# The Impact of Quality of Hospital Services on Patient's Satisfaction in Selected Hospitals of Punjab, India

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#### Abstract

In today's competitive era in health sectors, the patient's satisfaction is the major issue for health care providers. Now a day, so many new hospitals are upcoming to compete with other hospitals. Therefore, in hospitals the patient's satisfaction is the best indicator of overall quality of services. The study was carried out to assess the impact of quality of health services of hospitals on patient's satisfaction. A descriptive research design with cross sectional survey approach was used to collect data from 50 patients at Guru Teg Bahadur Hospital, Ludhiana, Punjab in august 2015, and using convenient sampling method. Data were collected by using SERVQUAL scale and modified patient's satisfaction scale. Findings revealed that the quality of hospital services provided to the patients has a positive impact on patient's satisfaction. The better the quality of health care services in the hospitals the more the patients get satisfied. The paper presents the importance of measuring patient's satisfaction in planning health care policies.

Keywords: Service quality, Hospital, Patient satisfaction, Patients.

#### Introduction

In today's competitive environment everyone is seeking for quality products/services and by assessing the quality of product/services one can make positive or negative image about the organizational performance<sup>1</sup>. Success to any business organization depends mainly in delivering high quality services to their respective customers<sup>2</sup>.

Service quality is directly related to customer satisfaction<sup>3</sup>. If the customers are satisfied with the quality of services provided by an organization then this can benefit the organization by retaining customers, gaining the confidence of customers, financial performance and competitive advantages<sup>4,5</sup>.

The customers perceptions of the quality of products/services and their expectations about the product/services can suggest the types of services delivered by organization. If the customers perceptions are high than the expectations then it indicates that the customers are satisfied with the quality of product/services and if the customers perceptions are low than the expectations then it indicates that the customers are not satisfied with the quality of product/services<sup>6,7,8</sup>.

Service quality can be influenced by many factors for example managerial support at various levels, financial disclosures, motivation of service providers, emotional intelligence of service providers, job satisfaction, cooflict management, communication skills<sup>9</sup>.

The hospitals should incorporate policies for periodic monitoring of patients perceptions of health care services received. Periodic monitoring is necessary for identifying the lacunas in the health care delivery system, to correct the existing work deficiency timely and thereby improving the quality of services<sup>10</sup>.

Patient satisfaction generally means their emotions, feelings, perceptions and attitude toward the type of health care they received during their visit to health care centres<sup>11-13</sup>. Patient satisfaction is the difference between patients perceptions of care received with the care expected<sup>14</sup>.

Patient's feedback on quality of health care services is very important for health care organizations because it helps the health care organizations for improving their service policies, enhancing decision making, meeting patient's expectations, framing strategies for better management, monitoring performance of service providers etc<sup>15,16</sup>.

One of the important factor in patient's overall satisfaction with hospital care is their satisfaction with nursing care<sup>17</sup>. Therefore, nurses must be aware of the factors which influence patient satisfaction and nurses should provide care to patients by considering those factors<sup>18</sup>.

**Objectives**: This pilot study was aimed: To calculate the sample size of patients for the main study. To find out the reliability coefficient of various questionnaires used. To establish the relationship between patient satisfaction and service quality.

#### **Materials and Methods**

The descriptive research design with cross sectional survey approach was used in this study. The study populations was inpatients of medical ward, surgical ward, ICU and emergency. Written permission was obtained from Guru Teg Bahadur Hospital, Ludhiana, Punjab for conducting the pilot study. Convenient sampling technique was used to collect data from 50 patients of Guru Teg Bahadur Hospital, Ludhiana, Punjab from 06/08/2015 to 09/08/2015, after obtaining informed consent from them. The SPSS 18 version was used to analyze the data. Descriptive statistics like mean, standard deviation, reliability coefficient and correlation was used.

**Instruments:** The data was collected by using following questionnaires: Standardized Service quality scale. Modified patient's satisfaction scale. Prior permission was taken from standardized tool developers for using tools in this study. The patients were also asked to respond to their demographic information questions.

Service Quality (SERVQUAL) scale: To assess the service quality in hospital, a standardized questionnaire SERVQUAL developed by Parasuraman A, Zeithaml VA and Berry LL in 1988 was used. It consists of 22 statements. The service quality was assessed in five dimensions namely tangibility, reliability, responsiveness, assurance and empathy. It has two parts, "expectations" part consist of 22 statements and "perception" part also consisting of 22 matching statements. Patients were asked to report on seven point likert scale ranging from 1-strongly disagree to 7-strongly agree.

Modified patient's satisfaction scale (MPSS): This scale was self developed to measure the patient's satisfaction with the delivered nursing care. The patients were asked to give their responses on 23 statements on a five point likert scale ranging from (1) strongly disagree to (7) strongly agree. It measures the patients satisfaction with nursing care in four dimensions namely communication and information; needs and expectations; skills and competencies; and safety. For all 23 questionnaires reliability coefficient varies from 0.74 to 0.96. The overall reliability of the questionnaire was 0.88.

