## Patient Satisfaction Survey: To Improve Quality of Care at Tertiary Care Center, South Gujarat

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## Abstarct:

Introduction: Mismatch between patient expectation and the service received is related to decreased satisfaction. Aims and Objectives: To measure level of satisfaction and identify the obstacles in availing services among the patient at Tertiary Care Center, South Gujarat. Method: It was a cross sectional study, included 800 respondents, 400 each from indoor and outdoor facilities. Respondents from all the department have been taken by proportion to their OPD and IPD load (PPS) after informing and taking their consent. Data has been collected by using android smart phones. Results: General perception of the clients for the OPD services were 60% believed that the time to get services is appropriate, 98% respondents satisfied with staff behavior, 60% satisfied with the cleanliness OPD at the same time few dissatisfied with public utilities (16%), 70% patient satisfied with available water and other amenities in, around the hospital and 77% felt that the space in OPDs was crowded. All the patient whom examination required reported that the privacy has been maintain. As many as 92% wish to return every time for the treatment from our hospital. General perception regarding the IPD services shows that more than 95% patients were satisfied with various services like quality of medical care, nursing care, diagnostic and referral service, admission process, discharge process and physician services. As far as the staying is concerned at people ranked lowest to the availability of drinking water and cleanliness of toilet and bathroom. **Conclusion**: The findings of the present study can be utilized to improve the services.

Keywords: Patient satisfaction, Public health facilities, Quality of care

## Introduction:

Satisfaction can defined as the extent of an individual's experience compared with his or herexpectations. Patients' satisfaction is related to the extent to which general health care needs and condition specific needs are met. Evaluating to what extent patients are satisfied with healthservices is clinically relevant, as satisfied patients are more likely to comply with treatment, takean active role in their own care, to continue using medical care services and stay within a healthprovider and maintain with a specific system. In addition, health professionals may benefit fromsatisfaction surveys that identify potential areas for serviceimprovement and health expenditure may be optimised through patient-guided planning andevaluation.<sup>[1]</sup> Mismatch between patient expectation and the service received is related todecreased satisfaction. Therefore,

assessing patient perspectives gives them a voice, which canmake public health services more responsive to people's needs and expectations. <sup>[2]</sup>. PublicHospitals need more Patient Satisfaction Surveys at regular intervals, as the PSS subjective data supported with other objective data like hospital indicators would further help in improving quality of services in Public hospitals. <sup>[3]</sup>Patient satisfaction depends up on many factors such as: Quality of clinical services provided, availability of medicine, behaviour of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences.<sup>[4]</sup>

This institute is one of the well-known multispecialty tertiary care Hospitals in South Gujarat since 1964. Backed with a vision to offer the best in patient care and equipped with technologically advanced healthcare facilities, it is one of the upcoming names in the healthcare industry. A team of well-trained medical staff, non-medical staff and experienced clinical technicians work round-theclock to offer various services that include X-ray ,Sonography, Blood Bank, Eye Bank, Ambulance Service, Fax Facility. A team of doctors on board, including specialists are equipped with the knowledge and expertise for handling various types of medical cases. Every day around 2500 OPD and 1200 IPD weekly patients receive medical care from the hospital. This study attempts to highlight patient satisfaction after their interaction with the system in different phase of services such as approach to the hospital, doctor, examination by doctor, information given about disease & medications, availability of services, waiting time, accommodation facilities and cost provided for services. The purpose of present study was to carry out evaluation of hospital services by getting feedback from outdoor and indoor patients attending New Civil Hospital, Surat.

### Aims and Objectives:

- 1. To measure level of satisfaction among the patient attending Tertiary Care Center, South Gujarat.
- 2. To identify the obstacles in availing services.

### Method:

**Study setting**: Tertiary Care Center, South Gujarat.

Study design: Cross- sectional observational study

**Sample size**: Total 402 OPD patients and 397 Indoor patients were included in this study. (Considering 50% patients dissatisfy with the services). To calculate sample size from different department, OPD and IDP data of March 2017 has been selected from Medical Record Section. Sampling population were selected from different department like Medicine, Surgery, OBS and gynaecology, Opthalmology, Orthopedics, ENT, Paediatrics, Pychiatry, Dentisty, TB chest and Skin VD.

