

# To investigate the level of satisfaction among indoor COVID positive patients at a private tertiary care specialty hospital and to determine the underlying causes of dissatisfaction

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## Abstract

**Aim:** The aim of the present study was to investigate the level of satisfaction among indoor COVID positive patients at a private tertiary care specialty hospital and to determine the underlying causes of dissatisfaction.

**Methods:** The present study was done on patients of COVID-19 hospital part of CIMS hospital which is a tertiary care private hospital in Ahmedabad Gujarat. Hospital has treated more than 7000 patients so far for COVID-19. In this study, the number of patients studied from COVID-19 area in Hospital was 2408 out of which 10 were excluded due to incomplete data.

**Results:** 95.29% of the patients appear to agree that Reception service is good. While another 4.59% appear to agree that Reception service is very good. 31.90% of the patients appear to agree that Consultant service is good. While another 67.93% appear to agree that Consultant service is very good. 32.53% of the patients appear to agree that Medical service is good. While another 67.31% appear to agree that Medical service is very good. 31.19% of the patients appear to agree that Nursing service is good. While another 67.97% appear to agree that Nursing service is very good.

**Conclusion:** On the basis of patient feedback and observations, it can be concluded that maximum patients are satisfied with the services provided in the hospital especially Nurses, consultants and Front office. Only some patients were dissatisfied with supportive services like food services, Diagnostic services, Billing Services and discharge services. Therefore, by improving these services overall patient satisfaction can be improved.

**Keywords:** COVID-19, patient satisfaction, tertiary care hospital, admitted

## Introduction

Coronaviruses (CoVs) are a large family of RNA viruses. Genome changes occur in CoVs. This aids in adapting to a particular host <sup>[1]</sup>. CoVs cause respiratory infections in humans such as common cold. They can also cause severe infections such as Middle East respiratory syndrome and severe acute respiratory syndrome (SARS) <sup>[2]</sup>. The last decade witnessed the discovery of a new coronavirus which was later named SARS-coronavirus-2 (SARS-CoV-2). This virus was identified as the cause of a cluster of pneumonia cases in Wuhan, China, which very rapidly spread all across the globe. The disease caused by SARS-CoV-2 has been named COVID-19. On January 30, 2020, the WHO Director-General Dr. Ghebreyesus declared this outbreak a public health emergency of international concern <sup>[3]</sup>. As of October

12, 2020, globally, there were 37,423,660 COVID-19 cases and 1,074,817 deaths<sup>[4]</sup>. India is also not untouched by the havoc of COVID-19. The first case of COVID-19 in India was reported from Thrissur, Kerala, on January 30, 2020. As of October 13, 2020, there were 7.18 million COVID-19 cases in India, out of which 838,729 were active cases, 6,227,295 were recovered cases, and there were 109,856 deaths<sup>[5]</sup>.

Patient's satisfaction has gained increased attention over the past few years<sup>[6]</sup>. It is now a day's understood that patient's opinion should supplement the usual indicators of quality in health care<sup>[7, 8]</sup>. Patient expressions is an important source of information in screening for problems and developing an effective plan of action for quality improvement in health care organizations<sup>[9]</sup>. Assessing satisfaction has been mandatory for quality control of any hospital, which has resulted in an increasing number of projects devoted to the concept of satisfaction and determinant of patient satisfaction<sup>[10-13]</sup>.

To combat with this pandemic, hospital infrastructure and policies have gone through many changes. In this scenario of changing health-care system, it becomes important to assess the quality of care that is being provided to COVID-19 positive patients as the health-care quality plays a crucial role in winning over any health crisis. Quality of health-care facility implies that services should be affordable, with adverse effects being at the minimum level and the patients could be cured or relieved of their health problems<sup>[14]</sup>. The quality of medical services that the patients receive is difficult to assess. The satisfaction of patients toward the care they receive is rather easier to assess<sup>[15]</sup>. Moreover, in this time of global health emergency, it is important that the people should be satisfied with the health-care services they receive so as to keep their morale high. Measuring patient satisfaction helps to measure the health-care quality and thus aids in identifying ways to improve it. To take inputs from patients into consideration is inevitable to be consistent with the reality. Patient satisfaction results from the patient's understanding and acceptance of his or her own health state, the logistics of care, and the extent to which care received has met certain expectations<sup>[16]</sup>. Patient satisfaction is internationally accepted to be assessed regularly in addition to other methods of quality assessment<sup>[17]</sup>.

The aim of the present study was to investigate the level of satisfaction among indoor covid positive patients at a private care specialty hospital and to determine the underlying causes of dissatisfaction.

