# Are Patients Satisfied with Healthcare Services in Hospitals? Which Dimensions Influence it?

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### **ABSTRACT:**

**Objectives:** To determine the patient satisfaction with health care services provided in hospitals, disregard of whether private or public

Methodology: A cross-sectional online survey was conducted from January to October 2020 who had utilized health services from private or public hospitals. A questionnaire was used for assessing the satisfaction in various dimensions; Likert scales were used for quantifying the level of satisfaction. A formal approval of ERC from the parent institution and informed consent was sought. The sample size was 384 keeping the expected satisfaction at 50%; non-probability sampling was done. Multiple variables were used to assess patient satisfaction. They were grouped into four thematic areas, and a mean score was given to each.

**Results:** The mean age of participants was  $25.19 \pm 6.99$ . More than half of the participants (59.9%) visited a private hospital compared to only 27% visiting a government hospital. Overall, 257 (88.9%) participants were satisfied with their previous visit. The satisfaction levels varied with various dimensions; with quality of doctor 73.2%; the environment and basic facilities 76.8%; the process of seeking care - 57.4%; and with medicine and diagnostic facilities 67.4%.

Conclusion: Three-quarters of the study population were satisfied with their last hospital visit. The perceived quality of doctors, the ambiance and hospitals' general facilities make a difference in patients' satisfaction. The follow-up visits and compliance with the treatment are influenced by how satisfied one is with the last visit.

Keywords: Patient's Satisfaction, health care delivery, public & private hospitals

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### **INTRODUCTION:**

The assessment of patients' satisfaction gives patients a voice. It helps public and private health service providers be more responsible for the quality of care they provide.<sup>1</sup> The healthcare sector of a country has social, political, moral, and business implications.<sup>2</sup> Compared to numerous other sectors' customer services, healthcare services are far more complex, co-productive, and intangible.<sup>3</sup> Patient satisfaction with healthcare is dependent on the perceived quality of service provided and treatment outcomes. These requirements must be met to minimize delays in seeking healthcare.<sup>4</sup> The satisfaction of patients undergoing treatment at a healthcare facility serves to analyze the quality of healthcare provided by that facility. Patient behavior is also strongly associated with the ability of healthcare service providers to meet patient demands<sup>5</sup> Patient satisfaction has been assessed by using various parameters such as accessibility to care, cost of care, and the quality of care, out of which the latter was the most significant.<sup>6</sup> Some studies suggest that the hospitals' quality of care is a crucial determinant of patient satisfaction.<sup>7</sup>

Healthcare providers' mainly focus on treating the diseases and providing medical advice to the patients. However, they should also provide a patient-centered service (i.e., social, psychological, personal, and economic aspects of healthcare provision), closely matching patients' other needs, wants and preferences.<sup>8</sup> Research has shown that improving patient satisfaction leads to better compliance, continuity of care, and better health outcomes, all of which translate to improved healthcare quality.<sup>9</sup> A significant amount of research suggests that there has been a drastic change in the traditional "Doctor-Patient" relationship in recent years. Since patient satisfaction forms an essential component of policy-level decisions, this topic needs to be considered in detail<sup>10</sup> Patients have clear-cut desires and expectations when they visit the hospital. The inadequate discovery of these desires can cause dissatisfaction among patients, leading to inadequate compliance and ultimately affecting healthcare quality.<sup>11</sup>

This study's objective was to determine patient satisfaction with the health services disregard of the public or private hospitals. The various dimensions of satisfaction were specifically assessed for understanding and determining the dimensions which may need further improvements. This will help im improving the quality of services provided by various hospitals.