### Inclusion criteria:

**OPD patients**: Respondents from all the department have taken by proportion to their OPD load. (Sampling method- Population Proportion to size). Survey has been conducted for the period of 1 week (6 working

days) from 24<sup>th</sup> April to 1<sup>st</sup> May 2017. Total 67 respondents per day have been selected randomly from all the Departments. Every 20<sup>th</sup> patient has been selected till the desired number of sample size per day was achieved. In case of first visit in institute, interview conducted at the time of exit from hospital. In case of follow up visit, interview has been conducted in OPD waiting area.

**Indoor patients**: Total 397 IPD patient got selected. All the participants admitted in different ward with minimum hospital stay more than 24 hrs have been taken till the desired number of sample size was achieved. On the day of discharge, after taking written consent the participants have been interviewed.

Written consent has been taken from all the selected respondents after explaining them regarding study.

**Exclusion criteria**: Respondents who has not given written consent.

**Ranking**: Ranking was given based on descending order of mean score of each facilities. This score was used for accommodation facilities.

### Data collection:

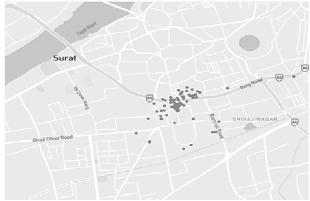
Data have been collected by 17 intern doctors posted in PSM Department. They were given formal training on date 17<sup>th</sup> April 2017 and piloting in the same week. Patient satisfaction survey questioner has been designed for both indoor patients and outdoor patients. <sup>[5]</sup> Data have been collected on ODK collect v1.5.1 version using android smart phones and analysis done by SPSS.17.

**Ethical issue**: Written informed consent has obtained from selected respondents. No harm to study participants. All details have been maintained by the investigator in strict confidentiality and analysis would be anonymous. Report shall be submitted to medical superintendent and concerned authority.

**Study Period**: One and half Month (17<sup>th</sup> April to May 2017)

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Figure 1:Study area



### **Results:**

Total 799 patients were included in the study (402 OPD and 397 IPD patients). Out of them, 47%

participants were males, rest 53% were females and 39% participants were males, rest 61% were females for OPD and IPD respectively. The mean age of the participants was 38 and 34 years for OPD and IPD respectively. The education level of the OPD participants was poor as most of them were either illiterate (19%) or primary passed (44%). Similarly, IPD participants also very poor in education as 57% and 21% were illiterate and primary education respectively. Majority of the patient were Gujarati Hindu followed by Hindi from UP, most of them doing household duties. Median income reported for OPD respondents was 9000 and for IPD 5000.

Sr.No	Variables (N)	Perception of the participants N (%)					
		Too long	Appropriate	Medium	Too short		
1.	Waiting time						
	at case window (402)	67 (17)	241 (60)	80 (20)	14 (3)	-	
Behaviour of staff							
	Completely Somewhat Neutral Somewhat C				Completely		
		satisfied	satisfied		dissatisfied	dissatisfied	
2.	Nurse (347)	209 (60)	114 (33)	20 (6)	3 (1)	1	
3.	Technical Staff (306)	164 (54)	114 (37)	23 (8)	5 (2)	-	
4.	Pharmacist (369)	181 (49)	142 (38)	38 (10)	8 (2)	-	
	Cleanliness						
5.	Dispensary (391)	231 (59)	147 (38)	13 (3)	-	-	
6.	Laboratory (294)	155 (53)	118 (40)	20 (7)	1 (0)		
7.	Injection Room (178)	90 (51)	78 (43)	10 (6)	-	-	
8.	Dressing Room (161)	98 (61)	54 (34)	8 (5)	1 (1)	-	
9.	Public utility (320)	78 (24)	138 (43)	53 (17)	39 (12)	12 (4)	
10	Drinking-water						
	facility (290)	105 (36)	133 (46)	33 (11)	19 (7)		
11	other Amenities (373)	164 (44)	160 (42)	36 (10)	11 (3)	2 (1)	
Extent of crowding (402)							
		Over	Somewhat	Neutral	Adequate	Spacious	
		crowded	crowded		space		
1	Overall	43 (11)	264 (66)	56 (14)	37 (37)	2 (0)	

