ANALYZING AND EVALUATING PATIENT PERCEPTION: A COMPARATIVE STUDY IN GOVERNMENT AND PRIVATE HOSPITALS

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Abstract

The aim of the study is to analyze and evaluate the patient perception gap using SERVQUAL technique. This study uses twelve attributes between customer expectation and customer perception of government and private hospitals. Data was collected by using questionnaire from 402 patient in government and private hospital and then tested using software SPSS to find the regression analysis and correlate with SERVQUAL attributes. This study also identifies the dependent and independent variables for delivered service and received service quality. The study examines that service quality in health care industry is very complex in nature as compared to other services. The results indicates that the customers' perceptions did not exceed their expectations, as they were dissatisfied with the level of healthcare services provider rendered by both government and private sector hospitals. The paper find relationship for different variables which tend to describe the techniques of examination of quality of delivery.
Keywords: SERVQUAL, service quality, healthcare industry.

1. INTRODUCTION

According to WHO health care in India is a biggest service provider of medical treatment and employment and is expanding rapidly. A hospital is an institution which is scientifically & economically organized for prevention, diagnosis & treatment of diseases. Hospitals are divided according to service provided, ownership and bed capacity which refer patient for their treatment. A service has been defined as 'any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything' (Kotler et al., 2013). It is this fundamental belief that services are dissimilar to goods that leads to a service discipline requiring innovative thoughts, methods, and strategies (Gotzamani and Tzavlopoulos, 2009; Berry and Parasuraman, 1993). Generally, service quality (SERVQUAL) is a robust scale for findind quality of service across service sectors (Naik et al., 2015). To evaluate such sector in providing services, firstly find and modify scale to point out for industry specific demand (Turan et al., 2016). The SERVQUAL approach is considered a major departure from the old method of service received to evaluate a customer satisfaction prediction. Other than perception, SERVQUAL suggest using expectation/perception the service quality gap as an enduring perception that find customer satisfaction with a service provider (Sultan and Yin Wong, 2010; Babakus and Mangold, 1992; Parasuraman et al., 1991). Parasuraman et al. (1985, 1988) and Gro¨nroos (1984) defined service quality as a parameter of customer results from comparisons between expectations of quality with perceptions of actual received quality. Understanding service quality is indispensable for service providers aspiring to attract and retain customers (Muhammad and Cyril, 2010). Crosby (1979) defined quality as zero defects. Juran (1980) measured it as conformance to requirement and others measured quality by counting internal and external failures (Garvin, 1983). One of the pressing issues before services research is concern with the identification of the determinants of service quality (Al-Kilani, et al., 2017). This should be a central concern for service management academics and practitioners, as the identification of the determinants of service quality is necessary to be able to specify measure, control and improve customer perceived service quality (Chowdhary et. al., 2007).

The main aim of research is to compare the service quality attributes which affect the customers satisfaction and examine the dependent and independent variables which positively influence the service quality dimensions and measure the service quality of government and private hospital of Indore Madhya Pradesh state and to offer suggestion based on results of the study. This study determines the service quality dimensions which effect to the delivery of service in healthcare industry. This study broadly classified into various sections such as literature, data collection, methodology, analysis, conclusion, limitations, future implications.

2. LITERATURE REVIEW

A systematic literature review has been conducted to check the status of current research that has been carried out in healthcare industries. Campos et al. (2017) aimed to identify service quality in public health clinics: perceptions of users and health professionals. Data was collected by a questionnaire and interview both. Modules identify expectations, were used a Likert scale ranging from zero (not important) to ten (very important). In the performance evaluation modules, the responses were collected on a Likert scale, ranging from zero (bad performance) to 10 (excellent performance). About the quality of service, indicated by the gaps between expectations and performance, patients and providers evaluated service

