A Study on International Patient's Satisfaction and Quality Evaluation of Private Hospitals in Gurgaon India

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ABSTRACT

Measuring the quality of healthcare involves assessing patient satisfaction, which is a crucial aspect. The objective of this study was to assess the reliability and validity of the international patient satisfaction scale in relation to the quality of health services and its determining factors. To gather data on international patient satisfaction, a cross-sectional study was carried out involving 30 international patients at 10 private hospitals in Gurgaon, India. The overall outpatient satisfaction rate was found to be 76.19%. There were five factors: staff contact and communication, facilities, information transparency & administrative procedures, service supply results. The international patient satisfaction scale's total score ranged from 57 to 148 when the 30 components were added together. Greater satisfaction is reflected by higher scores. The scale's overall mean score was 134.51 (minimum = 57.0; maximum = 148.0). Despite the good attitudes and communication of the medical staff, foreign patients admitted to the private hospitals in Gurgaon, India, reported moderate to high levels of satisfaction.

Keywords: Accessibility, international patients, administrative procedures.

INTRODUCTION

The development of medical technology and its applications has not only helped the health care system flourish in many ways to address complicated health issues, but it has also exposed a number of systemic faults. Among these, one of the most serious shortcomings is when medical personnel injure patients whether knowing it or not (Brennan et al., 1991; Cresswell et al., 2013; Donaldson et al., 2017; WHO International patients Safety & Organization,

2009 WHO, 2019). International patient safety is now widely accepted as a crucial component of the health care system in order to prevent such situations (Ammouri et al., 2015; Papoutsi et al., 2018; Vincent, 2011).

Injection misuse directly endangers patients from other countries as well as medical professionals by exposing them to potentially fatal illnesses including HIV and hepatitis B and C (HBV and HVC) (Janssen and Rautmann, 2014). Patients may suffer grave consequences if radiation is administered incorrectly. According to a study on radiation safety, these kinds of events happen about once every 10,000 treatment sessions (Shafiq et al., 2009). Furthermore, according to estimates made by (Donaldson et al., 2017), the yearly cost of drug errors worldwide is estimated to be US\$ 42 billion, or about 0.7% of all healthcare spending.

According to recent data, around 2.6 million fatalities are recorded annually from 134 million occurrences of adverse events (National Academies of Sciences, Engineering, and Medicine, 2018). Hospitals are the primary source of reports on these incidents. About 10% of all hospital admissions experienced adverse occurrences, according to the UK Department of Health. Research conducted in the US and Canada indicates that carelessness is the primary cause of roughly 3-8%, and occasionally as much as 27%, of adverse events that happen to patients while they are in the hospital (Baker et al., 2004; Brennan et al., 1991; Gandhi et al., 2003; Thomas et al., 2005). Inadequate care also has a significant financial cost. The amount that unsafe care costs is estimated in the literature to be between EUR 2.8 to 84.6 billion, or 0.2% of all health expenditures; nevertheless, it is difficult to pinpoint the precise amount of costs (Allué et al., 2014; Jha et al., 2013; Vries et al., 2008; Zsifkovits et al., 2016).

A disease's diagnosis is the first and most important step toward curing it. But occasionally, serious mistakes are made throughout the diagnosing process, which can seriously injure individuals. There are serious consequences when the diagnosing process is delayed. Numerous studies on patient care in hospitals have been conducted. Still, the vast majority of patients go to primary care for medical attention. The World Health Organization (WHO) has recognized diagnostic mistake as a critical issue and has endeavoured to provide extra focus on patient primary care (Cresswell et al., 2013). The field of primary diagnosis is high-risk for a number of reasons. Research indicates that approximately 5% of US patients make diagnosis-related mistakes during primary care, and 50% of these mistakes could be dangerous for patients from other countries (Singh et al., 2014, 2017). The Institute of Medicine (IOM) determined in a report that almost everyone has encountered a diagnostic error at some point in their lives (Committee on Diagnostic Error in Health Care et al., 2015).

