

# Assessment of Satisfaction Levels of the Outpatients Attending Outpatient Departments in a Quaternary Care Hospital

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## ABSTRACT

**Background:** The quality of service (QOS) needs to be assessed at regular intervals by hospitals in the form of patient satisfaction. The outpatient department (OPD) is a “shop window” of a hospital and measurement in this area is a key determinant of health care. This study aims to assess the level of satisfaction among outpatients attending the superspecialty departments of a quaternary care teaching hospital.

**Materials and methods:** Our study was conducted in the OPDs of Narayana Medical College Hospital, Nellore, India, from July 2017 to August 2017. The consent was obtained from 205 patients and were enrolled randomly. The short-form patient satisfaction questionnaire (PSQ-18) was used to collect the data and analyzed using the SPSS (19) statistical software.

**Results:** Out of 205, 146 (71%) were males, 59 (29%) females. The mean scores for subscales, general satisfaction, communication, interpersonal manner, technical quality, financial aspects, and consultation time spent during the visit, accessibility, and convenience, were  $4.03 \pm 0.79$ ,  $4.39 \pm 0.66$ ,  $4.60 \pm 0.55$ ,  $3.86 \pm 0.67$ ,  $3.37 \pm 0.83$ ,  $3.77 \pm 0.89$ , and  $3.77 \pm 0.67$ , respectively. Subscale scores for interpersonal relation and communication are high for the patients. The scores for interpersonal relation and financial aspects were statistically significant.

**Conclusion:** The subscales general satisfaction, communication, interpersonal relation, technical quality were rated better to good with mean  $\pm$  SD as  $4.13 \pm 0.66$  and consultation time and finance aspects were rated good with mean  $\pm$  SD as  $3.57 \pm 0.86$ . The variables affecting are age, socioeconomic status, expectations and clinical quality of doctor. Feedback surveys and training of staff are recommended.

**Keywords:** Consultation time, Patient satisfaction, PSQ-18, Quaternary care hospital.

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## INTRODUCTION

The patient care perception compared with the expectation is the recent measure of patient satisfaction.<sup>1</sup> By measuring this component in health care, problems can be identified and also further evaluation can be done.<sup>2</sup> Fulfillment of this aspect shall retain the existing patients and also attract new patients. It also reduces malpractice claims.<sup>3</sup> Lot of standardized questionnaires are available to assess patient satisfaction.<sup>4-7</sup>

The aim of our study was to determine the level of satisfaction among outpatients attending the superspecialty departments of a quaternary care teaching hospital.

## MATERIAL AND METHODS

Study design: descriptive cross-sectional study.

Study setting: A 1,420-bedded quaternary care teaching hospital.

Study period: July 2017–August 2017.

Sample size (n): 205.

Sampling technique: random sampling and face-to-face interview.

Institutional ethical committee (IEC) approval has been obtained.

## Data Collection

The data have been obtained from the subjects of the study after a written informed consent and face-to-face interview were conducted in the local Telugu language.

The standard PSQ-18 questionnaire<sup>8</sup> was distributed and it consists of three parts:

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- Personal details
- Consultation subscale (Q12, Q15)
- Other subscales
  - Communication (Q1, Q13)
  - General satisfaction (Q3, Q17)
  - Technical quality (Q2, Q4, Q6, Q14)
  - Interpersonal relation (Q10, Q11)
  - Finance (Q5, Q7)
  - Accessibility and convenience (Q8, Q9, Q16, Q18)

The five-point Likert scale ranging from “strongly agree” to “strongly disagree” was used after scoring for each item of seven subscales. Thus, these items were averaged together to create all seven subscale scores.<sup>5,8</sup>

## Statistical Analysis

Data were analyzed by the SPSS version 19 statistical software. Descriptive statistics presented as proportions, mean, median, and standard deviation. The standard “*t*” test was used and a *p* value of <0.05 was considered significant.

## RESULTS

### Demographic Characteristics

A total of 205 patients participated in the study. Majority of them were males—146 (71%); 48 (23.4%) were above 60 years. Out of 205, the education of 89 (43.4%) was up to the school level. The employment status of most of the patients (94, 45.9%) was farmers, self-employed, and workers categorized under others. Majority of the participants (156, 76.1%) were follow-up patients (Table 1). Out of 205, participants have consulted in the urology (54, 26.3%), cardiology (53, 25.9%), and cardiothoracic vascular surgery (39, 19.0%).

