



## Patients' attitude towards hospital services in a Tertiary care Institute of North East India: A cross-sectional study

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### Abstract

**Introduction:** Health care quality is a global issue and client's perception of satisfaction in a health system is an effective tool in assessing health care deliveries.

**Objectives:** To study the attitude of the patients towards hospital services in a tertiary care institute of North East India. 2. To assess the factors determining the patients' satisfaction.

**Methodology:** This was a hospital based cross-sectional study conducted during March and April 2016 among 280 eligible in-patients of a government tertiary health care facility who were selected by stratified sampling procedure. Data analysis was done using SPSS 25 and patients' attitude was assessed using Likert Scale.

**Results:** The study showed that 85% of the patient had positive attitude towards availability of doctors and nurses and 79.3% patient had positive attitude towards services provided by doctors. However, majority of the patients had negative attitude regarding the availability of medicines and surgical goods in the Hospital. Though 77.10% of the patients had positive attitude towards availability of lights and fans, but majority of the patients had negative attitude regarding availability of drinking water supply, cleanliness and quality of food provided in the hospital. The study revealed that the satisfaction varied significantly across different wards ( $p$  value-0.00), and different educational ( $p$  value-0.04) and occupational status ( $p$  value-0.03).

**Conclusion:** The study highlighted the facilitators and potential barriers which influence patient satisfaction. Efforts must be made to provide health facilities with the necessary infrastructure since these can ultimately influence the attitude of the hospital services.

**Keywords:** Patients' Attitude, Patients' satisfaction, Hospital services, Tertiary care Institute, In-patients

## Introduction

Health care quality is an important global issue especially in developing countries. In India, it has become a critical challenge to make the service more client-oriented, of good quality and satisfactory to the patients. Patient satisfaction has been defined as the patient's subjective evaluation of their cognitive and emotional reactions as a result of the interaction between their expectations regarding ideal care and their perception of the actual care<sup>[1]</sup>. Positive attitude towards hospital services or patient satisfaction depends upon many factors such as: Quality of clinical services provided, availability of medicine, cleanliness, behaviour of doctors and other health staff, cost of the services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences<sup>[2]</sup>.

In past few years the patient satisfaction has been at stake in many parts of the country. Thus, a research on patient satisfaction can be a simple but important tool to improve the quality of the services. Keeping this in view the present study was conducted with the objective to study the attitude of the patients towards hospital services in a tertiary care institute of North East India and to assess the factors determining the patients' attitude.

## Materials And Method

This was a hospital based cross-sectional study conducted in Agartala Government Medical College & GBP Hospital, which is a tertiary care hospital of Tripura, North East India. The study included patients who were admitted for at least 24 hours in the various wards of the hospital and who had given consent for participating in the study.

The sample size was calculated to be 266 considering the prevalence of satisfaction (P) among the patients to be 77.40 as found by Rajkumari B et al<sup>[3]</sup> in a government health facility in North East India, at 95% confidence interval and an absolute precision of 5%.

However, considering a 5% non-response rate the sample was rounded to 280 patients.

Stratified sampling procedure was adopted, and the various inpatient departments were considered as individual strata. From each stratum the expected number of admitted patients was calculated according to the bed occupancy rate to prepare the sampling frame. To ensure proportionate representation of each strata, study participants were selected by probability proportionate to size technique from the expected number of admitted patients for the inpatient ward. Then from each ward the given numbers of patients were selected by simple random sampling procedure.

A structured interview schedule was used to collect information from the patients. Attitude of the patients was assessed using 5 point Likert scale against 28 positive statements suggesting satisfaction on various hospital services. Considering a minimum score of 4 for positive attitude for each item a patient with a total score of  $\geq 112$  was said to be Satisfied and with a score of  $< 112$  to be unsatisfied or uncertain. Data analysis was done using SPSS 25 and were expressed in frequency and percentage. Statistical analysis was done by using Chi square test, Fisher's exact test and Student t test and a p value of  $< 0.05$  was deemed to be significant. The study was approved by the institutional ethics committee of the college.

