

## A CROSS-SECTIONAL STUDY OF PATIENT'S SATISFACTION TOWARDS SERVICES RECEIVED AT TERTIARY CARE HOSPITAL ON OPD BASIS

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### ABSTRACT

**Objective:** The main objective of the study is to measure the satisfaction of OPD patients in tertiary care hospital and to know the relationship between various determinants & OPD patient's satisfaction.

**Materials and methods:** The present cross sectional study was conducted among 450 patients attending the outpatient departments (OPDs) of Sassoon General Hospital Pune during 6 months period. Systemic random sampling was used for patient selection.

**Results:** Maximum number of patients i.e. 197(43.78%) were in the age group of 49 and above. About 61% patients were females. About cleanliness of waiting area 44.5% patients were found unsatisfied. About explanation of treatment by pharmacist 77% patients were satisfied. 91% patient said that OPD timings were convenient. 176 (39.12%) patients had to wait less than 30 min before consulting doctor.

**Conclusion:** According to the patient's opinion, the study showed good satisfaction with respect to registration services, doctor services, nurse services, lab services and pharmacy staff services.

**Keywords:** Patient's satisfaction, OPD services, Tertiary care hospital.

### INTRODUCTION

Patient satisfaction is one of the important goals of any health system, but it is difficult to measure the satisfaction and gauge responsiveness of health systems as not only the clinical but also the nonclinical outcomes of care do influence the customer satisfaction.<sup>1</sup>

The health sector in India is characterized by a public health sector and private sector. The major reason for choosing the public health services is its inexpensiveness, availability with close proximity. However, effectiveness of health system depends upon quality of services which is largely neglected. Patients are using public health services but majority are not satisfied. Patient's satisfaction depends on many factors such as quality of clinical services provided, availability of medicine, behavior of doctor and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support and respect for patient preferences. Patient satisfaction is recognized as

an important parameter for assessing the quality of patient care services.<sup>2</sup>

Keeping above points in mind, this study was planned in a tertiary care providing government hospital to know the various factors which affect patient satisfaction; there by to improve quality of care and patient satisfaction.

### MATERIALS AND METHODS

The present cross sectional study was conducted among the patients attending the outpatient departments (OPDs) of Sassoon General Hospital Pune. The period of study was from June 2010 to November 2010. For this study we presumed maximum variability, hence we considered prevalence of patient satisfaction as 50%. We included 450 patients in this study. The institutional Ethical committee approved methodology and data collection procedure of the study. A patient attending the OPD and having age above 18 years was included in the

study after taking informed consent. Patient working in the health care facility and patients with serious physical or mental pathologies, such as terminal disease and psychosis were excluded from the study. The patients attending the various OPDs were selected for the interview by systematic random sampling at the pharmacy counter. Every 3<sup>rd</sup> patient was selected for the interview. A predesigned and pretested proforma was used for data collection. Some statements regarding services of physical facilities, registration staff, doctor, nurse, pharmacy, and laboratory staff were asked to patients. Patients were asked to give ratings to these statements. Likert's 5 points rating scale was used. <sup>3</sup>. The rating was done as following-5= Strongly agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly disagree. On an average 20 minutes time was given for interview of each patient. The responses were expressed in proportions.

#### Analysis:

Data was entered in Microsoft Excel sheet and analyzed using the software SPSS version 17 and Open Epi version 2.3. Discrete data was analyzed using Pearson's Chi-square test for normal distribution, values <0.05 were considered significant.

## RESULTS

The study included 450 patients attending various OPDs. Maximum number of patients i.e. 197(43.78%) were in the age group of 49 and above. About 61% patients were females. Demographic data consisting of marital status, socioeconomic status was collected. Patients were also inquired about the concerned department, type of visit. Whether it was first visit, follow up visit or referred from other hospital. [Table 1]

As shown in table 2 regarding cleanliness of waiting area 44.45% patients were found unsatisfied. About adequacy of sitting arrangement 51% patients were satisfied. Near about 6% patients replied that they were unsatisfied with friendliness and helpfulness of registration staff. Regarding examination and explanation received from doctor 92% patients were satisfied.

Patients who were strongly disagreed, disagreed with statement were considered as unsatisfied and rests were considered as satisfied.