quality negatively in all service attributes. Shabbir et al. (2016) intended towards Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan. For data collection random sampling techniques were used and the data was self-administered, and researcher has personally distributed and collected questionnaires from the willing inpatients of both public and private sector hospitals. Reliability and validity were tested for determining patient perception of expectations. Yousapronpaiboon and Johnson (2013) aimed to identify Out-patient service quality perceptions in private Thai hospitals. A self-administrated questionnaire survey was administered to collect empirical data from out-patients with private hospital out-patient departments located in Thai. To collect quantitative data for the study, a total of 400 questionnaires were printed and distributed for the purpose of data analysis. A 7-point Likert-type scale was used, ranging from strongly disagree (1) to strongly agree (7) to access the level of expectations and perceptions regarding out-patients service quality. Amin and Zahora Nasharuddin (2013) intended towards hospital service quality and its effects on patient satisfaction and behavioural intention. A convenience sampling technique was used in this study and data was collected by using questionnaire. It investigates hospital service quality and its effect on patient satisfaction and behavioural intention. The SEM approach was used to test the constructs framework between hospital service quality, patient satisfaction and behavioural intention. For hospital service quality, overall service was the key driver of service quality, followed by social responsibility, medical service, discharge, and admission, respectively. patients are more concerned with the overall service dimension than other dimensions as a key factor in establishing relationship with their hospitals.

3. HYPOTHESIS TESTING

1. Patient perception do not meets expectations in government hospital.
2. Patient perception do not meets expectations in private hospital.
3. There is no difference in service quality of private and government hospital.
4. Patient satisfaction in government hospital are more than private.

4. METHODOLOGY

This study uses SERVQUAL and survey questionnaire methods The SERVQUAL instrument developed by Parasuraman et al. (1985) has proved popular, being used in study of service quality. This is because it has a generic service application and is a practical approach to the area. Several researchers have applied the SERVQUAL model to measure service quality in the hospitality industry, with modified models to suit specific hospitality situations. The SERVQUAL instrument consists of 68 statements based on twelve SERVQUAL attributes for assessing consumer perceptions and expectations regarding the quality of a service. Respondents are asked to rate their level of agreement or disagreement with the given statements on a 5-point Likert scale. Consumers' perceptions are based on the actual service they receive, while consumers' expectations are based on past experiences and information received. The statements represent the determinants or dimensions of service quality. Refinement of this work reduces the original service dimensions used by consumers to judge the quality of a service from ten to five. Researchers have used 68 structured and paired questionnaires to evaluate the expectation and perception of patient in government and private hospital.

Table 01. The 12 key dimensions (Parasuraman et al., 1985) that were identified are given

S.no.	Key SERVQUAL Dimensions	Description
1.	TANGIBLES	physical evidence and representations of the service, other customers in service facility.
2.	RELIABILITY	consistency of performance and dependability, accuracy in billing, keeping records correctly, performing the service right at the designated time.
3.	RESPONSIVENESS	willingness or readiness of employees to provide service, timeliness of service such as mailing a transaction slip immediately.
4.	EMPATHY	Caring for patient and take individual attention for patient for better hospital service attention.
5.	ASSURANCE	keeping patient Knowledge and courtesy and their ability to inspire trust and confidence for better performance in hospital service environment.
6.	COMPETENCE	possession of the required skills and knowledge to perform the service, support personnel and research capability of the organization.
7.	ACCESS	approachability and ease of contact, the service is easily accessible by telephone, waiting time to receive service is not extensive, convenient hours of operation.
8.	COURTESY	politeness, respect, consideration, friendliness of contact personnel, consideration for the consumer's property, clean and neat appearance of public contact personnel.
9.	COMMUNICATION	keeping customers informed in language they can understand and listening to them, explaining the service itself and its cost, assuring the consumer that a problem will be handled.

10.	CREDIBILITY	trustworthiness, believability, honesty, company reputation, having the customer's best interests at heart, personal characteristics of the contact personnel.
11.	SECURITY	freedom from danger, risk, or doubt, physical safety, financial security, confidentiality.
12.	UNDERSTANDING THE CUSTOMER	understanding customer needs, learning the customer's specific requirements, recognizing the regular customer.

