The Impact of Quality on Satisfaction: Case Study of Mongolia Private Hospitals

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ABSTRACT

Quality of service is the most important indicator of patient satisfaction. The purpose of this study was to examine the impact of service quality on overall patient satisfaction in private hospitals in Ulaanbaatar, Mongolia. The study sample consisted of 69 patients who were selected from eight private general hospitals in Ulaanbaatar, Mongolia, using a sequential sample. Data analysis was performed using a t-test, ANOVA and multivariate regression. This study found a close relationship between quality of service and patient satisfaction. About 45% of the differences in overall satisfaction are due to four aspects of quality of service. In terms of process quality, the waiting time for visits, receptions and operations should be reduced, and services should be provided as soon as possible. The need to strengthen the interpersonal aspects of care and communication skills of service providers should be emphasized.

KEYWORDS: quality, service, satisfaction, hospital

1. INRODUCTION

Customer satisfaction as an important factor for success and long-term survival in the healthcare industry has attracted the attention of providers in the current competitive environment (Laohasirichaikul et al., 2010). Satisfied patients are important for hospitals because greater patient satisfaction with care will entail stricter patient compliance with the doctor's instructions, greater loyalty, a positive oral speech of the patient, reduced patient complaints, and higher profitability. higher patient return rates and more patient visits (Choi et al., 2004; Dawn & Lee, 2004; Wu, 2011). For these reasons, patient satisfaction assessment has become part of the strategic process of healthcare organizations. Measuring patient satisfaction and recognizing their effectiveness is important for healthcare managers because of the impact they have on the health and financial performance of healthcare organizations (Raposo et al., 2009).

Patient perception of service quality plays an important role in achieving customer satisfaction, and the causal relationship between service quality and satisfaction has been an important topic of discussion in many relevant studies (Choi et al., 2004). Zeithaml et al., (1996), in their study of the implications for service quality, indicated that customer perception of service quality is the most important indicator of customer satisfaction. In practice, satisfaction and quality are often used interchangeably, but the unanimous opinion of the researchers is that they are two different designs, although they are closely related to each other (Padma et al., 2010). Value judgments are relatively specific, while value judgments are mostly general (Jen et al., 2011). To achieve satisfaction, the patient must experience the service, while the perceived quality of service is not necessarily the result of the experience of a particular service (De Man et al., 2002). In addition, service quality is associated with cognitive judgment, and customer satisfaction is associated with effective judgment (Choi et al., 2004; Lai & Chen, 2011). The distinction between service quality as a cognitive design and customer satisfaction as an affective design suggests a causal relationship in which service quality is a predictor of patient satisfaction (Choi et al., 2004). Lee et al., (2000) concluded that customers are (not) satisfied only when they perceive and experience services; This shows that service quality assessment takes precedence over customer satisfaction. Therefore, service quality is often seen as a prior level of customer satisfaction (Dabholkar et al., 2000; Amin et al., 2013) and the notion that service quality has a direct impact satisfaction has been widely recognized (Cronin & Taylor, 1992).

Numerous studies on the relationship between quality of service and customer satisfaction show that higher quality of service will lead to higher satisfaction (Cronin et al., 2000). In the area of medical services, the relationship between quality of service and patient satisfaction is also being discussed. The results of studies conducted by Badri et al., (2009) in Cyprus indicate a positive effect of quality of service on patient satisfaction. In Mongolia, a lot of research

has been done on patient satisfaction and quality of service in hospitals. For example, Arab et al. (2014) conducted a study to develop and validate a device for measuring hospital patient satisfaction. They found seven dimensions to satisfy the patient: doctor-patient communication; Nursing; convenience; visitors' purity; costs; and overall satisfaction. The study showed that the overall patient satisfaction rate was 70%. But we did not find a study that considered the relationship between quality of service and patient satisfaction as two different designs. Thus, the aim of this study was to invest in the impact of service quality indicators on overall patient satisfaction in private hospitals in Ulaanbaatar, Mongolia.

2. Method
2.1. Design
This study was conducted in 2010, and the target group of the study was patients hospitalized in private hospitals in Ulaanbaatar, of which we selected 8 general hospitals for the study. The sample size in this study was 69 patients who were interviewed on the day of discharge from the hospital. Patients were selected sequentially and all discharged patients were interviewed during the study period. The study objectives were explained to patients, and they were confident in the confidentiality of their personal information. For illiterate patients, a trained interviewer helped fill out the questionnaire.

2.2. Measuring instrument
Researcher-developed questionnaire used to collect data. The first part of the instrument included 7 items related to the demographic characteristics of the patient. In this study, we added three questions (Q15-Q17) to the cost questionnaire to evaluate the impact of costs on perceptions of quality.

2.3. Data Analysis
To assess the reliability of the questionnaire, the Cronbach coefficient alpha was calculated, and the coefficients 0.934 and 0.942 were used for "perceived quality" and "overall satisfaction", indicating stability and reliability, respectively. To assess the level of perception of the quality of service and overall satisfaction, the Likert scale was used (1 = strongly disagree, 5 = strongly agree). Perceived patient quality of service and overall satisfaction mean that variable points were obtained from the total points divided by the number of points. Data analysis was performed using descriptive statistics, t-test, ANOVA, and multivariate regression methods in SPSS.21 software.