METHODS

Study Design

A cross-sectional study was used to collect data on international patients satisfaction with private hospitals inGurgaon city of Haryana, IndiaLocation Map of Study Area The Study area located between Latitude 15°54′2″ N to 16°16′19″ N Latitude and 76°48′40″ E to 77°4′21″ E Longitude (Fig. 1).

Fig.1. Study area Map of Gurgaon Haryana India.



Study Subjects and Sampling

Fifty foreign patients seeking full-time preventive and curative care at Gurgaon's private hospitals made up the study's sample. In this study, convenient sampling was used, with roughly ten foreign patients selected daily for interviews.

Study Instruments

The Ministry of Health in Gurgaon released the hospital quality standards for gauging foreign patients' contentment. Thirty questions were prepared for a satisfaction survey. To get the participants to agree on the international patient satisfaction questions and scale, a voting method was employed.

Data Collection

The Ministry of Health's questionnaire on worldwide patient satisfaction was then consulted in the development of the self-reported structured questionnaire. Data collecting sessions were led by the teachers, who were highly skilled researchers who worked at private hospitals in Gargaon.

Measurement and Variables

International patients' satisfaction with healthcare services was the dependent variable. Five degrees of the Likert scale were used: [1] for extremely dissatisfied and [5] for strongly satisfied. The 30 question responses were added up, and the scores greater than or equal to the mean were classified as satisfied, while those lower than the mean were classified as unsatisfied. According to (Aga et al., 2021), the cut-off value was therefore the mean score. Sociodemographic traits like age, gender, education, occupation, economic status, and health insurance status are among the independent factors.

Data Management and Analysis

Epi-data software was used to code, clean, and enter the data into the computer. SPSS 18.0 was then used to analyze the data. Through exploratory factor analysis, the Convergent validity of the instrument was determined. A

number of criteria had to be evaluated before to factor analysis. The items' correlation coefficient ought to be greater than 0.4. For factor analysis to be performed, the Kaiser-Meyer-Oklin must be greater than the suggested threshold of 0.6 (Kaiser 1970 and Kaiser 1974).

RESULTS.

There were 50 participants in the sample, and 71.4% of them were men and 28.6% were women. Two categories were created by recoding education: under college and college and above. The percentage of people classified as undercollege students was comparable to that of the college and above group. Seventy-nine percent of the sample said they were unemployed. 9.1% of those surveyed reported being employed, while 19.0% were students and retired.

Table 1. General characteristics of the participants who used healthcare services private hospitals in Gurgaon, India 2023.

Characteristics	Number (n = 301)	Percent (%)
Age		
Younger than 30	91	29.1
30 to 39	78	27.7
40 and older	132	43.2
Gender		
Female	92	28.6
Male	209	71.4
Occupation		
Employed	24	19.01
Unemployed	211	61.9
Students, retired	66	19.09
Economic status		
Rich	8	2.6
Fair	288	95.7
Near-poor and Poor	5	1.7
Insurance status		
No	75	24.9
Yes	226	75.1

Description of International patients Satisfaction Items

The 50 international patient who accessed the health care service in private hospitals in Gurgaon India were asked to answer 30 questions about health service satisfaction with a 100% rate of responses. This continuous variable was recoded into a dichotomous variable for analysis as described in the method (Measurement and Variables). The overall international patient satisfaction was 76.19%.

The subtotal mean score of the factor "Accessibility" of 5 items was 22.15 (Min = 9.0; Max = 25.0) Table 2. The subtotal score of each factor was calculated by summing all the factor's items. The score of n=1 item are min = 2, max = 5 and mean = 4.53. The score of n=2 are min = 3, max = 5 and mean = 4.48. The score of n=3 item are min = 1, max = 5 and mean = 4.48. The score of n=4 item are min = 2, max = 5 and mean = 4.43 and the score of n=5 item are min = 1, max = 5 and mean = 4.23.

Table 2. Accessibility satisfaction items Description of international patients who used healthcare services private hospitals in Gurgaon, India 2023.