## Materials and Methods

The present study was done on patients of COVID-19 hospital part of CIMS hospital which is a private tertiary care private hospital in Ahmedabad Gujarat. Hospital has treated more than 7000 patients so far for COVID-19. In this study, the number of patients studied from COVID-19 area in Hospital was 2408 out of which 10 were excluded due to incomplete data.

**Inclusion criteria:** COVID-19 positive patients who had been admitted in the concerned hospital for not <5 days

**Exclusion criteria:** COVID-19 positive patients admitted in the concerned hospital but were unwilling to be part of the study or were under the age of 18 years at the time of admission.

## Tools of data collection

A quantitative structured interview schedule was used. It was developed taking into consideration inputs from the existing literature and various standard instruments used in measuring patient experience of health-care quality in hospitals. It was initially made in English and then translated into local dialect.

## Ethical consideration

Institutional ethical clearance was obtained from the concerned hospital authority of the tertiary care hospital to conduct the study within the specified time period.

Interview was conducted. It was a telephonic survey. For each interview, a minimum of 15 min was dedicated. There were questions regarding sociodemographic characteristics of the respondents, admission and discharge process, availability of various amenities, behavior of doctors and other supporting staff (which included nurses and paramedical staff and housekeeping staff), time given by doctors and their response to patients' complaints, explanation about illness and treatment, services regarding medicines and investigations, food quality, cleanliness, ambience, and overall impression of the stay. The study participants could give their responses as very satisfactory, satisfactory, average, unsatisfactory, and very unsatisfactory or excellent, good, average, poor, and worst. Before starting the interview, the interviewer gives her introduction to the study participant and explains the purpose of the study. Participants were assured that confidentiality would be maintained and the investigator was not involved in the treatment team. In order to steer clear of any bias in the behavior of the treating physician and the supporting staff, they were not informed about the study. Informed verbal consent was taken from all the participants before starting the interview. If any participant hesitated to be part of the study, he/she was excluded from the study.

### Statistical analysis

Data were entered in Microsoft Excel and checked for its accuracy and completeness. The statistical analysis was performed using IBM SPSS Statistics software, version 20 (IBM).

### Results

**Table 1:** Data collected

Reception	Percentage	Count
0 (good)	95.29%	2285
1 (not good)	0	0
2(very good)	4.59%	110
<b>Consultant</b>		
0 (good)	31.90%	765
1 (not good)	0.17%	4
2(very good)	67.93%	1629
<b>Medical care</b>		
0 (good)	32.53%	786
1 (not good)	0.17%	4
2(very good)	67.31%	1614
<b>Nursing</b>		
0 (good)	31.19%	748
1 (not good)	0.83%	20
2(very good)	67.97%	1630
<b>Pathology</b>		
0 (good)	95.04%	2279
1 (not good)	0.00%	0
2(very good)	4.96%	119
<b>Radiology</b>		
0 (good)	97.33%	2334
1 (not good)	0.00%	0
2(very good)	2.67%	64

95.29% of the patients appear to agree that Reception service is good. While another 4.59% appear to agree that Reception service is very good. 31.90% of the patients appear to agree that Consultant service is good. While another 67.93% appear to agree that Consultant service is very good. However, the remaining 0.17% respondents appear to disagree in their opinion. 32.53% of the patients appear to agree that Medical service is good. While another 67.31% appear to agree that Medical service is very good. 31.19% of the patients appear to agree that Nursing service is good. While another 67.97% appear to agree that Nursing service is very

good. 95.04% of the patients appear to agree that Pathology service is good. While another 4.59% appear to agree that Pathology service is very good 97.33% of the patients appear to agree that Radiology service is good. While another 2.67% appear to agree that Radiology service is very good

**Table 2:** Other features

<b>Dietician</b>	<b>Percentage</b>	<b>Count</b>
0 (good)	85.36%	2047
1 (not good)	0.08%	2
2(very good)	14.55%	349
<b>Physiotherapy</b>		
0 (good)	86.78%	2081
1 (not good)	0.13%	3
2(very good)	13.09%	314
<b>Pharmacy</b>		
0 (good)	100.00%	2398
1 (not good)	0.00%	0
2(very good)	0.00%	0
<b>Admission</b>		
0 (good)	89.16%	2138
1 (not good)	0.54%	13
2(very good)	10.30%	247
<b>Billing</b>		
0 (good)	88.91%	2132
1 (not good)	0.46%	11
2(very good)	10.63%	255
<b>Insurance</b>		
0 (good)	94.25%	2260
1 (not good)	0.00%	0
2(very good)	5.71%	137
<b>Housekeeping</b>		
0 (good)	30.73%	737
1 (not good)	1.71%	41
2(very good)	67.56%	1620
<b>Ambulance</b>		
0 (good)	98.92%	2372
1 (not good)	0.00%	0
2(very good)	1.08%	26