5. DEMOGRAPHIC PROFILE OF SURVEYED RESPONDENTS

Table 02. Respondent's profile

Variables	Category	Frequency
Age	18-25	52
	26-35	78
	36-45	108
	46-55	102
	56+	62
	Total	**402**
Monthly Income	5,000-10,000	30
	10,000-20,000	56
	20,000-30,000	73
	30,000-40,000	115
	40,000+	128
	Total	**402**
Occupation	Student	51
	Professional	127
	Businessman	85
	Housewife	37
	Govt. employee	48
	Others	54
	Total	**402**
Education Level	Undergraduate	150
	Graduate	162
	Postgraduate	90
	Total	**402**
Gender	Male	278
	Female	124
	Total	**402**

6. DATA ANALYSIS

Data were processed using SPSS software and descriptive statistics were found for all variables. The attributes score is added and average of them is taken to obtain the score of the variables in each section and for each variable mean for all the cases together (N=68) and standard deviation is calculated. Reliability is tested using Cronbach's alpha and for government hospital Cronbach's alpha find 04 out of 12 variables have value more than 0.4, (reliability (0.6861), competence (0.4525), responsiveness (0.4481) and understanding (0.4438)) which is acceptable value. For 04 variables out of remaining 08, have above 0.3, but with a small sample size it was considered acceptable (security (0.385), courtesy (0.3827), tangible (0.3631), and communication (0.3469)). For the remaining other 04 variables ''credibility (0.234), Empathy (0.2525), assurance (0.0268) and access(-0.1806) it is very low. Thus, we have analyzed the possible reasons for the low reliability in these cases and though it was possible to omit the above-mentioned items to increase the reliability but sample size being small, it is felt that we might as well retain them for analysis.

Comparing all attributes "reliability" ranked highest with mean of 3.2899 which shows that government hospital provides a good service to patient and will insist on error free records and hospital performs the better service right the first time. Patients feel safe in getting treated by the doctors in government hospital. Higher value of mean shows the most critical value of variable, middle value of mean shows the critical variable, and the lower value of mean shows the less critical value and needs improve mean. Attributes are divided into three categories first most critical, second sub critical and third one is less critical, 12 attributes are arranged according to value of mean (A)

$$A>3.2 \qquad \text{most critical}$$
$$3.2>A>2.1 \qquad \text{critical}$$
$$A<2.1 \qquad \text{less critical}$$

For Government hospital there are only one variable which are most critical having a mean more than 3.2, reliability (3.2899). Customers perceptions about these variables show it. Remaining elven variables are sub critical having a value of mean more than 2.1 showing the significance level access (2.8806), credibility (2.8295), assurance (2.7746), tangible (2.7596), empathy (2.7295), communication (2.7114), competence (2.6978), responsiveness (2.6915), security (2.6754), understanding (2.6692) and courtesy (2.6203). Standard deviation of most critical attributes is reliability (0.5504) and standard deviation of sub critical attributes are access (0.7040), credibility (0.6431), assurance (0.6220), tangible (0.3065), empathy (0.3748), communication (0.4999), competence (0.4402), responsiveness (0.5299), security (0.5506), understanding (0.7202) and courtesy (0.6174).

Higher value of mean and lower value of standard deviation shows that patients gives higher priority to most critical attributes in assessing the quality of healthcare provided by the government hospital. With low value of mean and higher value of standard deviation few attributes are sub critical and shows that patients are not very particular about these attributes. They feel that courtesy can be compromised if high class service is otherwise provided. Table 03 shows all measures.

Table 03. Descriptive Statistics and Cronbach's Alpha for Government hospital

Variable	No. Of Item	Minimum	Maximum	Mean	SD	Cronbach's α
TANGIBLE	201	1.94	3.5	2.759	0.3065	0.3631
RELIABILITY	201	2.25	4.5	3.289	0.5504	0.6861
RESPONSIVENESS	201	1.6	4	2.691	0.5299	0.4481
EMPATHY	201	1.78	3.56	2.729	0.3748	0.2525
ASSURANCE	201	1.33	4.33	2.774	0.6220	0.0268
COMPETENCE	201	1.63	3.88	2.697	0.4402	0.4525
ACCESS	201	1.5	5	2.880	0.7040	-0.1806
COURTESY	201	1	4.33	2.620	0.6174	0.3827
COMMUNICATION	201	1.6	4	2.711	0.4999	0.3469
CREDIBILITY	201	1.33	4.67	2.829	0.6431	0.234
SECURITY	201	1.25	4.25	2.675	0.5506	0.385
UNDERSTANDING	201	1	4.5	2.669	0.7202	0.4438