**Table 1: Socio-demographic characteristics of patients availing OPD health services (n=450)**

Variable	Patients (%)
<b>Age (In years)</b>	
18-28	147(32.67)
29-38	61(13.55)
39-48	45(10)
≥49	197(43.78)
<b>Gender</b>	
Male	177(39.33)
Female	273(60.67)
<b>Marital status</b>	
Never married	62 (13.78)
Married	388 (86.22)
<b>Socioeconomic-status</b>	
Upper(I)	12(2.67)
Upper middle(II)	40(8.89)
Lower middle(III)	107(23.78)
Upper lower(IV)	262(58.22)
Lower(V)	29(6.44)
<b>Type of visit</b>	
Follow up	175(38.89)
First	275(61.11)
Referred	169(37.56)
<b>OPD visited</b>	
Medicine & allied	194(43.11)
Surgery & allied	155 (34.44)
Obst. & Gynecology	101(22.45)

About friendliness and helpfulness of nurses 84% patients were found satisfied. When asked about explanation of treatment given by nurses only 20% were found unsatisfied. Maximum numbers of patients (88%) were satisfied regarding friendliness and helpfulness of laboratory staff. Only 15% patients were unsatisfied with timeliness of reports from lab. About explanation of treatment by pharmacist 77% patients were satisfied. 79.5% patients were satisfied with friendliness and helpfulness of pharmacy staff. When asked about reuse of this hospital services 52 % patients agreed.

91% patient said that OPD timings were convenient. 176 (39.12%) patients had to wait less than 30 min before consulting doctor. Large number of patients i.e. 174 (38.67%) could get drugs within 30 min. 58.22% patient could get more than 75% of drugs from pharmacy.

**Table 2: Distribution of responses towards various OPD services (n=450)**

Various services in hospital	Level of satisfaction (Likert's 5 point scale) (%)				
	5	4	3	2	1
<b>Physical facilities</b>					
Waiting area is clean	37 (8.22)	81 (18)	132 (29.33)	165 (36.67)	35 (7.78)
Waiting area has enough sitting arrangement	40 (8.89)	70 (15.55)	119 (26.44)	175 (38.9)	46 (10.22)
<b>Registration Service</b>					
Registration staff is friendly & helpful to you	42 (9.33)	214 (47.56)	166 (36.89)	23 (5.11)	5 (1.11)
Registration staff has good communication skill	39 (8.67)	232 (51.56)	132 (29.33)	41 (9.11)	6 (1.33)
<b>Doctor Services</b>					
You are satisfied with the examination you received	81 (18)	255 (56.67)	79 (17.56)	28 (6.22)	7 (1.55)
Doctor explained to you about your illness/prognosis/time required for treatment	94 (20.9)	258 (57.3)	69 (15.3)	21 (4.7)	8 (1.8)
<b>Nurse's service (N=256)*</b>					
Nurse is friendly & helpful to you	27 (10.5)	84 (32.82)	105 (41)	34 (13.28)	6 (2.35)
Nurses explain the treatment clearly	34 (13.3)	95 (37.11)	77 (30.07)	42 (16.41)	8 (3.13)
<b>Laboratory Staff Service(N=275)*</b>					
People collecting samples /doing procedures are friendly & helpful to you	37 (13.5)	117 (42.55)	89 (32.37)	28 (10.18)	4 (1.45)
Tests results received on time as told to you by the lab	36 (13.1)	136 (49.46)	61 (22.18)	28 (10.18)	14 (5.09)
<b>Pharmacy service</b>					
Pharmacist explained about the treatment clearly.	46 (10.2)	159 (35.33)	143 (31.78)	84 (18.67)	18 (4)
Pharmacist is friendly & helpful to you	41 (9.1)	171 (38)	146 (32.4)	76 (16.9)	16 (3.6)
<b>Quality of services</b>					
You would recommend the services of this hospital to friends/relatives	80 (17.8)	203 (45.11)	110 (24.45)	42 (9.33)	15 (3.33)
In future, if you feel unwell, you will return to this hospital for services	80 (17.8)	237 (52.67)	79 (17.55)	37 (8.22)	17 (3.78)

5=Strongly agree ; 4= Agree; 3=Neutral; 2= Disagree; 1= Strongly disagree.(Figures in parenthesis are showing row wise percentages).