Table 1 shows general perception of the respondents about the various services they are getting at this hospital. Sixty percent of them believed that the time to get services is appropriate and 17% said it was too long. Only 1 to 2% of the respondents dissatisfied with staff behaviour. Majority of them satisfied with the cleanliness OPD (60%) at the same time few dissatisfied with public utilities (16%). More than 70% patient satisfied with available water and other amenities in around the hospital. Majority felt that the space in OPDs was crowded (77%).

All the patient whom examination required reported that the privacy has been maintain to their satisfaction (100%). As many as 92%. wish to return every time for the treatment from our hospital.

There were various comments by Participants like "Laboratory staff talk rudely", "Behaviour of the staff and the doctor at Radiology completely unsatisfied", "Drugs are not available at store and PDU store", Dental: "materials not available always"

## Perception of the clients for the **IPD** services available at NCHS

Patients were admitted to the different departments for various purpose like majority (40.3%) admitted for major illness and 16 % for minor illness, 9.8% for operation, 1.3% for procedure and 30% for labour.

Sr.	Variables (N)	Perception of the respondents N					
No		Completely	Somewhat	Neutral	Somewhat	Completely	
		satisfied	satisfied		dissatisfied	dissatisfied	
1.	Overall rating for						
	services	295 (74.3)	79 (19.9)	15 (3.8)	7 (1.8)	1 (0.3)	
2.	Waiting time	307 (77.3)	56 (14.1)	19 (4.8)	9 (2.3)	6 (1.5)	
3.	Level of care	298 (75.1)	82 (20.7)	11 (2.8)	5 (1.3)	1 (0.3)	
4.	Emergency services	43 (70.5)	13 (21.3)	1 (1.6)	2 (3.3)	2 (3.3)	
5.	Medicine you receiving is just Perfect	303 (76.3)	82 (20.7)	6 (1.5)	6 (1.5)	-	
6.	Easy access to the medical specialist that you need	266 (78.7)	61 (18)	5 (1.5)	3 (0.9)	3 (0.9)	
7.	Easy access to the medical specialist that you need	266 (78.7)	61 (18)	5 (1.5)	3 (0.9)	3 (0.9)	
8.	Overall rating of the nursing care	324 (81.6)	62 (15.6)	8 (2.0)	1 (0.3)	2 (0.5)	
9.	Overall rating of diag- nostic services (240)	193 (80.4)	43 (17.9)	3 (1.3)	1 (0.4)	-	
10.	Overall rating of the Pharmacy (189)	148 (78)	37 (20)	2	1	1	
11.	Overall rating of the admission process(396)	301 (76)	87 (22)	6 (1.5)	2 (0.5)	-	
12.	Overall rating of the Discharge process (388)	299 (77.1)	72 (18.6)	14 (3.6)	3 (0.8)	-	
13.	Overall rating of the nutrition services	244 (70.5)	55 (15.9)	24 (6.9)	12 (3.5)	11 (3.2)	

Table 2\_General perception regarding the availed services at NCHS shows that more than 90% patients were satisfied with overall service, very few 2% of the participants not satisfied with the services and they mainly score negative. As far as the emergency services at NCHS are concerned around 7% people gave negative feedback. As far as the quality care is concerned more than 95% respondents were satisfied with the current standards. However, 6% of them believed it was not up to the mark. They also commented about the availability of the specialist lacking in some department (2%). More than 95% respondents satisfied with the nursing care and only as few as 5% to as high as 25% were not satisfied with the subdomains which includes responsiveness to

needs (25% in psychiatry), waiting time when called (25% in psychiatry) etc. Regarding food provided to patient, 10% of the respondents did not like the quality of food they received at NCHS. Satisfaction with the referral and diagnostic services were good (>95%) except radiology dept. Drug availability which needs to be taken care of. Overall more than 95 percent respondents satisfied with the admission process. Majority satisfied with the discharge process (98%) and some have commented that they were not properly given aftercare instruction.