#### **Results and Discussion**

Highest Percentage (44%) of staff nurses were in the age group of 21-25 years, most (82%) of staff nurses were female, 52% of staff nurse's professional qualification was GNM, near about 20% of them were working in medical ward, surgical ward and emergency ward respectively, 32% of them had 1-3 years of experience, 52% of them were unmarried, 50% of those married had no children, 50% each belongs to joint and nuclear family, 60% of them belongs to urban area, 26% each having family monthly income between 10000-20000 and 20000-30000 rupees respectively, 50% of them had in-service education on self compassion and emotional intelligence and 80% of them had attended in-service education once and 48% of them had attended in-service education < 1 year back.

44% of patients were greater than 30 years of age, 70% of patients were female, 46% of patients had metric education, 62% of patients belong to urban area, 36% of them were laborer, 40% of them were admitted in hospital once and 40% of them were admitted in medical ward.

### Calculation of sample size: Formula:

Sample size = 
$$\frac{4 \times \sigma^2}{d^2}$$

Where:  $\sigma = SD$ , d = Absolute degree of precision.

So as per the statistical calculations minimum 110 patients are required. After checking the feasibility, the researcher had determined the sample size of 500 patients for the generalizations of the finding of the study.

The cronbach's alpha coefficient was 0.93 and 0.95 for SERVQUAL expectation and perceptions respectively and 0.88 for Modified patient's satisfaction scale. The reliability coefficient for all questionnaires were very high, therefore suggesting the high internal consistency of all questionnaires.

Table-3 depicts the mean, SD and Cronbach's alpha coefficient of the total scale of SERVQUAL and its five dimensions. Overall the Cronbach's alpha for the expectations were 0.93 and for perceptions 0.95. The results are included in Table-3.

Table-1
Determination of sample size

Subjects	Variable	Anticipated mean/r	Anticipated SD	Absolute degree of precision	Confidence level	Power	n (sample size)
Patients	SERVQUAL	120	21	4	95%	-	110
	MPSS	99	14	3	95%	-	87
	Corelation (SERVQUAL vs MPSS)	0.69	-	Effect size/SD = 0.5	95%	90%	103

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Table-2 Mean, SD, and Cronbach alpha coefficient of Questionnaires

Questionnaires	Mean	SD	Cronbach alpha coefficient
Service quality	125.37	19.08	0.93
Expectations Perceptions	114.68	24.17	0.95
Modified patient's satisfaction scale	99.27	13.87	0.88

Table-3
Mean, SD, and Cronbach alpha coefficient of Service Quality (SERVQUAL) scale

Dimensions		Mean	SD	Cronbach alpha coefficient
Tangibles	Expectations	24.17	3.23	0.89
	Perceptions	22.23	4.55	0.91
D 11 1 111	Expectations	31.25	3.16	0.87
Reliability	Perceptions	28.22	6.17	0.94
Dagmanaiyanaga	Expectations	20.16	5.23	0.92
Responsiveness	Perceptions	18.12	6.34	0.86
Ассумомос	Expectations	23.73	3.41	0.88
Assurance	Perceptions	21.63	4.55	0.97
Emmothy	Expectations	25.79	9.51	0.95
Empathy	Perceptions	21.94	8.63	0.89
Total cools	Expectations	125.37	19.08	0.93
Total scale	Perceptions	114.68	24.17	0.95

Table-4 Mean, SD, and Cronbach alpha coefficient of Modified Patient's Satisfaction Scale

Dimensions	Mean	SD	Cronbach alpha coefficient
Total scale	99.27	13.87	0.88
Communication and information	33.67	3.28	0.94
Needs	18.14	3.11	0.86
Skills and competences	23.11	2.91	0.89
Safety	22.83	2.87	0.90

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The Cronbach's alpha for the modified patient's satisfaction scale for this study was 0.88. The Cronbach's alpha for the four dimensions of this study were as follows: communication and information (0.94), needs (0.86), skills and competences (0.89), safety (0.90). The results are included in Table-4.

Table-5
Relationship between variables

Relationship	Service quality and Patient's satisfaction		
Correlation (r)	0.69		
p value	0.05		

Positive correlation was found between service quality and patient's satisfaction 0.69 at 0.05 level of significance (Table-5).

**Discussion:** This pilot study was aimed to estimate the reliability coefficient of various questionnaires used in the study; to investigate the impact of quality of hospital services on patient's satisfaction and to calculate the sample size for the main study.

The results indicated that the reliability coefficient of SERVQUAL was 0.93 for expectation and 0.95 for the perception. This was supported by the findings of Parasuraman A, Zeithaml AV and Berry LL (1988)<sup>19</sup> reporting the total scale reliability of SERVQUAL 0.92. The internal consistency reliability of modified patient's satisfaction scale was 0.88, Lubeck DP, Litwin MS, Henning JM, Mathias SD, Bloor L, Carroll PR (2000)<sup>20</sup> reported the internal consistent reliability of patient satisfaction scale 0.82.