## Results

The cross-sectional study included 280 patients admitted in various wards of AGMC and GBP hospital. The Sociodemographic Profile of the study participants showed that the mean age of the respondents was  $40.80 \pm 18.71$  years with majority of the respondents being female (55.70%), Hindu by religion (90.40%), belonging to General caste (36.8%) and having primary education (30.7%). Majority of the respondents belonged to BPL family (62.14%) and to rural area (61.4%). (Table 1)

The study showed that 85% of the patient had positive attitude towards availability of doctors and nurses round the clock with 53.20% patients agreeing and 31.80% patient strongly agreeing their presence. Similarly, 79.3% patient had positive attitude towards services provided by doctors. 57.50% patients agreed, and 31.50% patients strongly agreed that there was no delay in admission procedures. However, 11.40% patients strongly disagreed and 30.70% disagreed regarding the availability of medicines and surgical goods in the Hospital. (Table 2)

The present study showed that majority of the patients had negative attitude regarding availability of drinking water supply in the hospital, with 7.90% patients strongly disagreeing, 23.20% patients disagreeing and 27.90% patients neither agreeing or disagreeing regarding drinking water availability in the hospital. However, 77.10% of the patients had positive attitude towards availability lights and fans with 53.20% patients agreeing and 23.90% patient strongly agreeing their presence. Regarding Cleanliness of wards majority of the patients had positive attitude whereas regarding cleanliness of toilets in few

wards the patients were satisfied whereas in few wards they were dissatisfied. Regarding food hygiene, majority of the patients neither agreed nor disagreed to the quality of food provided in the hospital which may be an indication regarding their dissatisfaction towards the food services. (Table 3)

The Present study revealed that only 51 patients had overall satisfaction towards hospital service. Majority of the patients in Surgery & Orthopaedics wards (96.10%), Obstetrics & Gynaecology ward (94.2%) and Medicine/TB & Chest/Skin wards (80.6%) were having negative attitude and it was statistically significant (P value-0.00). Again, majority of the illiterate patients (94.2%), sakshar patients (84.3%) were having negative attitude towards hospital services and low education of the participants was significantly associated with positive attitude of the patient (P valoue-0.04). Majority of patients who were unskilled laborer (91.8%), businessman (88.9%), and students (88.0%) were having negative attitude towards hospital services and it was also statistically significant (P valoue-0.03).

**Table 1:** Sociodemographic profile of study participants:

		Mean	Standard Deviation
Age (in Years)		40.80	18.71
		Frequency (N=280)	Percentage(%)
Gender	Male	124	44.30
	Female	156	55.70
Religion	Hindu	253	90.40
	Muslim	21	7.50
	Christian	6	2.14
Caste	General	103	36.80
	Scheduled Caste	87	31.30
	Scheduled Tribe	43	15.35
	Other Backward Class	47	16.78
Education	Illiterate	52	18.57
	Sakshar	51	18.21
	Primary	86	30.71
	Secondary	59	21.07
	Higher Secondary	18	6.42
	Graduate & above	14	5.00
Occupation	Unskilled labour	49	17.50
	Skilled Labour	32	11.42
	House Wife	124	44.28
	Student	25	8.92
	Business	18	6.42
	Service	19	6.78
	Others	13	4.6
	Economic status	APL	106
	BPL	174	62.14
Residence	Urban	108	38.57
	Rural	172	61.43

**Table 2:** Attitude of the patients towards various hospital services

	Strongly Disagree	Disagree	Can't say	Agree	Strongly Agree
<b>Attitude of the patients towards services of health care providers</b>					
Doctors and nurses are available round the clock	5 (1.8%)	30 (10.7%)	7 (2.5%)	149 (53.2%)	89 (31.8%)
Behaviour of doctor is satisfactory	9 (3.2%)	31 (11.1%)	18 (6.4%)	149 (53.2%)	73 (26.1%)
Behaviour of nursing staff is satisfactory	2 (0.7%)	27 (9.6%)	11 (3.6%)	153 (54.6%)	87 (31.1%)
Behaviour of the hospital attendants is satisfactory	4 (1.4%)	22 (7.9%)	29 (10.4%)	155 (55.4%)	70 (25.0%)
<b>Attitude of the patients towards admission services</b>					
The registration counter was helpful	5 (1.8%)	16 (5.7%)	20 (7.1%)	159 (56.8%)	80 (28.6%)
The Hospital attendant was available during admission	6 (2.1%)	29 (10.4%)	40 (14.3%)	144 (51.4%)	61 (21.8%)
There was no delay in admission	6 (2.1%)	17 (6.1%)	9 (3.2%)	161 (57.5%)	87 (31.5%)
<b>Attitude of the patients towards diagnostic and treatment services</b>					
All tests advised were available in hospital itself	4 (1.4%)	21 (7.5%)	45 (16.1%)	134(47.9%)	76(27.1%)
Medicines & Surgical goods advised are available in the hospital itself.	32 (11.4%)	86(30.7%)	91(32.5%)	59(21.1%)	12(4.3%)
Cost of Medicine advised for purchase is reasonable.	15 (5.4%)	65(23.2%)	92(32.9%)	93(33.2%)	15(5.4%)
Cost of Diagnostic services are reasonable	3 (1.1%)	28(10.02%)	106(37.9%)	96(34.3%)	47(16.8%)