### Patient Satisfaction Scores

The mean scores obtained for the subscales when arranged from highest to lowest satisfaction scores are as follows:

Interpersonal relation ( $4.60 \pm 0.55$ ), communication ( $4.39 \pm 0.66$ ), general satisfaction ( $4.03 \pm 0.79$ ), technical quality ( $3.86 \pm 0.67$ ), consultation time ( $3.77 \pm 0.89$ ), accessibility and convenience ( $3.77 \pm 0.67$ ), finance ( $3.37 \pm 0.83$ ) (Table 2).

### Genderwise Patient Satisfaction

Subscale scores for general satisfaction, communication, interpersonal relation, and technical quality are high for female patients. Whereas financial aspects, doctor consultation time, accessibility, and convenience are high for male patients. The *p* value suggests that general satisfaction scores are statistically significant (Table 3).

### Age Group and Patient Satisfaction

Subscale scores for interpersonal manner are high for the patients who fall under the age group of 31–40 years. The scores for interpersonal manner are statistically significant. In general, patients with age group >60 are satisfied (Table 4).

### Education Level and Patient Satisfaction

Subscale scores for interpersonal manner and general satisfaction are high for the patients who are not educated while in communication, patients of the school education level are more satisfied (Table 5).

### Employment Status and Patient Satisfaction

Interpersonal relations, communication, general satisfaction, and accessibility were high for retired employees. Employed category is more satisfied with technical quality and financial subscales. Students expressed satisfaction for Doctor consultation time (Table 6).

### Visit and Patient Satisfaction

Subscale scores for interpersonal relation are high for the new patients. Subscale scores suggest that follow-up patients are more satisfied while in communication the attenders/others are more satisfied (Table 7).

**Table 1:** Demographic characteristics of study subjects (*n* = 205)

Characteristics	<i>n</i> (%)
Gender	
Male	146 (71.2)
Female	59 (28.8)
Age (years)	
18–30	41 (20.0)
31–40	29 (14.1)
41–50	47 (22.9)
51–60	40 (19.5)
>60	48 (23.4)
Education	
No education	42 (20.5)
School education	89 (43.4)
College education	74 (36.1)
Employment status	
Unemployed	39 (19.0)
Student	12 (5.9)
Employed	36 (17.6)
Retired	24 (11.7)
Others	94 (45.9)
Visit to hospital	
New patient	36 (17.6)
Follow-up patient	156 (76.1)
Others	13 (6.3)
Department	
Cardiology	53 (25.9)
CTVS	39 (19.0)
Endocrinology	15 (7.3)
Medical gastroenterology	21 (10.2)
Nephrology	11 (5.4)
Neurology	6 (2.9)
Plastic surgery	6 (2.9)
Urology	54 (26.3)
Waiting time	
<1 hour	152 (74.1)
1–2 hours	33 (16.1)
>2 hours	20 (9.8)
Consultation time	
<15 minutes	113 (55.1)
15–30 minutes	67 (32.7)
>30 minutes	25 (12.2)
Overall opinion	
Very good	57 (27.8)
Good	120 (58.5)
Fair	23 (11.2)
Bad	4 (2.0)
Very bad	1 (0.5)
Group	
A	92 (44.9)
B	113 (55.1)

**Table 2:** Patient satisfaction score distribution for subscales

Characteristics	Mean $\pm$ SD (n = 205)
General satisfaction	4.03 $\pm$ 0.79
Communication	4.39 $\pm$ 0.66
Interpersonal relation	4.60 $\pm$ 0.55
Technical quality	3.84 $\pm$ 0.57
Finance aspects	3.37 $\pm$ 0.83
Doctor consultation time	3.77 $\pm$ 0.89
Accessibility and convenience	3.77 $\pm$ 0.67