3. Result
The average age of the patients was 48 ± 16.9 years, of which 54.5% were women and 45.5% were men. About 7% of patients were illiterate, 48% were with different levels of higher education, and 91% of patients had medical insurance. The mean time of the last stay (ALS) in the hospital was 5.4 ± 4.4 days, and 33% of patients had a previous stay in this hospital. In addition, 7.5% of patients called their health after discharge from the hospital "excellent", 55% - "good" and 37.5% - "medium" and "poor".

The average scores relating to 17 points of quality of service lie between 3.16 (Q16. Reasonable expenses for hospital care) and 4.38 (Q1. Well-dressed and well-groomed staff). Among the four measurements of service quality, the highest average score (4.19) relates to the quality of the physical environment (EQ), and the lowest average score (3.39) is associated with the measurement of service costs (Table 1). The overall average patient perception of the quality of service in the hospital was 3.91 ± 0.61 out of 5. Also, the average scores for the four indicators of overall satisfaction changed from 4.07 (SAT3. Making a reasonable decision about hospitalization in this hospital) to 4 , 15 (SAT1. Overall satisfaction with the services provided by the hospital). The average overall satisfaction score was also 4.11 ± 0.65 out of 5 (table 1).

Comparison of the average indicators of general satisfaction in terms of the patient's demographic variables showed that insurance coverage (t = 2.53, p = 0.011), hospital size (t = 2.09, p = 0.037) and post-discharge health status (F = 8.70, p <0.000) affected overall patient satisfaction, while variables such as age, length of stay, gender, educational level, and previous hospitalization in the current hospital did not. The overall satisfaction rating of patients with insurance coverage was higher than that of a patient without insurance coverage. Large hospital patients (more than 150 beds) received higher overall satisfaction scores than patients hospitalized in medium-sized hospitals (below 150 beds). Also, patients who described their state of health at discharge as "excellent" had the highest score, and patients who described their condition as "poor" had the lowest overall satisfaction score.

Table1. Average and standard deviations of indicators of quality of service and patient satisfaction

Item/Dimension	Mean	±SD
Environment Quality (EQ)	4.19	0.59
Q1. Well dressed and groomed staff	4.38	0.53
Q2. Clean and comfortable environment of the hospital	4.32	0.58
Q3. Modern and up- to- date equipment	3.97	0.93
Q4. Visual appeal of physical facilities	4.14	0.75
Process Quality (PQ)	4.07	0.72
Q5. Telling when services will be performed	4.04	0.79
Q6. Prompt provision of medical and non-medical services	4.04	0.80
Q7. Willingness of staff to help patients	4.05	0.79
Q8. The availability of staff when needed	4.10	0.79
Q9. Creating a sense of trust in the patient	4.11	0.82
Q10. Conducting the services right at the first time	4.06	0.85

Interaction Quality (IQ)	3.74	0.79
Q11. Polite and friendly dealing with patients by staff	3.34	1.20
Q12. Attention to the patients' beliefs and emotions	3.91	0.82
Q13. Having patients' best interest at heart	3.85	0.85
Q14. Understanding the specific needs of patients	3.87	0.85
Costs	3.39	0.92
Q15. Costs versus quality of services	3.68	0.98
Q16. Reasonable hospital service costs	3.16	1.12
Q17. Valuable service versus paid costs	3.24	1.01
Overall satisfaction	4.11	0.65
SAT1. Overall satisfaction with the services provided by the hospital	4.15	0.67
SAT2.Satisfaction of selecting this hospital for hospitalization	4.12	0.69
SAT3. Making a wise decision for being hospitalized in this hospital	4.07	0.72
SAT4. Positive feeling about relationship with this hospital	4.09	0.72

Table2. Regression Results: Impact of Service Quality on Patient Satisfaction

Service Quality dimensions	B	Beta	t-value	Sig.
Constant coefficient	1.56	-	13.845	< 0.001
Environment Quality	0.07	0.06	1.709	0.088
Process Quality	0.26	0.29	7.718	< 0.001
Interaction Quality	0.09	0.12	3.522	< 0.001
Cost	0.26	0.36	13.11	< 0.001

p < 0.001.

To assess the relative importance of each of the parameters of quality of service in predicting patient satisfaction, a linear regression analysis was performed. Based on the results of the regression, the R^2 value of this research model was 0.45, and therefore 45% of the variance of the patient's overall satisfaction is explained by the quality of service. Regression coefficients show that the regression model was statistically significant, and the three independent variables "maintenance costs", "process quality" and "quality of interaction" were positively effective for patient satisfaction, but the quality of the physical environment did not significantly affect the general condition of the patient. satisfaction (see Table 2).

4. Conclusion

As expected, this study also found a close relationship between quality of service and patient satisfaction. But when service quality is seen as a multidimensional design, provide invaluable advice for managers and decision-makers. The study of quality of service as a multidimensional construct clarifies effective areas of quality of service in establishing patient satisfaction. In this way, managers can focus their quality improvement efforts on areas of service quality that have a greater impact on patient satisfaction. This study found that the costs of care, the process of providing services, and patient interaction had the most important positive effect on overall satisfaction. For hospital managers, this study emphasizes the need to comply with tariffs and maintain high standards in the service delivery process. Managers and owners of private hospitals should determine rational prices depending on the quality of service. Regarding the quality of the process, they should reduce waiting times for visits, hospitalizations and surgeries so that services are delivered as quickly as possible. It should also be emphasized the strengthening of the interpersonal aspects of the skills of care and communication of doctors, nurses and staff.

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