## **METHODOLOGY:**

The study design followed for the research was crosssectional and was carried out throughout the country with no city or area restrictions. The entire process took approximately ten months from January 2020 to October 2020. Throughout these months, efforts were made to ensure the collection was not biased to ensure the research's authenticity. The sample size, calculated by using the EPI info version 7 sample size calculator, was 384. These calculations were done by keeping the level of significance at 5% and the confidence interval at 95% with an expected prevalence of 50 %. The non-probability sampling technique was followed, which allowed the team to select people that were easier to approach. The level of patient satisfaction at the government and private hospitals was determined through various variables that included: the general satisfaction level, technical facilities, behavior and attitude of health care professionals, finances, and factors about the doctor and hospital such as waiting time, investigative facilities, hospital infrastructure,

The data was collected using an online questionnaire, which was designed using Google survey forms. A structured questionnaire with closed-ended questions using a Likert scale was used. The questions were provided in both languages i.e., Urdu and English. The inclusion criterion included age groups of 18 years and above disregard of the sex of respondents and who had visited the hospital in previous 3 months. The online survey was distributed by the research team belonging to various parts of Pakistan. The data gathered from the questionnaires was transferred into IBM SPSS version 26, and further statistical analysis was done. Further analysis using Pearson's Chi-square test was used to assess the association at the level of significance

5% and the confidence interval of 95%. The ethical permission was taken from the Ethical Review Committee (ERC) of Bahria University Medical and Dental College. In addition, informed consent was also sought from respondents.

## RESULTS

Out of 384, 289 people responded to our questionnaire, which puts this study's response rate at 75.3%. The mean age of the participants was  $25.19 \pm 6.99$ . Among which151 (52.2%) were males, and 138 (47.8%) were females. Only 12.5% of the participants were married. The participants belonged to different socio-economic backgrounds; 127 (44%) belonged to a high socio-economic group. 142 (49.1%) of the participants were employed. It was noted that 173 (59.9%) of the participants visited a private hospital compared to 78 (27.1%) who visited government hospitals during their last visit. Table 1 illustrates socio-demographic characteristics of the study population

Several variables were used to assess patient satisfaction, which had been classified into four major groups. The levels/scales assigned have been further merged to create two categorical groups of satisfied and not satisfied. In the group 1: satisfaction with doctors' quality, the main pointers of dissatisfaction were: side effects of medicines were mentioned; getting consent and explaining the procedure. The patients were relatively more unsatisfied because the bathrooms were not clean; this was noted in the group 2 for having basic facilities. Problems in getting an appointment, (high) fee charges, and lack of feedback mechanism were identified as means of dissatisfaction in the group 3 of 'process of seeking care'. One of the main sources of dissatisfaction was not getting medicines from the hospitals in the group 4 about satisfaction with medication and diagnostics. Further details can be seen in Table 2. As seen in Table 2, most patients found their hospitals, doctors, and other medical/paramedical staff to be satisfactory. However, the majority were not satisfied with the cleanliness of washrooms, registration waiting time, the ease of getting an appointment, explaining the medicines' side effects, explaining any procedure done, feedback taken from them at the end, and the provision of medicines by the hospital.

Further analysis of the satisfaction data was done to convert them into scores from each of the 4 above groups. Thus for each of the questions in each group were given a score of 0 for dissatisfaction and 1 for the satisfaction. This was then converted into the percentage scored for each group to ensure the comparability. Table 3 illustrates the scores achieved by each of the major groups related to satisfaction. The socio-demographic characteristics were also assessed for their association with overall satisfaction. It was noted that only the family monthly income was found to affect the overall satisfaction (p value=0.000) significantly. Neelam Jawed Qureshi, Inayat H. Thaver, Omer Shahid, Manahil Khalid, Zuhaib Arshad, Munza Yusuf, Mashal Sarwar, Hafiz Hussain, Wara Fatima

### **DISCUSSION:**

Patient satisfaction is an essential aspect of healthcare as it directly reflects a healthcare facility's status. Our study inferred that most participants were satisfied with most of the proxy variables they were enquired about. Patient satisfaction is one of the universal goals of healthcare providers as it directly reflects the status of any healthcare facility.<sup>12</sup> Additionally, it helps achieve patient loyalty and competitive advantage.<sup>13</sup>