**Table 3:** Patient satisfaction score distribution with respect to the gender

Gender	Male (n = 146)		Female (n = 59)	p value
	Mean $\pm$ SD	Mean $\pm$ SD		
General satisfaction	3.96 $\pm$ 0.83	4.22 $\pm$ 0.65	0.020	
Communication	4.36 $\pm$ 0.68	4.48 $\pm$ 0.58	0.228	
Interpersonal relation	4.56 $\pm$ 0.57	4.68 $\pm$ 0.48	0.156	
Technical quality	3.82 $\pm$ 0.54	3.89 $\pm$ 0.63	0.700	
Finance aspects	3.41 $\pm$ 0.74	3.27 $\pm$ 0.01	0.319	
Doctor consultation time	3.79 $\pm$ 0.91	3.71 $\pm$ 0.85	0.534	
Accessibility and convenience	3.78 $\pm$ 0.67	3.75 $\pm$ 0.65	0.760	

**Table 4:** Patient satisfaction score distribution with respect to the age group

Age group (Years)	18–30 (n = 41)		31–40 (n = 29)		41–50 (n = 47)		51–60 (n = 40)		>60 (n = 48)		p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	3.89 $\pm$ 0.77	4.19 $\pm$ 0.51	4.13 $\pm$ 0.71	3.98 $\pm$ 0.85	4.03 $\pm$ 0.96	0.503					
Communication	4.40 $\pm$ 0.64	4.41 $\pm$ 0.52	4.44 $\pm$ 0.68	4.23 $\pm$ 0.78	4.48 $\pm$ 0.64	0.463					
Interpersonal relation	4.40 $\pm$ 0.70	4.78 $\pm$ 0.41	4.69 $\pm$ 0.41	4.59 $\pm$ 0.58	4.58 $\pm$ 0.56	0.049					
Technical quality	3.79 $\pm$ 0.54	3.76 $\pm$ 0.47	3.89 $\pm$ 0.56	3.79 $\pm$ 0.64	3.92 $\pm$ 0.59	0.644					
Finance aspects	3.40 $\pm$ 0.69	3.50 $\pm$ 0.78	3.42 $\pm$ 0.87	3.38 $\pm$ 0.88	3.24 $\pm$ 0.91	0.726					
Doctor consultation time	4.11 $\pm$ 0.75	3.97 $\pm$ 0.72	3.71 $\pm$ 0.86	3.58 $\pm$ 0.93	3.59 $\pm$ 1.02	0.022					
Accessibility and convenience	3.82 $\pm$ 0.65	3.71 $\pm$ 0.41	3.83 $\pm$ 0.77	3.71 $\pm$ 0.69	3.79 $\pm$ 0.71	0.876					

**Table 5:** Patient satisfaction score distribution with respect to the education level

Education	No education (n = 42)		School education (n = 89)		College education (n = 74)		p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	4.10 $\pm$ 0.83	3.98 $\pm$ 0.75	4.05 $\pm$ 0.80	0.708			
Communication	4.39 $\pm$ 0.72	4.44 $\pm$ 0.58	4.33 $\pm$ 0.71	0.527			
Interpersonal relation	4.70 $\pm$ 0.44	4.54 $\pm$ 0.62	4.60 $\pm$ 0.51	0.314			
Technical quality	3.82 $\pm$ 0.59	3.83 $\pm$ 0.54	3.84 $\pm$ 0.58	0.717			
Finance aspects	3.31 $\pm$ 0.89	3.34 $\pm$ 0.81	3.44 $\pm$ 0.83	0.644			
Doctor consultation time	3.61 $\pm$ 0.92	3.88 $\pm$ 0.88	3.72 $\pm$ 0.88	0.231			
Accessibility and convenience	3.67 $\pm$ 0.69	3.71 $\pm$ 0.60	3.90 $\pm$ 0.71	0.126			

**Table 6:** Patient satisfaction score distribution with respect to the employment status

Employment	Unemployed (n = 39)		Student (n = 12)		Employed (n = 36)		Retired (n = 24)		Others (n = 94)		p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	3.87 $\pm$ 0.87	4.12 $\pm$ 0.74	4.02 $\pm$ 0.79	4.20 $\pm$ 0.72	4.05 $\pm$ 0.77	0.558					
Communication	4.25 $\pm$ 0.68	4.45 $\pm$ 0.45	4.40 $\pm$ 0.64	4.62 $\pm$ 0.53	4.38 $\pm$ 0.70	0.316					
Interpersonal relation	4.52 $\pm$ 0.63	4.29 $\pm$ 0.75	4.59 $\pm$ 0.54	4.72 $\pm$ 0.46	4.63 $\pm$ 0.50	0.187					
Technical quality	3.64 $\pm$ 0.62	3.77 $\pm$ 0.63	3.89 $\pm$ 0.44	3.96 $\pm$ 0.47	3.87 $\pm$ 0.58	0.130					
Finance aspects	3.43 $\pm$ 0.83	3.54 $\pm$ 0.78	3.59 $\pm$ 0.82	3.41 $\pm$ 0.81	3.23 $\pm$ 0.83	0.199					
Doctor consultation time	3.82 $\pm$ 0.94	3.83 $\pm$ 0.77	3.76 $\pm$ 0.78	3.68 $\pm$ 0.85	3.77 $\pm$ 0.94	0.984					
Accessibility and convenience	3.69 $\pm$ 0.65	3.54 $\pm$ 0.69	3.95 $\pm$ 0.58	4.01 $\pm$ 0.60	3.71 $\pm$ 0.70	0.081					