85.36% of the patients appear to agree that Dietician service is good. While another 14.55% appear to agree that Dietitian service is very good. 86.78% of the patients appear to agree that Physiotherapy service is good. While another 13.09% appear to agree that Physiotherapy service is very good. 100.00% of the patients appear to agree that Pharmacy service is good. 89.16% of the patients appear to agree that Admission service is good. While another 10.30% appear to agree that Admission service is very good. 88.91% of the patients appear to agree that billing service is good. While another 10.63% appear to agree that Billing service is very good. 94.25% the patients appear to agree that Insurance service is good. While another 5.71% appear to agree that Insurance service is very good. 30.73% the patients appear to agree that Housekeeping service is good. While another 67.56% appear to agree that Housekeeping service is very good. 98.92% the patients appear to agree that Ambulance service is good. While another 1.08% appear to agree that Ambulance service is very good.

## Discussion

In this study, we study the 2398 patient's data. In all above graphs in chapter 5 we found our patients very satisfy about hospital services.

Patient satisfaction is considered to be one of the important parameters in the assessment of quality of healthcare; hence, healthcare facility performance can be best assessed by measuring the level of patient satisfaction. Globally, healthcare quality is an emerging issue [18]. A few decades back, quality of health services was based on professional practice standards only but now, entire scenario has changed. In the current era, quality of healthcare system depends on patients' feedback or, level of their satisfaction [19]. Patient satisfaction has been defined as "the degree of congruency between a patient's expectations of ideal care and his/ her perception of the real care(s) he/ she receives." [20].

Before they meet the doctor, the front desk receptionist is the patients' access point to the medical facility. They go to them for answers to any questions or doubts they might have. Thus receptionists need to project a kind and friendly demeanor at all times. In our case we found major percentage of patients' is satisfied with Reception services in hospital.

Consultants are senior doctors that have completed full medical training in a specialized area of medicine and are listed on the Medical Council's specialist register. They have clinical responsibilities and administrative responsibilities in managing staff and junior doctors. They usually work in hospitals or community settings. Consultants also provide a significant amount of value for an organization. They can help to develop strategies for growth or manage projects. A consultant may have a higher level of business expertise than the average employee and can provide unique solutions for businesses. In our case we found major percentage of patients was satisfied with consultant services in hospital.

It is a multidimensional aspect. It represents a vital key marker for the quality of healthcare delivery. On international platform, it is an issue of utmost consideration for delivering quality healthcare services, which need to be regularly updated. Assessment of patient satisfaction is one of the criteria to judge clinical efficiency, healthcare delivery system and overall quality services of that healthcare system. It is through this feedback mechanism that if any loophole found in system, that can be improved at its earliest point [21].

Medical care has several important functions. Hospital care of general medicine patients has been an important part of general internal medicine. Every patient required to use medical facility in hospital as per there prescription. In our case we found major percentage of patients was very satisfied with Medical services in hospital.

Nurses play a key role in Hospitals. They communicate with patients, understand them and take exceptional care of them along with administering medicines. With growing patient expectations and needs, the role of a nurse is also evolving. They take upon different roles and responsibilities in the hospital. Not only that they lend an empathetic ear to the patients and understand them. They take care of the patients along with educating them on all important aspects of their health. In our case we found major percentage of patients was very satisfied with Nurses services in hospital.

The patient satisfaction is influenced by both clinical as well as non-clinical factors, such as quality of clinical services provided, behavior of doctors and other health staff, hospital services, physical comfort, respect for patient preferences, and communication to the patient. Mismatch between patient expectation and the service received is related to decreased satisfaction [22]. Therefore, measuring patient perspectives gives them a voice, which can make public health services more responsive to people's needs and expectations [23, 24]. Patients' feedback is necessary to identify problems that need to be resolved in improving the health services. Even if they still do not use this information systematically to improve care delivery and services, this type of feedback triggers a real interest that can lead to a change in their culture and in their perception of patients [25].

Pathology is a branch of medical science primarily concerning the cause, origin and nature of disease. It involves the examination of tissues, organs, bodily fluids and autopsies in order to study and diagnose disease. In COVID this is most important thing in hospital so we can do the test and get appropriate results. In our case we found major percentage of patients was very satisfied with Pathology services in hospital. Radiology is now the key diagnostic tool for many diseases and has an important role in monitoring treatment and predicting outcome Besides X-ray, radiology helps in imaging procedures in other imaging processes as well.

Through this technology, doctors and surgeons can access real-time pictures of the inside body. In hospital with help of this we can predict the infection of corona patients in lungs. In our case we found major percentage of patients was satisfied with Radiology services in hospital.