**Table 3:** Attitude of patients towards physical facilities and food quality of the hospital

	Strongly Disagree	Disagree	Can't say	Agree	Strongly Agree
<b>Attitude of patients towards physical facilities</b>					
Wheel chairs and trolleys gives satisfactory services	5 (1.8%)	20 (7.1%)	87 (31.1%)	116 (41.4%)	52 (18.6%)
Beds were available	17 (6.1%)	38 (13.6%)	6 (2.1%)	136 (48.6%)	83 (29.6%)
Drinking water supply is adequate	22 (7.9%)	65 (23.2%)	78 (27.9%)	85 (30.4%)	30 (10.7%)
Light & fan facilities are adequate	7 (2.5%)	42 (15.0%)	15 (5.4%)	149 (53.2%)	67 (23.9%)
Toilets are properly cleaned	11 (33.9%)	39 (13.9%)	16 (5.7%)	136 (48.6%)	78 (27.9%)
Wards cleaned frequently / whenever necessary	7 (2.5%)	13 (4.6%)	13 (4.6%)	162 (57.9%)	85 (30.4%)
<b>Attitude of the Patient towards food hygiene</b>					
Served food is tasty and hygienic	9 (3.2%)	24 (8.6%)	159 (56.8%)	61 (21.8%)	27 (9.6%)
Canteen prices are reasonable	2 (0.7%)	21 (7.5%)	148 (52.9%)	87 (31.1%)	22 (7.9%)
Canteen is clean & hygienic	3 (1.15)	29 (10.4%)	163 (58.2%)	63 (22.5%)	21 (7.5%)

**Table 4:** Factors affecting patients' satisfaction

		Score Group		P value
		Negative attitude (Score: <112, n=229)	Positive attitude (Score: ≥ 112, n=51)	
Ward	Medicine (Including TB & chest & Dermatology)	58 (80.60%)	14 (19.4%)	<b>0.00**</b>
	Surgery (Including orthopaedics)	99 (96.1%)	4 (3.9%)	
	Obstetrics & Gynae	49 (94.2%)	3 (5.8%)	
	Paediatrics	3 (14.3%)	18 (85.7%)	
	ENT	12 (85.7%)	2 (14.3%)	
	EYE	8 (44.4%)	10 (55.6%)	
Age	Mean age in years	40.86 ± 18.99	40.51 ± 17.59	0.90***
Sex	Male	98 (79.0%)	26 (21.0%)	0.35*
	Female	131 (84.0%)	25 (16.0%)	
Religion	Hindu	204 (80.60%)	49 (19.40%)	0.18**
	Others	25 (92.60%)	2 (7.4%)	
Caste	General	85 (82.5%)	18 (17.5%)	0.08*
	Scheduled Caste	65 (74.7%)	22 (25.3%)	
	Scheduled Tribe	40 (93.0%)	3 (7.0%)	
	OBC	39 (83.0%)	8 (17.0%)	
Education	Illiterate	49(94.2%)	3(5.8%)	<b>0.04*</b>
	Sakshar	43(84.3%)	8(15.7%)	
	Primary	67(77.9%)	19(22.1%)	
	Secondary	45(76.3%)	14(23.7%)	
	H/S	16(88.9%)	2(11.1%)	
	Graduate & above	9(64.3%)	5(35.7%)	
Occupation	Unskilled labour	45(91.8%)	4(8.2%)	<b>0.03**</b>
	Skilled labour	23(71.9%)	9(28.1%)	
	Housewife	102(82.3%)	22(17.7%)	
	Student	22(88.0%)	3(26.3%)	
	Business	16(88.9%)	2(11.1%)	
	Service	14(73.7%)	5(26.3%)	
	Others	7(53.8%)	6(46.2%)	
Family status	APL	85(80.2%)	21(19.8%)	0.53*
	BPL	125(81.7%)	28(18.3%)	
	ADHOC BPL	19(90.5%)	2(9.5%)	
Income group	≤2500	170(81.7%)	38(18.3%)	0.98*
	2501-5000	42(82.4%)	9(17.6%)	
	>5000	17(81.0%)	4(19.0%)	
Residence	Urban	94(87.0%)	14(13.0%)	0.07*
	Rural	135(78.5%)	4(19.0%)	