## Outpatient Departments and Patient Satisfaction

Subscale scores for general satisfaction and technical quality are high in cardiology outpatient department (OPD). Subscale scores for communication, interpersonal manner, and financial aspects are high in neurology OPD. Subscale score for time spent with the doctor is high in the cardiovascular thoracic surgery OPD. Subscale score for accessibility and convenience is high in the nephrology OPD. The *p* value suggests that difference in the scores of interpersonal manner, financial aspects, and time spent with the doctor are statistically significant (Table 8).

## Waiting Time and Patient Satisfaction

Subscale scores for interpersonal relation and communication are high for the patients whose waiting time is less than 1 hour. The scores for interpersonal manner and financial aspects were statistically significant. Even though the waiting time of the patient is more than 2 hours and if the doctor consultation time is convincing, the general satisfaction score is high (Table 9).

## Consultation Time and Patient Satisfaction

Subscale scores for interpersonal relation and general satisfaction are high for the patients whose consultation time is more than 30 minutes. The scores of general satisfaction are more or less same

**Table 7:** Patient satisfaction score distribution with respect to their visit

Visit	New patient (n = 36)	Follow-up (n = 156)	Others (n = 13)	p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	4.02 $\pm$ 0.83	4.07 $\pm$ 0.75	3.61 $\pm$ 1.00	0.133
Communication	4.38 $\pm$ 0.75	4.37 $\pm$ 0.64	4.61 $\pm$ 0.58	0.465
Interpersonal relation	4.62 $\pm$ 0.52	4.59 $\pm$ 0.56	4.61 $\pm$ 0.58	0.948
Technical quality	3.86 $\pm$ 0.54	3.84 $\pm$ 0.58	3.77 $\pm$ 0.53	0.881
Finance aspects	3.44 $\pm$ 0.91	3.33 $\pm$ 0.81	3.73 $\pm$ 0.78	0.216
Doctor consultation time	3.56 $\pm$ 1.14	3.80 $\pm$ 0.83	4.00 $\pm$ 0.76	0.241
Accessibility and convenience	3.85 $\pm$ 0.76	3.77 $\pm$ 0.64	3.63 $\pm$ 0.69	0.586