A study in Peshawar showed that 68% of patients were satisfied in the private sector versus 32% in public sector hospitals.<sup>10</sup> Another study conducted in Majmaah, Kingdom of Saudi Arabia, showed patients' level of satisfaction was 82%. The study showed that the most stated reason behind dissatisfaction was the unsuitable buildings (29%) of the health care centers. Also, a significant association was found between the level of patients' satisfaction with health care center services and the respondents' level of education.<sup>9</sup> The assessment of patient satisfaction should not be a one-off exercise, but it needs to be a continuously repeated action. This helps service providers learn their deficiencies, enabling them to undertake timely and appropriate alternative steps.<sup>14</sup> Interest in patient satisfaction is also supported by several studies that have demonstrated the positive impact of satisfaction assessment on hospital performanceÊand patient willingness to comply with their treatment plan.<sup>15</sup> The sociodemographic characteristics and factors about hospital services are associated with patient satisfaction.<sup>16</sup>The public health sector is plagued by uneven demand and perceptions of poor quality. Countrywide, the underutilization of available facilities is of significant concern. The utilization of public health care services has been decliningÊwhileÊthe rate of utilization of private health care facilities for the same period has been increasing.<sup>17</sup>. In a study conducted by Liu and Fang in 2019, patient' satisfaction potential factors included the quality, cost, and convenience of the medical services.<sup>18</sup> The results of our study identified similar variables that played a role in determining patient satisfaction. This study also identified several other new variables that might impact a patient's satisfaction, for example, providing medicines and obtaining feedback at the end.

Previous studies have shown that variables related to health care services like medical' staff's behavior, examination time, consulting time, and counseling time play a significant role in patient satisfaction.<sup>9</sup> However, our study's results show otherwise as the difference between percentages of respondents satisfied and not satisfied with each of these respective proxy variables is not very much different.

In a study conducted by Mummalaneni and Gopalakrishna, multiple previous studies, several socio-demographic factors have been examined to have any association with patient satisfaction.<sup>19</sup> These may include age, gender, marital status, occupation, and monthly family income. Our study revealed that only a patient's family monthly income is associated with their satisfaction. The respondent's age, gender, marital status, and occupation do not influence their satisfaction level with their care.( no significant P value in Chi-Square)

Some of the variables that play a role in patient satisfaction are modifiable, while some may not be modifiable. Some modifiable factors can be staff behavior, waiting time, and patient trust. Developed countries emphasize modifying their healthcare facilities and aiming to develop their economy by generating revenues through health tourism.<sup>20</sup> In England, the Department of Health (DOH) introduced a yearly national survey program that all NHS trusts had to survey patient satisfaction and report their management results.ÊTherefore, patient satisfaction is a legitimate indicator for improving all healthcare organizations' services and strategic goals.<sup>21</sup> It is important to make sure that the issues related to healthcare delivery are promptly addressed.<sup>22</sup> It is recommended that medical service providers develop effective strategies that can help improve the modifiable variables that impact patient satisfaction.

This study had its limitations regarding conducting online surveys, time limitations, and differentiating the reported and observed activities in terms of doctor-patient interaction. It also did not consider the type as well as the severity of illness and the gender and age of the health providers. It is recommended more studies need to be conducted by addressing various dimensions for improving the overall satisfaction and hence the quality of care.

### **CONCLUSION:**

Better health outcomes and treatment adherence can be achieved through improved patient satisfaction. According to our results, Our results only revealed that the lower family monthly income of patients is an important factor resulting in dissatisfaction. The problems in seeking care and

Table 1. Socio-demographic characteristics of the study population

AGE	
Mean age	25.19 (SD 6.99)
SEX	
Male	151 (52.2%)
Female	138 (47.8%)
MARITAL STATUS	
Married	36 (12.5%)
Single	253 (87.5%)
FAMILY MONTHLY INCOME	
10,000-50,000	64 (22.1%)
50,000-100,000	98 (33.9%)
>100,000	127 (43.9%)
OCCUPATION	
Government Employee	67 (23.2%)
Private Job/Personal Job	142 (49.1%)
Unemployed	80 (27.7%)

