Original Article

Patient satisfaction with hospital services in COVID-19 era: A cross-sectional study from outpatient department of a tertiary care hospital in Jammu, UT of J&K, India

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Abstract

Background: In the coronavirus disease (COVID-19) era, healthcare delivery toward patient-centered orientation has gone a paradigm shift. High levels of adherence to treatment and recommended prevention are usually the outcome of perceived patient satisfaction. **Aims:** The present study aimed to assess patient satisfaction levels in the COVID-19 era and explore its determinants. **Settings and Design:** A cross-sectional study from outpatient department of a tertiary care hospital in Jammu, UT of J&K, India. **Materials and Methods:** The present cross-sectional study was carried out in outpatient department of a tertiary care hospital in the Jammu district. A total of 220 patients were interviewed using consecutive sampling. The tool used to assess patient satisfaction was the patient satisfaction questionnaire-18 (PSQ-18). **Statistical Analysis:** Data were analyzed using Statistical Package for Social Sciences (SPSS) version 20.0. Tests of significance used were ANOVA and *t*-test. **Results:** The overall mean satisfaction score was found to be 2.91 ± 0.17 and it was highest in the communication domain (3.12 ± 1.50), whereas it was lowest in the accessibility and convenience domain (2.73 ± 1.17). Except for religion, which was found to be statistically significant ($P < 0.05$) with overall mean satisfaction score, other sociodemographic variables (occupation, marital status, and monthly family income) were found to be statistically insignificant ($P > 0.05$). **Conclusions:** Out of the seven subscales of patient satisfaction, results revealed high scores for communication and financial aspects. Only religion as a demographic variable was found to be significantly associated with patient satisfaction scores. There is a need to improvise the healthcare services in this COVID-19 era in such a manner so that we can contribute to better patient trust leading to a positive influence on health outcomes.

Keywords: COVID-19, healthcare delivery, healthcare institution, patient satisfaction

Introduction

The healthcare system has evolved over time with a shift from being a traditional concept of noble profession toward a customer-oriented service industry.[1] This has resulted in a challenge for the healthcare industry in delivering high-quality healthcare services; safe, equitable, evidence-based, timely, efficient, and patient-centered services.[2] Patient satisfaction is "a measure of the extent to which a patient is content with the healthcare that they received from their healthcare provider."[3] A survey of patient satisfaction is capable of yielding high-quality data that can be of great benefit to the health practitioners, the individual patient as well as the community.[4,5,6] According to World Health Organization (WHO) 2000 report, health systems have to be responsive to the health needs of the patient and the community. The major beneficiaries of a good healthcare

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Received: 26-03-2022 **Revised:** 10-06-2022
Accepted: 16-06-2022 **Published:** 31-10-2022

Access this article online

Quick Response Code:

Website: www.jfmpc.com

DOI: 10.4103/jfmpc.jfmpc_704_22

How to cite this article: Sultan N, Mahajan R, Kumari R, Langer B, Gupta RK, Mir MT, *et al*. Patient satisfaction with hospital services in COVID-19 era: A cross-sectional study from outpatient department of a tertiary care hospital in Jammu, UT of J&K, India. J Family Med Prim Care 2022;11:6380-4.

system are clearly patients.[7] Health service researchers reported that satisfied and dissatisfied patients behaved differently; satisfied patients were more likely to comply with treatment, keep follow-up appointments, and utilize health services.[8,9] Approaches to measuring patient satisfaction can be indirect or direct. In the indirect method, periodic field surveys sample the general population and patients from alternative healthcare delivery systems. The direct approach is to ask patients to evaluate their satisfaction with encounters, in particular, healthcare facilities or with specific providers in the form of exit interviews.[10-13] Unprecedented circumstances like the recent COVID-19 pandemic put immense pressure on healthcare service providers to reshape the hospital infrastructure and policies to deter the spread of deadly infections and ensure smooth functioning of healthcare delivery.[14] To combat this pandemic, hospital infrastructure and policies have gone through many changes. In this scenario of changing healthcare system, it becomes important to assess the quality of care that is being provided to COVID-19-positive patients as the healthcare quality plays a crucial role in winning over any health crisis. Quality of healthcare 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. 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. Moreover, in this time of global health emergency, it is important that the people should be satisfied with the healthcare services they receive so as to keep their morale high.[15] The literature review has revealed the paucity of patient satisfaction during the COVID-19 era where people as well as healthcare professionals are equally under both mental and physical stress. Hence the authors conducted the present study aimed to assess patient satisfaction regarding services available in Government Medical College (GMC) and Hospital, Jammu during the COVID-19 pandemic and to determine the association between various sociodemographic factors and patient satisfaction.