**Table 8:** Patient satisfaction score distribution with respect to the outpatient departments

Departments	CARD (n = 53)	CTVS (n = 39)	ENDO (n = 15)	MGE (n = 21)	NEPH (n = 11)	NEU (n = 6)	PLS (n = 6)	URO (n = 54)	p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	4.24 $\pm$ 0.81	3.85 $\pm$ 0.60	4.20 $\pm$ 0.75	3.95 $\pm$ 0.89	4.18 $\pm$ 0.78	3.41 $\pm$ 1.15	4.16 $\pm$ 0.40	3.97 $\pm$ 0.80	0.131
Communication	4.49 $\pm$ 0.73	4.32 $\pm$ 0.45	4.33 $\pm$ 0.55	4.07 $\pm$ 0.81	4.45 $\pm$ 0.65	4.66 $\pm$ 0.40	4.33 $\pm$ 0.51	4.46 $\pm$ 0.69	0.295
Interpersonal relation	4.67 $\pm$ 0.59	4.51 $\pm$ 0.45	4.63 $\pm$ 0.63	4.50 $\pm$ 0.50	4.40 $\pm$ 0.73	5.00 $\pm$ 0.00	3.91 $\pm$ 0.86	4.68 $\pm$ 0.45	0.012
Technical quality	4.05 $\pm$ 0.65	3.72 $\pm$ 0.39	3.75 $\pm$ 0.69	3.61 $\pm$ 0.59	3.77 $\pm$ 0.42	3.62 $\pm$ 0.54	3.75 $\pm$ 0.61	3.86 $\pm$ 0.51	0.307
Finance aspects	3.21 $\pm$ 1.05	3.15 $\pm$ 0.65	3.86 $\pm$ 1.00	3.26 $\pm$ 0.70	3.59 $\pm$ 0.62	4.00 $\pm$ 0.83	3.58 $\pm$ 0.80	3.46 $\pm$ 0.64	0.029
Doctor consultation time	3.35 $\pm$ 0.90	4.37 $\pm$ 0.67	4.33 $\pm$ 0.79	3.90 $\pm$ 0.88	3.86 $\pm$ 0.71	3.00 $\pm$ 0.77	4.00 $\pm$ 0.63	3.58 $\pm$ 0.80	<0.0001
Accessibility and convenience	3.90 $\pm$ 0.71	3.45 $\pm$ 0.44	3.73 $\pm$ 0.64	3.71 $\pm$ 0.81	4.13 $\pm$ 0.76	3.83 $\pm$ 0.68	3.83 $\pm$ 0.49	3.83 $\pm$ 0.65	0.035

CARD, cardiology; CTVS, cardiothoracic vascular surgery; ENDO, endocrinology; MGE, medical gastroenterology; NEPH, nephrology; NEU, neurology; PLS, plastic surgery; URO, urology

**Table 9:** Patient satisfaction score distribution with respect to the waiting time

Waiting time	<1 hour (n = 152)	1–2 hours (n = 33)	>2 hours (n = 20)	p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	4.03 $\pm$ 0.78	3.86 $\pm$ 0.84	4.27 $\pm$ 0.71	0.182
Communication	4.41 $\pm$ 0.64	4.39 $\pm$ 0.64	4.27 $\pm$ 0.80	0.690
Interpersonal relation	4.65 $\pm$ 0.45	4.43 $\pm$ 0.75	4.42 $\pm$ 0.76	0.04
Technical quality	3.86 $\pm$ 0.68	3.85 $\pm$ 0.75	3.85 $\pm$ 0.52	0.996
Finance aspects	3.43 $\pm$ 0.78	3.01 $\pm$ 0.87	3.50 $\pm$ 1.01	0.023
Doctor consultation time	3.77 $\pm$ 0.89	3.65 $\pm$ 0.96	4.00 $\pm$ 0.77	0.389
Accessibility and convenience	3.77 $\pm$ 0.66	3.73 $\pm$ 0.64	3.82 $\pm$ 0.77	0.890

as that of <15 minutes, which means patients are not focused to the consultation time either <15 minutes or >30 minutes but are more toward the quality of care provided. Patients are uncertain to express satisfaction about the financial aspects (Table 10).

### Overall Opinion and Patient Satisfaction

Patients, who are satisfied generally and also with accessibility and convenience, rated overall very good. Patients, who are satisfied with communication, technical quality, doctor consultation time, and financial aspects, rated overall good. Patients, who are satisfied with interpersonal relation, rated overall fair. As the frequency of the patient who expressed overall poor is only  $n = 1$ , the scores

**Table 10:** Patient satisfaction score distribution with respect to the consultation time

Consultation time	<15 minute (n = 113)	15–30 minute (n = 67)	>30 minute (n = 25)	p value
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	
General satisfaction	4.05 $\pm$ 0.76	4.00 $\pm$ 0.83	4.06 $\pm$ 0.79	0.899
Communication	4.45 $\pm$ 0.61	4.33 $\pm$ 0.73	4.28 $\pm$ 0.64	0.328
Interpersonal relation	4.61 $\pm$ 0.52	4.56 $\pm$ 0.61	4.66 $\pm$ 0.49	0.711
Technical quality	3.94 $\pm$ 0.74	3.72 $\pm$ 0.60	3.83 $\pm$ 0.52	0.085
Finance aspects	3.25 $\pm$ 0.80	3.52 $\pm$ 0.79	3.54 $\pm$ 0.98	0.062
Doctor consultation time	3.82 $\pm$ 0.85	3.67 $\pm$ 0.93	3.80 $\pm$ 0.96	0.524
Accessibility and convenience	3.80 $\pm$ 0.63	3.75 $\pm$ 0.69	3.73 $\pm$ 0.78	0.842

are neglected. The  $p$  value suggests that the scores of the general satisfaction and communication are statistically significant (Table 11).