\* p value calculated using Chi square test. \*\* p value calculated using Fisher's exact test. \*\*\* p value calculated using unpaired t- test.

## Discussion

Assessment of patient's satisfaction to quality of health care service provided by any hospital depends greatly on its Doctor- patient relationship. While assessing the patient's attitude towards the health care providers, it has been found that their behaviour towards patient was satisfactory but not exemplary. Majority patients agreed that the behaviour of the doctors were satisfactory (79.3%) whereas 85.7% agreed that the behaviour of the nurses were satisfactory. Overwhelming number of patients (85%) said that doctors & staffs were available at their service whenever it was necessary. The results shown by the present study is consistent to a previous study conducted by Kumari R et al<sup>[4]</sup> at Lucknow.

The present study showed that 85.4% patients had positive attitude regarding the registration services and 89% patients had positive attitude regarding the admission procedure. Similar finding was obtained in a study conducted by Mishra P M et al<sup>[5]</sup>, where overall 82% people were satisfied with the services at the admission counter. Again, the present study showed that 75% of the patients had positive attitude towards availability of tests in the hospital. Medicine and surgical goods being not available in the pharmacy showed higher level of dissatisfaction. Regarding the cost of the prescribed medicine 38.2% were dissatisfied which is in contrast to a similar study conducted by Qadri S et al<sup>[6]</sup> in Haryana (43.3%).

In the present study 60% patients have agreed that wheel chairs & trolleys in the hospital premises were giving satisfactory services. Regarding other physical facilities, 41.1% of the patients had positive attitude towards the availability of drinking water in the hospital and 77.1% patients had positive attitude regarding adequate light and fan facilities in the respective wards. The study finding is consistent with studies conducted by Kumari R et al<sup>[4]</sup> and Sharma A et al<sup>[7]</sup> where 45.7% patients and 44% patients were satisfied with the availability of drinking water respectively. But the finding was low compared to a study conducted by Singh S et al<sup>[8]</sup> where

86.75% patients were satisfied with the wheel chair facility and 79% patients were satisfied with drinking water provision indicating there is necessity to improve these services. However, regarding the cleanliness in the wards, the study finding was better than studies conducted by Arshad AS et al<sup>[9]</sup>, Amrit Virk et al<sup>[1]</sup>, Singh S et al<sup>[8]</sup> in different parts of the country. The present study showed that overall 31.4% patients were satisfied with the hospital served food. But in the study conducted by Qadri S et al<sup>[6]</sup> 18.25% patients were dissatisfied regarding canteen facilities which was better than the study results.

The present study also revealed that majority of the patients had negative attitude towards hospital services who were admitted in major departments like Medicine, Surgery or Obstetrics ward which has >100% bed occupancy rate. Similar finding was obtained in a study conducted by Rajkumari B et al<sup>[3]</sup> where dissatisfaction was significantly more in patients admitted in major departments. Again, the present study revealed that patients with low educational status were more unsatisfied towards hospital services. This finding was in contrast to a study conducted by Ogbeyi OG et al<sup>[10]</sup> in Nigeria where dissatisfaction significantly increased with educational status.

Patient satisfaction is the desired outcome of every hospital. The study revealed that the satisfaction varied significantly across different wards, and different educational and occupational status. The study identified the facilitators and number of potential barriers which the hospital management needs to address to influence patient satisfaction. The study highlighted that assessment of patients' satisfaction should be conducted regularly for evaluating the services and for overall improvement in the quality of care provided.

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