Items (n =5)	Min	Max	Mean
Accessibility			
Signposts help you find the clinic easily	2	5	4.53
The diagram of the lobby is clear	3	5	4.48
Easy-to-understand instructions from staff to specialized rooms	1	5	4.48
Notice of clinic on time of medical examination and treatment is clear	2	5	4.43
Notice about the time to receive specific subclinical results (tests, X-rays, ultrasound) is clear	1	5	4.23
Total score	9	25	22.15

The subtotal mean score of the factor "Information transparency and administrative procedures" of 6 items was 26.67 (Min = 11; Max = 30.0) Table 3. The subtotal score of each factor was calculated by summing all the factor's items. The score of n=1 item are min = 2, max = 5 and mean = 4.72, the score of n=2 are min = 2, max = 5 and mean = 4.45, the score of n=3 item are min = 2, max = 5 and mean = 4.37, the score of n=4 item are min = 1, max = 5 and mean = 4.28, the score of n=5 item are min = 2, max = 5 and mean = 4.67 and the score of n=6 item are min = 2, max = 5 and mean = 4.18.

Table 3. Satisfaction items of Information transparency and administrative procedures Description of international patients who used healthcare services private hospitals in Gurgaon, India 2023.

Items (n =6)	Min	Max	Mean
Information transparency and administrative procedures			
The process of medical examination and treatment is publicly notified	2	5	4.72
You are clearly explained about your illness	2	5	4.45
You are clearly explained about the treatment	2	5	4.37
You are clearly explained about the treatment time and the disease progress	1	5	4.28
You are was consulted and explained clearly about the need for tests, subclinical (tests, ultrasound, X-ray, gastrointestinal endoscopy)	2	5	4.67
You are consulted and explained clearly about service prices before performing subclinical tests (tests, ultrasound, X-ray, gastrointestinal endoscopy)	2	5	4.18
Total score	11	30	26.67

The subtotal mean score of the factor "Facilities" of 7 items was 30.69 (Min = 14; Max = 34.0) Table 4. The subtotal score of each factor was calculated by summing all the factor's items. The score of n=1 item are min = 3, max = 5 and mean = 4.12, the score of n=2 are min = 1, max = 4 and mean = 4.49, the score of n=3 item are min = 2, max = 5 and mean = 4.51, the score of n=3 item are min = 2, max = 5 and mean = 4.49, the score of n=5 item are

min = 1, max = 5 and mean = 4.01, the score of n=6 item are min = 3, max = 5 and mean = 4.48 and the score of n=7 item are min = 2, max = 5 and mean = 4.59.

Table 4. Satisfaction items of Facilities Description of international patients who used healthcare services private hospitals in Gurgaon, India 2023.

Items (n =7)	Min	Max	Mean
Facilities			
The walkway in the clinic is not slippery, does not stagnant water	3	5	4.12
Arranging full seats waiting for customers	1	4	4.49
The area in the clinic is spacious, clean, with appropriate temperature control equipment (fans, air conditioners,)	2	5	4.51
Specialized clinic rooms are provided with clean pillows	2	5	4.49
Toilets are clean with available toilet paper, soap and water	1	5	4.01
You are provided with hot/cold drinking water	3	5	4.48
Clinic ensuring privacy for you when conducting medical examination and treatment (blinds, partitions)	2	5	4.59
Total score	14	34	30.69

The subtotal mean score of the factor "Interaction and communication of staff" of 6 items was 28.55 (Min = 15; Max = 29.0) Table 5. The subtotal score of each factor was calculated by summing all the factor's items. The score of n=1 item are min = 2, max = 4 and mean = 4.62, the score of n=2 are min = 3, max = 4 and mean = 4.91, the score of n=3 item are min = 2, max = 5 and mean = 4.52, the score of n=4 item are min = 3, max = 5 and mean = 4.71, the score of n=5 item are min = 2, max = 5 and mean = 4.86 and the score of n=6 item are min = 3, max = 5 and mean = 4.90.

Table 5. Satisfaction items of Interaction and communication of staff Description of international patients who used healthcare services private hospitals in Gurgaon, India 2023.