Regarding the hypothesis, relationship between service quality and patient's satisfaction, a positive correlation was found among service quality and patient's satisfaction (0.69). There are many factors affecting patient's satisfaction i.e. humility of nurses, nurses ability to respect their family members, listening to patients and relative carefully etc<sup>21</sup>. Besides this the work environment of nurses and the staffing ratio of nurses and patients also plays an important role in patient's satisfaction<sup>22</sup>.

#### Conclusion

This pilot study represents that the way quality of health services are provided to the patients has a greater influence on patient satisfaction. It also focuses on various factors that influence the patient's satisfaction. This study recommends that frequent evaluation of health care services is important to correct the existing deficiencies in an health care organization.

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## References

- 1. Aiello A., Garman A. and Morris B.S. (2003). Patient satisfaction with nursing care: A multilevel analysis. *Journal of Quality Management in Health Care*, 12(3), 187-191.
- **2.** Ann K., Matthew D., Douglas M., Jeannie P., Linda F., Donna F. and Linda H. (2009). Nursing: A Key to Patient Satisfaction. *Health Affairs* (Millwood), 28(4), w669–w677.
- **3.** Berry L.L., Lefkowith E.F. and Clark T. (1988). In services, what's in a name? *Harvard business review*, 66(5), 28-30.
- **4.** Elaine Y, Gail C.D., Richard R. (2002). The Measurement of Patient Satisfaction. *Journal Nurse Care Quality*, 16(4), 23–29.
- 5. Evans J. and Lindsay W. (1996). The Management and Control of Quality. Cincinnati: West Publishing Company.
- **6.** Gronroos C. (1993). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- 7. Han C.H. (2003). Measuring patient satisfaction as an outcome of nursing care at a teaching hospital of Southern Taiwan. *Nursing Care Quality Journal*, 18(2), 143-150.
- **8.** Iftikhar A., Allah N., Shadiullah K., Habibullah K., Muhammad A.R. and Muhammad H.K. (2011). Predictors of Patient Satisfaction. *Gomal Journal of Medical Sciences*, 9(2), 183-188.
- **9.** Irfan S.M., Ijaz A. and Farooq M.M. (2012). Patient Satisfaction and Service Quality of Public Hospitals in Pakistan: An Empirical Assessment. *Middle-East Journal of Scientific Research*, 12(6), 870-877.
- 10. Jenkinson C., Coulter A., Bruster S., Richards N. and Chandola T. (2003). Patients' experience and satisfaction with Health Care: Results of a questionnaire study of specific aspects of care. *Quality Safety Health Care*, 11, 335-339.
- **11.** Johansson P., Oléni M. and Fridlund B. (2002). Patient satisfaction with nursing care in the context of health care: a literature study. *Scand J Caring Sci.* 16(4), 337-44.
- **12.** Kandampully J. and Butler L., (2001). Service guarantees: A strategic mechanism to minimise

- customers' perceived risk in service organisations. *Managing Service Quality*, 11(2), 112-121.
- 13. Kara A. (2005). A paradox of service quality in Turkey: The seemingly contradictory relative importance of tangible and intangible determinants of service quality. *European Business Review*, 17(1), 5-20.
- **14.** Kim W. H. J. L. E. (2001). Effects of relationship marketing on repeat purchase and word of mouth. *Journal of Hospitality and Tourism Research*, 25(3), 272-288.
- **15.** Lubeck D.P., Litwin M.S., Henning J.M., Mathias S.D., Bloor L. and Carroll P.R. (2000). An instrument to measure patient satisfaction with healthcare in an observational database: Results of a validation study using data from Ca PSURE. *Am J Manag Care*. 6(1), 70-6
- **16.** Merkouris A., Ifantopoulos J., Lavara V. and Lemonidou C. (1999). Patient satisfaction: A key concept for evaluating and improving nursing services. *Journal of Nursing Management*, 7, 19-28.
- **17.** Mrayyan M.T. (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *International Nursing Review*, 53, 224-230.

- 18. Naeem H., Iqbal Saif M. and Khalil W. (2008). Emotional Intelligence and Its Impact On Service Quality Empirical Evidence From The Pakistani Banking Sector. *International Business and Economics Research Journal*, December, 7(12), 55-62.
- 19. Oyvind A.B., Ingeborg S.S. and Hilde H.I. (2011). Overall patient satisfaction with hospitals: effects of patient-reported experiences and fulfillment of expectations. *British Medical Journal Quality Safety*, available at:http://qualitysafety.bmj.com [Accessed on August 2011]
- **20.** Parasuraman A., Zeithaml A.V. and Berry L.L. (1988). SERVQUAL: A Multiple item scale for measuring consumer perception of service quality. *Journal of Retailing*, 64(1), 12-40.
- **21.** Parasuraman A., Zeithaml V.A. and Berry L.L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 41-50.
- **22.** Pui-Mun Lee P.K.D.N.G. (2006). Impact of deficient healthcare service quality. *The TQM Magazine*, 18(6), 563-571.