Materials and Methods

This cross-sectional study was conducted in outpatient departments of GMC Jammu, which is a tertiary care hospital in Jammu, UT of Jammu and Kashmir.

Inclusion criteria

All patients more than 18 years of age and providing consent for participation were enrolled.

Exclusion criteria

1. Patients visiting the hospital for the first time were excluded from the study.
2. Those patients who were advised in-patient department admission and very sick patients were also excluded.

Method of data collection

The study was commenced after obtaining approval from the Institutional Ethics Committee (IEC), GMC, Jammu. The patients were enrolled from various outpatient departments (OPDs) of GMC Jammu on alternate days of the week from June 1, 2021 to August 31, 2021. The patients coming out of the OPD after consultation with the doctor were approached using consecutive sampling and those willing to participate were enrolled for the study. A minimum of 10 patients were interviewed on a daily basis. The investigator approached a total of 245 patients during the 3 months of the study period but only 220 patients provided consent to participate [Figure 1].

Before the start of the interview, each eligible participant was explained in their local dialect by the investigator about the purpose of the study. The questions were translated into the local language of respondents by the interviewer and approximately 10–15 min were required to complete one interview.

Data collection tool

A predesigned, pretested, semistructured study proforma was used to obtain sociodemographic information from the patients. In addition, this proforma also contained questions pertaining to the awareness of patients regarding services available in the hospital, difficulty faced by patients in reaching the hospital, and availability of basic amenities in the hospital. A pilot study was conducted on 10 patients before the enrolment of study participants. These patients were excluded from the final study.

The patient satisfaction questionnaire-18 (PSQ-18)

PSQ-18 is a valid, reproducible, Likert scale questionnaire used to assess patient satisfaction in seven dimensions: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with the doctor, and accessibility and convenience. Each domain is tested through different related questions, which helps in identifying particular areas to improve on.

Statistical analysis

The data collected from the respondents was initially entered into MS Excel spreadsheets and categorized as well as tabulated using Microsoft Excel (version 2009). Descriptive statistics were applied and quantitative data was expressed as number and percentages. The association of various sociodemographic variables with

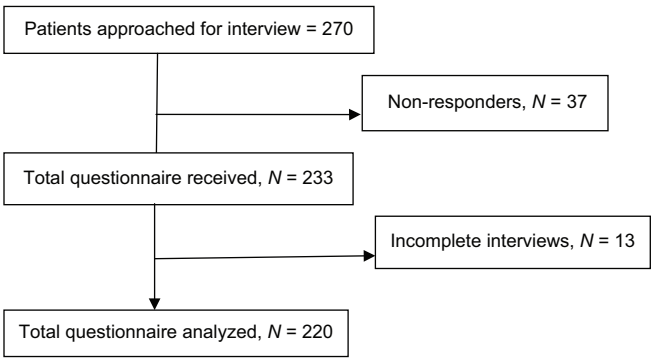

Figure 1: Flowchart depicting patient enrollment in the study

patient satisfaction was determined using ANOVA and *t* test. All the statistical analysis were done in SPSS version 20.0. The level of statistical significance was assumed to be a *P* value of less than 0.05.

Result

A total of 220 patients who completed the survey comprised the final sample size in the present study.

Of the total respondents, 59% comprised males and about 68.6% of them were employed. About three-fourth of the respondents were residing in urban areas.