\* Out of 450 patients only 256 patients utilized nurse's services and 275 utilized laboratory services.

**Table 3: Distribution of responses (n=450)**

Variable	Patients (%)
<b>OPD timings convenient</b>	<b>409(90.89)</b>
<b>Waiting before consulting doctor</b>	
Less than 30 min	176(39.12)
30min-1 hr	160(35.56)
≥1hr	114(25.32)
<b>Waiting for getting drugs</b>	
Less than 30 min	174(38.67)
30min-1 hr	150(33.33)
≥1hr	126(28)
<b>% of Drugs available at pharmacy</b>	
76-100	262(58.22)
51-75	120(26.67)
26-50	41(9.11)
≤25	27(6)
<b>Total satisfaction</b>	
Satisfied	229(50.89)
Unsatisfied	221(49.11)

facilities .The mean of total score was 43.Those securing equal and more than mean were labeled as satisfied ;similarly those securing less than mean were classified as unsatisfied. It was noticed that total satisfaction with OPD services was 50.89%. [Table 3]

Cross tables were made and test of significance were applied to various determinant. It showed statistical significant association of total patient satisfaction with gender, socioeconomic status, waiting time before consulting the doctor, waiting time before getting the drugs and % of availability drugs.

Females were found more satisfied than males. Patients from lower socioeconomic status were more satisfied as compared to upper class. Patient who waited more than 30 min were found highly unsatisfied. Patients who said that <75 % drugs are available were found more unsatisfied. [Table 4]

As shown in table patients were classified as satisfied and unsatisfied with reference to all

**Table 4: Association between various determinants and total satisfaction (n=450)**

Various determinants	Satisfied (n=229)	Unsatisfied (221)	p-Value
<b>Age</b>			
18-28	87(37.99)	60(27.15)	<b>0.379</b>
29-38	24(10.48)	37(16.74)	
39-48	25(10.92)	20(9.05)	
≥49	93(40.61)	104(47.06)	
<b>Gender</b>			
Male	75(32.75)	102(46.15)	<b>0.005</b>
Female	154(67.25)	119(53.85)	
<b>Marital status</b>			
Never married	27(11.79)	32(14.48)	<b>0.48</b>
Married	202(88.21)	189(85.52)	
<b>Socioeconomic status</b>			
Upper(I)	2(0.87)	10(4.52)	<b>0.04</b>
Upper middle(II)	17(7.42)	23(10.41)	
Lower middle(III)	60(26.20)	47(21.27)	
Upper lower(IV)	141(61.57)	121(54.75)	
Lower(V)	9(3.94)	20(9.05)	
<b>Type of visit</b>			
First	134(58.52)	141(63.80)	<b>0.294</b>
Follow up	95(41.48)	80(36.2)	
<b>Waiting time before consulting doctor</b>			
Less than 30 min	96(41.92)	80(36.2)	<b>0.001</b>
30min-1 hr	80(34.93)	80(36.2)	
≥1hr	53(23.15)	61(27.6)	
<b>Waiting for getting drugs</b>			
Less than 30 min	103(44.98)	71(32.13)	<b>0.007</b>
30min-1 hr	72(31.44)	78(35.29)	
≥1hr	54(23.58)	72(32.58)	
<b>% of Drugs available at pharmacy</b>			
76-100	156(68.12)	106(47.96)	<b>&lt;0.001</b>
51-75	48(20.96)	72(32.58)	
26-50	17(7.42)	24(10.86)	
≤25	8(3.5)	19(8.6)	

\*Chi-square test was applied between various determinants and total patient satisfaction (df =1)

(Figures in the parenthesis are showing column wise percentage)

## DISCUSSION

The health care system is basically a service based industry and customer experiences and satisfaction is of the utmost importance just as in other services-oriented systems.<sup>4</sup>It becomes an important indirect marketing tool as it has direct impact on improving the quality of the 'product' i.e. health service.<sup>5</sup>

Sassoon general hospital being one of the largest tertiary health care hospital of the western

region of Maharashtra attracts large number of patients in its OPDs.55.55% patients replied that they were satisfied with cleanliness of waiting area. In a similar study by AnjumJaved 90.5% patients were satisfied with cleanliness of hospital.<sup>6</sup>In another study done by PralhadRai et al also found 65% satisfied patients with respect to cleanliness.<sup>7</sup> This could be due to limited class IV employee in this hospital. They are overburdened. About sitting arrangement 49% patients were unsatisfied. This finding was consistent with study done by AnjumJaved<sup>6</sup>.