SATISFACTION VARIABLES	SATISFACTORY- N (%)	NOT SATISFACTORY- N (%)
1. Satisfaction with quality of doctor:	•	•
Behavior of Medical Staff	199 (68.9%)	90 (31.1%)
Doctor's attitude	268 (92.7%)	21 (7.3%)
Doctor's knowledge	271 (93.8%)	18 (6.2%)
Doctor's attention	268 (92.7%)	21 (7.3%)
Doctor's explanation	239 (82.7%)	50 (17.3%)
Examination time	192 (66.4%)	97 (33.6%)
Consulting Time	192 (66.4%)	97 (33.6%)
Counseling Time	177 (61.2%)	112 (38.8%)
Was privacy observed	265 (91.7%)	47 (16.3%)
Treated with dignity and respect	272 ((94.1%)	24 (8.3%)
Explained how to use the medicines	254 (87.9%	35 (12.1%)
Side effects of medicines were mentioned*	60 (20.8%)	229 (79.2%)
Consent*	149 (51.6%)	140 (48.4%)
Procedure explained*	126 (43.6%)	163 (56.4%)
2. Satisfaction with the environment and l	basic facilities:	
Hospital Accessibility	263 (91%)	26 (9%)
Hospital Cleanliness	244 (84.4%)	45 (15.6%)
Hospital Comfortability	231 (79.9%)	58 (20.1%)
Facilities in the waiting area	289 (100%)	0
Clean washrooms*	89 (30.8%)	200 (69.2%)
Parking facilities	217 (75.1%)	72 (24.9%)
Satisfaction with the process of seeking ca	re:	
The behavior of Paramedical Staff	198 (68.5%)	91 (31.5%)
Registration waiting time	128 (44.3%)	161 (55.7%)
Turn waiting time	234 (81%)	55 (19%)
Ease of appointment*	139 (48.1%)	150 (51.9%)
Paramedical/Medical staff was trained	275 (95.2%)	14 (4.8%)
Service charges*	151 (52.2%)	138 (47.8%)
Feedback was taken*	37 (12.8%)	252 (87.2%)
Satisfaction with medicine and diagnostic	facilities:	
Laboratory facility	230 (79.6%)	59 (20.4%)
Radiology facility	221 (76.5%)	68 (23.5%)
Other investigative facilities*	194 (67.1 %)	95 (32.9%)
Medicines were provided by hospital*	140 (48.4%)	149 (51.6%)
Vaccinations	189 (65.4%)	100 (34.6%)
Overall Satisfaction*	257 (88.9%)	32 (11.1%)

Table 2: The frequency distribution of satisfaction-related characteristics.

Table 3: Scores achieved by various dimensions of satisfaction

Satisfaction scores distribution	Score Mean (SD)	Cumulative percentage score achieved
The doctor's quality. (Scored 0-15)	10.98 (3.17),	73.2%;
The environment and basic facilities. (Scored 0-6)	4.61 (1.14)	76.8%;
The process of seeking care. (Scored 0-7)	4.02 (1.11)	57.4%;
The medicine and diagnostic facilities. (Scored 0-5)	3.37 (1.38),	67.4%.
Cumulative satisfaction score (Scored 0-33)	22.98 (4.90)	76.3%

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inadequate medicines and diagnostic facilities thus influence the lack of satisfaction of the patients. The general satisfaction masquerades the various dimensions that may need to be addressed to improve the satisfaction of patients; this study has unveiled some of those exciting dimensions.

#### **Authors Contribution:**

- Neelam Jawed Qureshi: Led the team including contributions I in all phases of research.
- Inayat H. Thaver: Supervised & contributed from conception to writing of article, reviewed & Improved the article and
- conducted a detailed analysis of data
- **Omer Shahid**; Objectives defining, questionnaire designing, Data entry, Data Analysis, Results writing, literature review, L data collection
- Manahil Khalid: Introduction writing, objective defining,
- questionnaire designing, literature review, data collection. **Zuhaib Arshad:** Methodology writing, questionnaire designing, data collection.
- Munza Yousuf: Abstract, data collection
- Mashal Sarwar: Data collection, sample size calculation,
- methodology Hafiz Hussain: Data collection, literature review
- Wara Fatima: Data collection

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