For Private hospital Cronbach's alpha find 03 out of 12 variables have value more than 0.4, (credibility (0.428), access (0.4188), and understanding (0.4108)) which is acceptable value. For 02 variables out of remaining 09, have above 0.3, but with a small sample size it was considered acceptable (security (0.392), courtesy (0.3305). For the remaining other 07 variables reliability (0.2911), Empathy (0.2434), assurance (0.1369), competence (0.0521), tangible (0.0463), communication (-0.1047) and responsiveness (-0.1862), it is very low. Thus we have analyzed the possible reasons for the low reliability in these cases and though it was possible to omit the above-mentioned items to increase the reliability but sample size being small, it is felt that we might as well retain them for analysis. Comparing all attributes "tangible" ranked highest with mean of 3.7756 which shows that It is convenient to reach to private Hospital, beds, pillows and mattresses were comfortable and clean, wards are well furnished, decorated, well ventilated and clean all the time, ambulance services are made available to patients, drugs available in the pharmacy, meals are offers food which is suitable to the patients.

Higher value of mean shows the most critical value of variable, middle value of mean shows the critical variable and the lower value of mean shows the less critical value and needs improve mean. Attributes are divided into three categories first most critical, second sub critical and third one is less critical, 12 attributes are arranged according to value of mean (A)

A>3.2   most critical
3.2>A>2.1   critical
A<2.1   less critical

For Private hospital there are nine variables which are most critical having a mean more than 3.2, tangible (3.7756), reliability (3.7572), competence (3.7187), empathy (3.7181), assurance (3.7118), access (3.6891), communication (3.6876), responsiveness (3.6816), courtesy (3.5934). Customers perceptions about these variables show it. Remaining three variables are sub critical having a value of mean more than 2.1 showing the significance level credibility (3.1578), security (2.6924), understanding (2.9511). Standard deviation of most critical attributes are tangible (0.2335), reliability (0.3653), competence (0.3359), empathy (0.3530), assurance (0.5605), access (0.7170), communication (0.4381), responsiveness (0.3786), courtesy (0.6131). and standard deviation of sub critical attributes are credibility (0.7079), security (0.5418), understanding (0.5662).

Higher value of mean and lower value of standard deviation shows that patients gives higher priority to most critical attributes in assessing the quality of healthcare provided by the Private hospital. With low value of mean and higher value of standard deviation few attributes are sub critical and shows that patients are not very particular about these attributes. They feel that security can be compromised if high class service is otherwise provided. Table 04 shows all measures.

Table 04. Descriptive Statistics and Cronbach's Alpha for Private hospital

Variable	No. of Items	Minimum	Maximum	Mean	SD	Cronbach's α
TANGIBLE	201	3.06	4.44	3.7756	0.2335	0.0463
RELIABILITY	201	3	4.5	3.7572	0.3653	0.2911
RESPONSIVENESS	201	2.6	4.6	3.6816	0.3786	-0.1862
EMPATHY	201	2.56	4.44	3.7181	0.3530	0.2434
ASSURANCE	201	2.33	4.67	3.7118	0.5605	0.1369
COMPETENCE	201	2.88	4.38	3.7187	0.3359	0.0521
ACCESS	201	2.5	5	3.6891	0.7170	0.4188
COURTESY	201	1	5	3.5934	0.6131	0.3305
COMMUNICATION	201	2.4	4.6	3.6876	0.4381	-0.1047

CREDIBILITY	201	1.5	5	3.1578	0.7079	0.428
SECURITY	201	1.35	4.5	2.6924	0.5418	0.392
UNDERSTANDING	201	1.39	4.1	2.9511	0.5662	0.4108

Pearson Correlation Analysis

Inter correlations between the studied variables are calculated using most widely used Pearson correlation coefficient for analysis of critical attributes of service quality. Pearson correlation coefficient is preferred because it assumes that the two variables are measured on at least interval scales and it determines the extent to which values of the two variables are proportional to each other. The value of correlation coefficient does not depend on the specific measurement units used. Proportional means linearly related; that is, the correlation is high if it can be "summarized" by a straight line. Private hospital Results are summarized in Table 05 and there are many significant correlations amongst the attributes. Government hospital Results are summarized in Table 06 and there are many significant correlations amongst the attributes.