Items (n =6)	Min	Max	Mean
Interaction and communication of staff			
Staff always have words, attitude, proper communication, warm and friendly.	2	4	4.62
You are respected, treated fairly and cared for by the staff	3	5	4.91
The staff handle the job competently, responding promptly to your needs	2	5	4.52
You are advised to use medicine, diet, exercise regime and preventive medicine.	3	5	4.71
The staff does not suggest, ask for gifts and presents, making it difficult for customers	2	5	4.89
The clothes of the staff are neat, clean and beautiful, not crumpled, wearing a full name plate	3	5	4.90
Total score	15	29	28.55

The subtotal mean score of the factor "Service supply results" of 6 items was 26.45 (Min = 08; Max = 30.0) Table 6. The subtotal score of each factor was calculated by summing all the factor's items. The score of n=1 item are min = 1, max = 4 and mean = 4.21, the score of n=2 are min = 2, max = 4 and mean = 4.43, the score of n=3 item are min = 1, max = 5 and mean = 4.45, the score of n=4 item are min = 1, max = 5 and mean = 4.46, the score of n=5 item are min = 1, max = 5 and mean = 4.47.

Table 6. Satisfaction items of Service supply results Description of international patients who used healthcare services private hospitals in Gurgaon, India 2023.

Items (n =6)	Min	Max	Mean
Service supply results			
You are satisfied with the waiting time for medical examination and treatment	1	5	4.21
You are satisfied with the time of medical examination and treatment	2	5	4.43
You are satisfied with the waiting time to perform near-clinical services (tests, X-rays, ultrasound)	1	5	4.45
You are satisfied with the waiting time for receiving the results of subclinical tests (tests, ultrasound, imaging, screening, functional probes,)	1	5	4.46
You are provided with adequate medication instructions	2	5	4.43
Medical equipment and supplies of the clinic are sufficient to meet your needs	1	5	4.47
Total score	08	30	26.45

The total score of the international patients satisfaction scale was calculated by summing 30 items and the result was from 57 to 148. The higher the score, the more satisfaction is indicated. The total mean score of the scale was 134.51 (Min = 57.0; Max = 148.0).

DISCUSSION

According to the findings, there were thirty items that belonged to five factors and had very high internal consistency (Cronbach's Alpha > 0.9). This indicates that patient satisfaction and its related aspects could be examined using this 30-item scale. Furthermore, this study's scale was a formative measure. Despite its limitations—namely, that it was only appropriate in one context and was challenging to apply to others this type of measurement has been employed in several other studies that are comparable to it (Ahmed et al., 2013; Messina et al., 2024). In order to help managers act more precisely, the component structures in this study's scale were seen as markers for the places at which patients were dissatisfied and needed to improve.

The study found that patients were most satisfied with the "Facilities" element (mean score of 30.69) out of the five factors assessing patient satisfaction. This result differed from prior research where the mean satisfaction score for "accessibility" was low, at 22.15. This could be explained by the fact that the clinic's facilities were constructed using brand-new, hygienic equipment. The "Interaction and communication of staff component" received the second-highest satisfaction score of 28.55 out of the five components. This outcome differed from that of several other investigations (Duc et al., 2017; Hung et al., 2016). This was clarified by the fact that the clinic hired specialists, which had an impact on the caliber of the examination and treatment outcomes. Furthermore, Table 6's explanation of the test results and the results of the service supply received a lower satisfaction rating from the patients. The clinic's recent operation with incomplete operations may account for this, as it also resulted in

lengthier patient wait times, which had an impact on patient satisfaction as other studies have noted (Pham et al., 2019; Nguyen et al., 2018].

CONCLUSION

International patients hospitalized to the private hospitals in Gurgaon, India, expressed moderate to high levels of satisfaction, despite the good attitudes and communication of the medical staff. To further enhance the caliber of medical examination and treatment, future considerations should be given to the outcomes of service supply as well as the issue of how to satisfy the needs of uninsured patients. Arabians and international health managers could use this modified patient satisfaction assessment tool to find ways to improve health quality in private hospital facilities, as it has high convergent validity and internal consistency reliability.

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