A total of 97.2% of the respondents reported no difficulty in reaching the hospital and two-thirds of the total used their own vehicle for this purpose. Majority (92.7%) were comfortable with OPD timings and >70% of the respondents had adequate knowledge of OPD timings and used signals to move on in the hospital premises. A major portion of the respondents would like to visit the hospital again, were satisfied with toilet facilities and as well as cleanliness, and would recommend the hospital to others [Tables 1 and 2].

The results have further revealed an overall satisfaction rate of 2.91 ± 0.17. Among the mean scores of seven subscales, communication mean score was highest at 3.12 ± 1.50 while accessibility and convenience were lowest at 2.73 ± 1.17 [Table 3]. When various sociodemographic variables were analyzed to see association with overall satisfaction scores, it was found that only religion had statistically significant association [F (3,216) = 3.48, $P < 0.05$] [Table 4].

Table 1: Responses of study participants regarding availability and accessibility of healthcare services

	Number (*n*)	Percentage (%)
Difficulty to reach the hospital		
Yes	6	2.72
Mode of transportation		
Walking and private vehicle	156	70.9
Public transport	64	29.09
Time taken to reach hospital		
<60 min	204	92.71
>60 min	10	4.54
Knowledge about OPD timings		
Yes	173	78.63
OPD timings suitable		
Yes	204	92.72
Help of signals		
Yes	155	70.45
Visit type		
New	157	71.36
Follow-up	63	28.63
Arrival and registration time		
<20 min	185	84.09
>20 min	35	15.90
Registration and consultation time		
<20 min	157	71.36
>20 min	63	28.63

Table 2: Responses of study participants regarding other services available in the hospital

	Number (*n*)	Percentage (%)
Waiting area cleanliness		
Yes	169	76.81
No	51	23.18
Overcrowding		
Yes	104	47.27
No	116	52.72
Drinking water		
Yes	82	37.27
No	138	62.72
Toilet facilities		
Yes	211	95.90
No	9	4.09
Cleanliness of toilets		
Yes	87	39.54
No	133	60.45
Like to visit again		
Yes	217	98.63
No	3	1.36
Recommend this hospital		
Yes	185	84.09
No	35	15.90

Discussion

In the current study, among the total respondents males comprised the majority at 60%, which was similar to the composition of respondents as reported by Vahab *et al.*[16] The results of the present study revealed an overall satisfaction rate of 2.91 among the respondents. Among the mean scores of subscales, communication and financial aspects were found to be 3.12 and 3.00, respectively. These results are in agreement with those reported by Chander *et al.*,[17] in a study conducted among people living with human immunodeficiency virus (HIV), where mean score for general satisfaction was 3.22 ± 0.66. Similar results were reported in a few other studies conducted at Jimma specialized hospital, in Turkey and in Trinidad and Tobago.[8,9,18]

In contrast to the results of the current study, higher levels of satisfaction rates were reported by Vahab *et al.*,[16] from south India where mean scores for general satisfaction were 4.43 ± 0.48. On the other hand, low levels of satisfaction were reported from Tigray zonal hospital.[19] The present study conducted in a tertiary care hospital in Jammu city of UT of J&K, which is well equipped in terms of infrastructure, health workers, and diagnostics—all a recipe for good levels of patient satisfaction. Also, considering the study was conducted during the COVID-19 pandemic era where everyone including the public and healthcare workers are the under same sort of anxiety and pressure, the mean satisfactory rates of the patients attending the outpatient department seem to be

Table 3: Average scores for seven subscales of patient satisfaction as per PSQ-18

Subscales and items	Mean score	SD
General satisfaction	2.90	1.13
Technical quality	2.91	1.22
Interpersonal manner	2.96	1.64
Communication	3.12	1.50
Financial aspects	3.00	1.17
Time spent with doctor	2.92	1.37
Accessibility and convenience	2.73	1.17
Overall satisfaction	2.91	0.17

Table 4: Average patient satisfaction scores according to sociodemographic profile