### Groupwise Patient Satisfaction

The subscale scores of the group B (patients who visit doctor twice in a day, once for advice and second time along with the advised investigation reports) are high for interpersonal relation, communication, general satisfaction, technical quality, financial aspects, accessibility, and convenience. While the scores of group A (patients who consult the doctor at once on that particular day)

**Table 11:** Patient satisfaction score distribution with respect to the overall opinion

	<i>Very good (n = 57)</i>	<i>Good (n = 120)</i>	<i>Fair (n = 23)</i>	<i>Bad (n = 4)</i>	<i>Very bad (n = 1)</i>	
<i>Overall opinion</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>p value</i>
General satisfaction	4.24 ± 0.81	4.05 ± 0.71	3.60 ± 0.86	3.12 ± 0.94	4.00 ± 0.00	0.002
Communication	4.36 ± 0.75	4.44 ± 0.56	4.41 ± 0.59	3.25 ± 1.50	4.50 ± 0.00	0.011
Interpersonal relation	4.54 ± 0.70	4.62 ± 0.44	4.65 ± 0.61	4.12 ± 0.75	5.00 ± 0.00	0.335
Technical quality	3.87 ± 0.63	3.90 ± 0.70	3.64 ± 0.62	3.56 ± 0.65	4.00 ± 0.00	0.447
Finance aspects	3.34 ± 0.98	3.40 ± 0.79	3.28 ± 0.59	3.25 ± 1.04	4.00 ± 0.00	0.878
Doctor consultation time	3.73 ± 0.98	3.89 ± 0.82	3.30 ± 0.77	3.50 ± 1.47	3.50 ± 0.00	0.060
Accessibility and convenience	3.86 ± 0.76	3.77 ± 0.56	3.60 ± 0.82	3.18 ± 0.94	4.50 ± 0.00	0.148

**Table 12:** Patient satisfaction score distribution with respect to the group

	<i>A (n = 92)</i>	<i>B (n = 112)</i>	
<i>Group</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>p value</i>
General satisfaction	3.92 ± 0.78	4.12 ± 0.78	0.080
Communication	4.35 ± 0.72	4.42 ± 0.60	0.479
Interpersonal relation	4.53 ± 0.58	4.65 ± 0.52	0.149
Technical quality	3.82 ± 0.77	3.88 ± 0.59	0.509
Finance aspects	3.33 ± 0.69	3.40 ± 0.93	0.538
Doctor consultation time	3.96 ± 0.87	3.61 ± 0.88	0.005
Accessibility and convenience	3.75 ± 0.63	3.79 ± 0.70	0.643

are high for the doctor consultation time, which are found to be statistically significant (Table 12).

## DISCUSSION

The factors of various studies that determine patient satisfaction are age, socioeconomic condition, competence, technologies, admission and discharge procedure, emergency, interpersonal communication, etc.<sup>9</sup> These studies improve the quality of service (QOS) in the healthcare sector, thus increasing the patient satisfaction levels and reach out their expectations; thereby, outcomes of dissatisfied patients also can be improved.<sup>10</sup>

When compared with Chander et al. study,<sup>11</sup> our study had higher scores in general satisfaction, technical quality, communication, and interpersonal relations. The courteousness and friendly behavior of doctors resulted in higher satisfaction scores among the patients. The scores were lower for finance aspects as it varies from subject to subject depending on their socioeconomic conditions and expectations.

## CONCLUSION AND RECOMMENDATIONS

Out of total sample of 205, there are specialitywise urology (54, 26.3%), cardiology (53, 25.9%), and cardiothoracic vascular surgery (39, 19.0%) departments. The waiting time of 74.1% ( $n = 152$ ) was <1 hour at urology, cardiology, CTVS departments. While 55.1% ( $n = 113$ ) had the consultation time of <15 minutes, 32.7% ( $n = 67$ ) had 15–30 minutes and the rest 12.2% ( $n = 25$ ) had >30 minutes. Overall opinion of majority of the patients was good ( $n = 120$ , 58.5%).