94% patients were satisfied with friendliness and helpfulness of registration staff. This finding is in contrast to study conducted by Md. Ziaul Islam and Md. Abdul Jabbar.They found only 25 % patients were satisfied with friendliness and helpfulness of registration staff.<sup>8</sup> In another study by TalluruSreenivas, G.Prasad only 13% patients were satisfied.<sup>9</sup>

With regard to explanation given by doctor about their illness/prognosis/time required for treatment only 6.5% patients were unsatisfied. This is consistent with the findings of Prasanna K.S. et al.They found only 3% patients unsatisfied.<sup>10</sup>Within short span of time doctors had to examine large number of patients.Inspite of this near about 93% patients were found satisfied with various services provided by doctors as shown in table 2.

176 (39.12%) patients had to wait less than 30 min before consulting doctor.RanjeetaKumari et al found similar results .In their study patient who waited less than 30 min were 37%.<sup>11</sup> Where as in an another study conducted by Prasanna KS et al showed that 20% patient waited less than 30 min.<sup>10</sup>A cross sectional study conducted by Md. Ziaul Islam and Md. Abdul Jabbar showed similar results.<sup>8</sup>

Large number of patients i.e. 174 (38.66%) could get drugs within 30 min. This finding is consistent with the study conducted by Prasanna K.S. et al. This study showed that 50% of patient had to wait less than 30 min for drugs.<sup>10</sup>

Table 3 shows that 58.22% patient could get more than 75% of drugs from pharmacy. Another study conducted by Talluru Sreenivas et al showed that only 20% patient could get all prescribed drugs.<sup>9</sup>It was noticed that total satisfaction with OPD services was 50.89%.This result is consistent with the study conducted by Chetwynd S.J. In his study total satisfaction was

49 %. <sup>12</sup>This finding is not consistent with the study conducted by Ranjeeta Kumari et al. In their study total satisfaction was 73 %. <sup>11</sup>Asma Ibrahim et al showed 10% overall satisfaction in their study.<sup>13</sup>

There was a statistically significant association between waiting time before consulting the doctor and total satisfaction. (p-value =0.001) Patients are already in pain or sufferings. Naturally they want to visit doctor as early as possible to get relieved from the sufferings. After consulting doctor patients wants to take treatment as early as possible so that they get relieved from sufferings. They wish to get drugs as early as possible. Patients who wait for longer time naturally had less satisfaction level. Patients who said that availability of drugs was 75-100% were found more satisfied i.e.68.12% as compared to those who procured less drugs. Hence availability of drugs in the hospital is essential factor for patient satisfaction. It can be interpreted from the data that patient satisfaction varies in different health facilities and circumstances. This variation may be due to difference in quality of services provided or difference in expectation of the patient.

## CONCLUSION

According to the patient's opinion, the study showed good satisfaction with respect to registration services, doctorservices, nurseservices, lab services and pharmacy staff services. About cleanliness of waiting area and adequacy of sitting arrangement large numbers of patients were found unsatisfied.

Study showed statistical significant association of total patient satisfaction with gender, socioeconomic status, waiting time before consulting the doctor, waiting time before getting the drugs and % of availability drugs.

## RECOMMENDATIONS

This study identified some of areas which can be improved in order to improve the patient care and quality of care. Low satisfaction was found with cleanliness in the hospital. Hospital authority should take action to improve cleanliness in the hospital. Waiting time before consulting doctor was one of the important factors affecting patient satisfaction. It can be reduced by starting appointment system at least for nonemergency cases. Waiting time for

getting the drugs was one of the important determinant of patient satisfaction. It can be reduced by introducing token system at the pharmacy counter. Availability of drugs was one of the important factor determining patient satisfaction. Therefore the drug policy should be revised quarterly in the year and most prescribed drugs in OPDs should be made available. Patient satisfaction assessment should be conducted regularly every 6 months. In the OPDs complaint and suggestion box should be kept, so that patients can freely put their complaints and suggestions for improvement in services provided in this hospital.

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