Sociodemographic characteristics	Number (*n*)	Mean±SD	*P*
Religion			
Hindu	130	2.93±0.17	0.04
Muslim	47	2.85±0.17	
Sikh	40	2.95±0.15	
Others	3	2.78±0.09	
Occupation			
Employed	151	2.90±0.18	0.09
Unemployed	29	2.88±0.18	
Homemaker	40	2.96±0.12	
Marital status			
Single	41	2.88±0.17	0.29
Married	154	2.92±0.17	
Divorced/Separated	7	3.00±0.12	
Widowed	18	2.92±0.18	
Monthly family income			
<10,000	25	2.95±0.14	0.28
10,000-25,000	61	2.93±0.15	
25,000-50,000	69	2.91±0.19	
>50,000	65	2.89±0.17	
Educational status			
Illiterate	11	2.91±0.16	0.42
Upto 12th class	94	2.92±0.16	
Graduate	60	2.91±0.18	
Postgraduate and Professional	55	2.90±0.18	
Residence			
Rural	57	2.92±0.15	0.58
Urban	163	2.91±0.17	
Gender			
Male	130	2.91±0.18	0.73
Female	90	2.92±0.15	
Age			
<30 years	62	2.92±0.17	0.86
>30 years	158	2.91±0.17	

reasonably good. Since 70% of respondents were examined within 20 min of registration, it points to fewer patients in outpatient departments during the pandemic. This finding is in contrast to results of other authors who have reported long waiting time between registration and examination by a physician to be negatively correlated with patient satisfaction.[20,21] However, those studies were conducted in pre-COVID-19 era and hence may lack a comparative narrative with the present COVID-19 era study.

The results of the current study have further revealed that among the seven subscales of PSQ-18, communication and financial aspects had higher mean scores while accessibility and convenience subscale had the least mean score. Time spent with doctor had a mean score of 2.92, which is again a fairly good indicator of patient satisfaction despite the ongoing COVID-19 pandemic. On a similar note, Eshetie *et al.*,[22] reported that consultants' advise on treatment options is an important factor in predicting the levels of patient satisfaction. So it will be a better option to give more attention to outpatient consultation on various treatment options to improve patient satisfaction. Eshetie *et al.*,[22] also reported that failure of getting all prescribed drugs was negatively associated with patient satisfaction. Chandra *et al.*,[23] reported that doctors communication behavior positively affected patients' trust as well as satisfaction independently. It is pertinent to mention that most of the studies being quoted were conducted in prepandemic era.

The results of the current study have reported mean score of interpersonal manner at 2.96, which are congruent with those reported by Platonova *et al*,[24] who also noted that patient trust and good interpersonal relationships with physicians are major predictors of patient satisfaction. It is worthwhile to add here that interpersonal relationship is inclusive of the communication behavior and is a strong predictor of patient trust and patient satisfaction, thus trust acts as an interlink between doctors' communication behavior and client satisfaction. Some other authors have also reported similar results.[25,26]

All other subscales of patient satisfaction were found to be adequate with overall satisfaction showing a good mean score of 2.91 ± 0.17; this, in spite of COVID-19 protocol of wearing masks, physical distancing, and infection control practices in the healthcare institutions.

Adequate patient satisfaction as elucidated in the present study in the COVID-19 pandemic would be beneficial for primary care physicians for a referral to tertiary healthcare centers.

Limitations

The small sample size and sampling procedure are among the limitations in the current study. Since patients were selected upon their will, so the introduction of self-selection bias cannot be ruled out. In the facility-based studies, more positive responses by the respondents are observed and hence the social desirability bias cannot be ruled out.

Conclusion

The present study conducted during the pandemic era reveals good levels of patient satisfaction on various parameters like suitable OPD timings, toilet facilities, visiting hospital again, recommending hospital to others, etc., Overall satisfaction rate of 2.91 can be further improved by upgrading the staff's communication skills and strategies to lessen the waiting time between reporting and physician consultation. Patient satisfaction

can be used as an indirect measure of health outcomes but authors recommend further studies to elucidate the link between patient satisfaction and clinical health outcomes.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient (s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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