Based on the mean scores, the subscales of all domains of the study are as follows: interpersonal relations ( $4.60 \pm 0.55$ ), communication ( $4.39 \pm 0.66$ ), general satisfaction ( $4.03 \pm 0.79$ ), technical quality ( $3.86 \pm 0.67$ ), doctor consultation time ( $3.77 \pm 0.89$ ),

accessibility and convenience ( $3.77 \pm 0.67$ ), and finance aspects ( $3.37 \pm 0.83$ ).

It is to conclude that the general satisfaction, communication, interpersonal relations, technical quality, accessibility, and convenience are rated better to good.

Consultation time with doctor and finance aspects even though rated good, the variables affecting are many ranging from age, socioeconomic status, expectations, clinical quality of doctor, approach, and answering queries by specific doctors, which shall influence the satisfaction at that moment and time.

There is always scope for improvement in proper information and communication to the needy at right time, convenience, comfort, and waiting time reduction.

Annexure feedback and surveys at regular intervals shall only guide administrators to constantly monitor and identify issues and appropriate action and decisions be implemented. Regular training to all categories of staff on attitudes, behavior, and communication is recommended.

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## ANNEXURE

## ANNEXURE I

**NARAYANA MEDICAL COLLEGE AND HOSPITAL**Chinthareddypalem , Nellore**PATIENT FEEDBACK****Consent**

Please express your opinion on the following statements about the hospital to serve you better. Your personal information and responses will be kept confidential. We request your consent for filling this form and thank you for sparing your valuable time.

Date: \_\_\_\_\_ Reg No: \_\_\_\_\_ Patient Name: \_\_\_\_\_ Age: \_\_\_\_\_ M/F Dept.: \_\_\_\_\_

Doctor: \_\_\_\_\_ OP Registration Time: \_\_\_\_\_ First Consultation In Time: \_\_\_\_\_ Out Time: \_\_\_\_\_

Second Consultation In Time: \_\_\_\_\_ Out Time: \_\_\_\_\_ Mob No: \_\_\_\_\_ Signature: \_\_\_\_\_

How strongly do you AGREE or DISAGREE with each of the following statements?

(Tick One Number on each Line)

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. Doctors are good about explaining the reason for medical tests.....	1	2	3	4	5
2. I think my doctor's office has everything needed To provide complete medical care.....	1	2	3	4	5
3. The medical care I have been receiving is just about perfect.....	1	2	3	4	5
4. Sometimes doctors make me wonder if their diagnosis is correct.....	1	2	3	4	5
5. I feel confident that I can get the medical care I need without being set back financially.....	1	2	3	4	5
6. When I go for medical care, they are careful to check everything when treating and examining me.....	1	2	3	4	5
7. I have to pay for more of my medical care than I can afford.....	1	2	3	4	5
8. I have easy access to my medical specialists I need.....	1	2	3	4	5
9. Where I get my medical care, people have to wait too long for emergency treatment.....	1	2	3	4	5
10. Doctors act too impersonal and business like towards me....	1	2	3	4	5
11. My doctors treat me in a very friendly and courteous manner.....	1	2	3	4	5

12. Those who provide my medical care sometimes hurry too much when they treat me.....	1	2	3	4	5
13. Doctors sometimes ignore what I tell them.....	1	2	3	4	5
14. I have some doubts about the ability of the doctors who treat me.....	1	2	3	4	5
15. Doctors usually spend plenty of time with me.....	1	2	3	4	5
16. I find it hard to get an appointment for Medical care right way.....	1	2	3	4	5
17. I am dissatisfied with some things about the medical care I receive.....	1	2	3	4	5
18. I am able to get medical care whenever I need it.....	1	2	3	4	5

**Some Information about you**

**GENDER**

Male 1  
Female 2

**YOUR AGE**

Under 18 1  
18-30 2  
31-40 3  
41-50 4  
51-60 5  
Above 60 6

**VISIT TO HOSPITAL**

New patient 1  
Follow-up patient 2  
Others 3

**EDUCATION**

No education 1  
School Education 2  
College Education 3

**EMPLOYMENT STATUS**

Unemployed 1  
Student 2  
Employed 3  
Retired 4  
Others 5

**OVERALL OPINIION**

Very Good 1  
Good 2  
Fair 3  
Bad 4  
Very Bad 5

***Thank you very much for your feedback!***