Clinical dietitians help hospital patients by determining their nutritional needs. They work in team with doctors and healthcare professionals to develop appropriate nutritional programming for patients. In our case we found major percentage of patients was satisfied with dietitians' services in hospital.

Physiotherapy professionally addresses varied population groups of all ages with various health statuses during hospitalization. Physiotherapists who work in primary healthcare facilities will likely play a part in the management of patients admitted to hospital with confirmed or suspected Covid-19. In our case we found major percentage of patients was satisfied with Physiotherapy services in hospital.

The primary mission of hospital pharmacy is to manage the use of medications in hospitals and other medical centers. Goals include the selection, prescription, procurement, delivery, administration and review of medications to optimize patient outcomes and for covid this is the most important thing is hospital. In our case we found major percentage of patients are satisfied with Pharmacy services in hospital.

Hospital Admission Procedure includes preparation of admitting patient, perform admission procedure, emergency admission, Routine admission, transfer in and discharge. Nurses need to follow strict protocol regarding admission and discharge in the hospital. Main purpose of Admission procedure is to prepare the patient both physically and mentally for his stay in the hospital. To help the patient to be comfortable and to provide him with a clear and safe environment for preventing infection. Also To give a good impression of the hospital and its service so that the patient will fully co-operate with the treatment and nursing care In our case we found major percentage of patients are satisfied with Admission services in hospital.

The Billing department plays an important role, as liaison office between the management and the patients. The hospital billing process is mainly to obtain remuneration for the services and materials provided by hospital to patients. The billing process is vital to the existence and financial health of a medical practice or hospital. So it is important to have accurate patient insurance information, data of birth, address, etc. This information must be correctly entered and submitted with CPT treatment and ICD diagnosis codes in the claim. In our case we found major percentage of patients was satisfied with Admission services in hospital.

Buying a health insurance policy is important because medical care is expensive, especially in the private sector. Hospitalization can burn a hole in your pocket and derail your finances. In this Covid era it will become even tough, if the person who brings in the money, is now in a hospital bed. In our case we found major percentage of patients are satisfied with Insurance services in hospital.

Maintaining good nutritional status during hospitalization is vital, as under nutrition in patients is associated with increased risk of hospital infections, delayed wound healing, and longer hospital stay, increased cost of treatment and higher morbidity and mortality risk There is a new trend we are seeing with hospitals. Many are moving toward modern cafeterias and dining facilities in search of greater patient satisfaction and overall revenue. With the knowledge that patient comfort and nutrition are beneficial in the healing process, hospitals are upgrading kitchen spaces, equipment and even menus. Although most hospitals have a full-service cafeteria, one very important aspect of foodservice in a hospital is the ability for staff to transport meals to the patients staying in the hospital. This is made possible through the use of transportable heating trays and rolling carts that keep the food to temperature and can transport many meals at once. In our case we found major percentage of patients is satisfied with Cafeteria services in hospital.

Attendant assists patients with personal hygiene needs and tasks (e.g., giving baths, changing bedpans, feeding, etc.), transports patients to appropriate areas throughout the hospital. Greeting visitors and providing relevant and accurate information. His work includes scheduling and tracking appointments for the top management personnel, intimating the

person when his or her visitors arrive, handling the telephone and taking messages. In our case we found major percentage of patients is satisfied with Attendant services in hospital.

The role of housekeeping in hospitals is to create a peaceful, infection free and pleasant atmosphere required for the speedy recovery of the patients. It should also create a homely atmosphere for the patients. In our case we found major percentage of patients are satisfied with housekeeping services in hospital.

Having the proper levels of security in a hospital can provide protection and peace of mind for all the patients treated at the facility. Hospital security responsibilities also extend to protecting the doctors, nurses, and all other staff members who deserve a safe workplace. In our case we found major percentage of patients was satisfied with Security services in hospital.

A hospital will discharge you when you no longer need to receive inpatient care and can go home. Or, a hospital will discharge you to send you to another type of facility. Many hospitals have a discharge planner. This person helps coordinate the information and care you'll need after you leave. In our case we found major percentage of patients was satisfied with Discharge services in hospital.

Inside the ambulance, we can find a variety of medical equipment, including cardiac monitors, oxygen tanks and IV equipment. We have basically everything a low-level emergency room would have in our case we found major percentage of patients is satisfied with Ambulance services in hospital.

### Conclusion

On the basis of patient feedback and observations, it can be concluded that maximum patients are satisfied with the services provided in the hospital especially Nurses, consultants and Front office. Only some patients were dissatisfied with supportive services like food services, Diagnostic services, Billing Services and discharge services. Therefore, by improving these services overall patient satisfaction can be improved. It also denotes that in spite of COVID19 scenario hospital services were able to keep majority of the patient satisfied.

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