the public transport was bad (39%).

Around 47% of our surveyed patients mentioned that the time given by doctor was more than 10 min. It is a good practice to give adequate time to the patients. In a new institute, in its early phase, it is possible to give more time for one patient. It is also important as this builds up the reputation of the institute, which will be carried forward in future. A point of concern always looms over the future of any institute that, once the

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Characteristics	Frequency	Percentage
Consultation should be free or paid		
Free	252	56.7
Paid	193	43.3
Number of patient should be restricted in OPD		
Restricted	137	30.8
Unrestricted	269	60.5
Cannot say	39	8.7
Do you expect the drug to be given free/paid		
Free	246	55.3
Paid	25	5.6
Paid but at subsidized rate	174	39.1
If free, do you expect all the drug free or selected drug		
All drugs	242	54.4
Only lifesaving drug	124	27.8
Selected drugs from every groups	69	15.5
Cannot say	10	2.3
Drugs should be free for all patients or only for poor patients		
All patients	201	45.2
For poor patients only	228	51.2
Cannot say	16	3.6
Investigations should be free or paid		
Free	278	62.9
Paid	61	13.5
Paid but at subsidized rate	106	23.6
How do you expect this hospital to function		
As a tertiary center and see only referred patients	170	38.2
As a tertiary center but see all the patients	264	59.3
Cannot say	11	2.5

Table 3: Patients' expectation with the care provided to them at AIIMS Patna

footfalls starts to increase, it becomes difficult by the consultant or the resident to give adequate consultation time to the patient. Thus, at the very beginning, it is important to figure out how the institute is going to function. If it has to function as a tertiary-care center, then necessary administrative steps need to be taken from the beginning only. In this regard, restricting the number of patients depending upon the number of consultants is a measure point of concern.

Understanding the disease from patient's point of view is as important as getting it cured. Unless until the patient understands the disease, he or she will not be able to comply with the treatment or follow all the advices. Around 32.6% patients told us that though the doctor did made an effort to make them understand but they were not able to understand and 15.5% felt that doctor did not give enough effort to make them understand the disease. This is important as this may lead to mistrust and force the patients to seek advice from elsewhere. This may have happened because of one the following reasons—(a) doctor was overworked, seeing more patient in the stipulated time; (b) there was language issue during communication with patient; or (c) improper attitude or training of the doctor. After understanding the disease, it is important and necessary to discuss the management plan including investigation and treatment methods and duration with the patient. About 74.1% said that plan was discussed with them properly, but 22.7% of our surveyed patients felt that the treatment plan was not discussed with them.

When enquired about the drugs distribution, majority of the patient felt that they should get some kind of help from the institute in the form of either free drugs distribution (55.3%) or subsidized (39.1%) drugs distribution. When further probed, most of the patients (54.4%) were of opinion that all category of drugs should be given free, whereas 27.8% felt that only lifesaving drugs to be given free. Majority of patients (51.2%) also felt that free distribution to be restricted to people who would not be able to afford it (below poverty line strata). Medicines are important part of our health care and still patients pin their hopes on government organizations, not only for cheaper consultation but also for cheaper or free medicines. Health as a part of being responsibility of state should consider some free medicines and making rest available at subsidized rate for patients visiting government institutes.

To make accurate diagnosis and follow-up, the effectiveness of the treatment investigations have become an integral and necessary part of overall management. Modern investigations are not cheap, and it incurs a significant cost on patient and family. It is, therefore, not surprising that majority of surveyed patients (62.9%) wants it to be free while a quarter of those who answered said it should be at least subsidized if not free. While opening a tertiary-care center, the government should chalk out the plan for getting the basic investigations and should equip the hospital with some of the minimal facility. Later on, as per need of the population and expertise of the faculty and staff available, the services can be built up. It does not help to the cause of reputation of the institute in the very beginning if patients are being sent out for investigation.

However, around 59% felt that AIIMS Patna to see all the patients and working as a speciality center. It goes to show two things—first, tertiary care facility is either lacking or are not working as they should be in the already existing system of the city, and second, the institute should work hand in hand and in close collaboration with the state-run facility so that burden of basic health care is shared.

# Conclusion

Patient satisfaction is the desired outcome of every hospital. Patient's satisfaction from health care decides the fate of health-care providers and health-care delivery system. About 15% patients still thought that doctor did not give enough effort to make them understand the disease. Management needs to take necessary step to avoid these kinds of impression building among patients in the beginning of the institute. Training of the faculty need to be organized periodically on effective ways of dealing with patients and how to interact with them. It is also very important and necessary to discuss the management plan including investigation and treatment methods and duration with the patient especially in a tertiary-care center where patients comes for serious and terminal illnesses. Patients thought that this institute should work as tertiary center but see all the patients who come to OPD. It is not possible for an institute to do justice if it goes out to achieve a reputation of tertiary-care center and cater patients who can be managed at primary health-care centers.

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How to cite this article: Kumar S, Kumar A, Bhavana K, Kumar P, Kumar D. A study of patient satisfaction and expectation in a newly established tertiary-care teaching hospital: a cross-sectional study. Int J Med Sci Public Health 2016;5:1487-1491 Source of Support: Nil, Conflict of Interest: None declared.