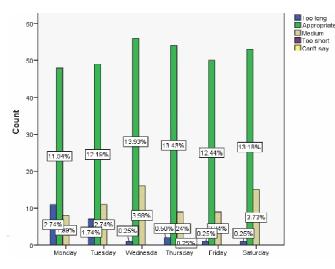
Sr. No	Variable	Completely satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Completely dissatisfied
1.	Overall rating	319 (80.4)	67 (16.9)	5 (1.3)	5 (1.3)	1 (0.3)
2.	Courtesy, respect, friendliness and kindness	313 (79)	53 (13.4)	22 (5.6)	6 (1.5)	2 (0.5)
3.	Thoroughness of examinations	326 (82.3)	54 (13.6)	11 (2.8)	1 (0.3)	4 (1)
4.	Doctor act business like and impersonal towards me	326 (83)	55 (14)	9 (2.3)	1 (0.3)	2 (0.5)
5.	Those who provide you medical care hurry too much when they treat					
	you	332 (84.5)	43 (10.9)	15 (3.8)	3 (0.8)	0 (0)
6.	Physician responsive- ness to Questions	306 (77.1)	64 (16.1)	18 (4.5)	7 (1.8)	2 (0.5)
7.	Explanation of tests procedures and treatments	287 (72.3)	52 (13.1)	45 (11.3)	11 (2.8)	2 (0.5)
8.	Sometimes doctors use medical term without explaining (391)	274 (70.1)	55 (14.1)	51 (13)	8 (2)	3 (0.8)
9.	Aftercare instructions	284 (73.2)	77 (19.8)	14 (3.6)	10 (2.6)	3 (0.8)

Table 3: Perception of the clients for the physician services available at Tertiary Care Center

Rank	Variable	N	Mean
Accom	modations facility overall rating	397	4.78
Rankir	ng of different facilities		
1.	Ease of access to the facility	397	4.76
2.	Equipments	393	4.74
3.	Safety	397	4.71
4.	Comfort	397	4.64
5.	Privacy	396	4.58
6.	Cleanliness	397	4.56
7.	Quietness	397	4.54
8.	Attractiveness	397	4.53
9.	Temperature	397	4.52
10.	Toilet	397	4.42
11.	Bathroom	397	4.40
12.	Drinking water	391	4.35

Table 4: Ranking of the overall staying as per score given by client

# Figure 2: Day of the week and the perception regarding getting the services



From **figure 2**, we can see that majority of patient believe that time for getting the service is appropriate. In initial day of week, more number of patients believes that time for getting the service is too long compare to other days.

More than 97% clients satisfied with physician services like examinations, behaviour, communication with the patient (Table 3).

As far as the staying is concerned at NCHS, people ranked lowest to the availability of drinking water and cleanliness of toilet and bathroom (Table 4).

## Comments from Respondents:

**Emergency Department:** Doctor in hurry, Patient was not explained properly and was not admitted on time.

**Physician service:** Hurry too much & early discharge, Less attention to aftercare.

Nursing: Should attend patient when call sister.

**Radiology:** Had to send relative 3 times to get x ray plate, Long waiting in radiology dept, MRI should be available free of cost in hospital, Sonography takes time even if referral is urgent, Too much waiting time at USG.

**Laboratory:** Too often pricking for blood sample collection.

**Pharmacy/Drug store:** Drugs are not available, Waiting time too long

Accommodations: Bathrooms are not properly clean, Dirty bathroom & toilet sometime, Drinking water facility should be there on each floor, Drinking water source quite far, Have to go to ground floor to take drinking water, Running water is not available in washrooms, valuables were stolen from the ward, drinking water should be available on the floor

**General Comments:** Difficulty in accessing some facilities due to lack of education in parents of patient, Drinking water should be provided to every floor, Number of lifts should be increased.

## Discussion:

Patient satisfaction is considered one of the important quality indicators at the health care institutes. Satisfaction is achieved when the patients' perception of the quality of care and services that they receive in healthcare setting has been positive, satisfying, and meets their expectations.

In present study, 60% clients believe that waiting time at case window is appropriate whereas in Patavegar et al study<sup>[6]</sup> and Kumari et al study<sup>[7]</sup> less than 50% clients give similar opinion. Difference within patients perception is depend on various factors like location of institute, timing of services, facilities at services, infrastructure of institutes. In present study almost all patients (98%) were satisfied with behavior of staff compare to Arsad et al study<sup>[8]</sup> (90%) and Kumari et al study<sup>[7]</sup> (73%).

In studyof Arsad et al <sup>[8]</sup> and Kumari et al <sup>[7]</sup> more than 60% patients were satisfied with cleanliness of OPD. In present study 70% patients were satisfied with basic amenities which is more compare to other study. We have to focus that remaining 30 to 40% patients were not satisfied with cleanliness and basic amenities. During planning strategy, we have to focused regarding this. In study of Arsad et al<sup>[8]</sup>, Kumari et al<sup>[7]</sup> and present study found that majority of people believe that OPD is overcrowding and large factor behind that is lack of human recourses.

Schoenfelder et al revealed 10 determinants of global patient satisfaction for indoor patients. The most influential determinants were outcome of treatment (OR 3.70) and kindness of the hospital's nurses (OR 2.78) and physicians (OR 1.96). Regarding the performance of service component, poor accommodation and quality of food resulted in decreasing global patient satisfaction. Both organization of admission and discharge were associated with global patient satisfaction<sup>[9]</sup>. Satisfaction level of patients is a subjective. It depend on many factors. In present study, Majority of patients (>90%) were satisfied with OPD services, IPD services, Physician services and accommodation facilities. Some patients were give comments regarding various facilities. From that comments we can identified obstacles in availing services like lack of human resource, patients overload, not availability of drinking water, uninterrupted supply of drugs and dental materials, more waiting time for USG, issue regarding behaviour of staff with patients ect.

## Conclusions:

General perception of the clients for the OPD services were 98% respondents satisfied with staff behavior, 70% patient satisfied with available water and other amenities in, around the hospital, 60% believed that the time to get services is appropriate,, 60% satisfied with the cleanliness OPD at the same time few dissatisfied with public utilities (16%), and 77% felt that the space in OPDs was crowded. All the patient whom examination required reported that the privacy has been maintain. As many as 92% wish to return every time for the treatment from our hospital.General perception regarding the IPD services shows that more than 95% patients were satisfied with various services like quality of medical care, nursing care, diagnostic and referral service, admission process, discharge process and physician services. As far as the staying is concerned at people ranked lowest to the availability of drinking water and cleanliness of toilet and bathroom.Obstacles in availing services are lack of human resource, patients overload, not availability of basic amenities, lake of materials, more waiting time for radiology facilities and issue regarding behaviour of staff. The findings of the present study can be utilized to improve the services.

## **Recommendations:**

The study findings suggest that following measures may be taken by the policy makers and hospital administrators to increase the patient satisfaction.

- Efforts should be made to reduce the waiting time and patient load so that doctors and other staff can give more attention and time to the respondents;
- Efforts are also needed to strengthen infrastructure and human resources (uninterrupted supply of the drugs and dental materials, availibity of the drinking water at each wards and cleaning and maintenance of the public utility).
- Certain improvements are also needed in the waiting area by making it informative and comfortable and improvement of the skills of doctor-patient communication.
- The findings of the present study can be utilized to improve the services at Tertiary Care Center, resulting in the more satisfaction of respondents availing such public health facilities.

### Limitations:

- Patient satisfaction is considered by some to be of dubious benefit in facilitating the process of clinical care, as respondents have no specific clinical expertise and are -perhaps- readily influenced by non- medical factors.
- High levels of ceiling effect with high levels of satisfaction due to respondents "fear of giving negative evaluations".
- Perceptions about need have an impact on satisfaction – the more you need the less satisfied you are. However, in the present study no need assessment has been done.

### **Declaration :**

Funding: Nil

### Conflict of Interest: Nil

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