Table 05. Correlation Coefficients between SERVQUAL attributes using Pearson Correlation Coefficient Correlations Coefficients between servqual attributes of Private hospital

Variables	Tangible	reliability	Responsiveness	Empathy	Assurance	Competence	Access	Courtesy	communication	credibility	security	understanding
Tangibles	1											
reliability	0.094	1										
responsive-ness	0.405**	0.066	1									
empathy	0.771**	-0.012	0.484**	1								
assurance	0.481**	-0.032	0.195	0.577**	1							
competence	0.732**	-0.015	0.314*	0.653**	-0.001	1						
Access	0.429**	-0.099	-0.105	0.339*	0.079	0.557**	1					
courtesy	0.402**	0.058	0.642**	0.531**	-0.111	0.627**	0.013	1				
communica-tion	0.635**	0.033	0.547**	0.795**	0.051	0.784**	0.166	0.799**	1			
credibility	0.399**	0.306*	0.218	-0.060	0.107	-0.076	-0.060	-0.049	-0.107	1		
Security	0.526**	0.030	0.571**	0.688**	-0.005	0.652**	0.078	0.905**	0.911**	-0.076	1	
understanding	0.281*	0.025	0.803**	0.431**	-0.038	0.450**	-0.061	0.855**	0.643**	-0.065	0.718**	1

** Correlation is significant at the 0.01 level (2-tailed).* Correlation is significant at the 0.05 level (2-tailed)

Table 06. Correlation Coefficients between SERVQUAL attributes using Pearson Correlation CoefficientCorrelations Coefficients between servqual attributes of Government hospital

Variables	Tangible	reliability	Responsiveness	Empathy	assurance	competence	access	courtesy	communication	credibility	security	understanding
Tangibles	1											
reliability	-0.116	1										
responsiveness	0.052	0.040	1									
empathy	0.122	-0.040	0.036	1								
assurance	0.035	-0.161	-0.211	-0.003	1							
competence	-0.095	-0.001	0.059	*0.270	-0.110	1						
Access	-0.037	-0.099	0.101	-0.006	0.132	-0.032	1					
courtesy	-0.012	0.068	-0.027	-0.071	0.014	-0.006	0.020	1				
communica-tion	0.093	-0.009	-0.047	0.149	0.107	0.123	-0.053	0.074	1			
credibility	*0.153	-0.053	0.030	0.139	-0.027	0.073	-0.097	-0.083	0.081	1		
Security	-0.132	-0.041	0.021	0.046	0.069	-0.004	0.064	0.040	-0.021	-0.136	1	
understanding	*-0.175	-0.060	-0.042	-0.041	0.083	-0.022	-0.009	0.066	0.070	-0.074	**0.718	1

(Correlation is significant at the 0.01 level (2-tailed).* Correlation is significant at the 0.05 level (2-tailed **

Multiple Regression Analysis

Multiple regression analysis is conducted to visualize the causal relationship between various variables. Multiple Regression analysis computed by choosing six dependent variables and six independent variables. The dependent variables are responsiveness, Assurance, Empathy, Courtesy, Communication, Credibility and Independent variables are Reliability, Tangibles, Competence, Access, Security, Understanding and their relationship shows the positive and negative impact on the attributes.

Private hospital Results of regression analysis are summarized above in Table 07. 'Responsiveness' has a significant relationship with 'understanding', greater the value of these factors greater will be response to service in healthcare industry hence it is important parameter to give a strong positive relationship. Next variable 'assurance' is also strongly dependent on 'understanding' it means greater the values of this variable better will be the assurance between service provided in healthcare organization. 'Empathy' has significant relation with 'competence'. 'Courtesy' has a statistically significant correlation with 'competence' and 'access', indicating that 'courtesy' may be improved by improving the 'competence' and 'access'. 'Courtesy' has negative relation with 'security' indicating that higher 'Security' leads to compromise in courtesy. 'Communication' is depending on 'access' it means higher communication with customers gives higher access to customers. 'Credibility' may be improved by improving 'competence' and 'understanding'.

R squared is comprehensible measure for indicating the percentage variation in the dependent variable which is accounted for by the independent variable. The R-square value is an indicator of how well the model explains the variance. R square values ranges from 0.225 to 0.75 which implies that 22.5% to 75% of the variation in the dependent variable has been explained by the independent variable. 'F' statistic shows goodness of fit. Higher the value of F the fit is good and all the values of F are high ranging from 2.663 to 9.019.

Table 07. Multiple Regression analysis between Servqual attributes of Private hospital

Variables	Dependent					
Independent	Responsiveness	Assurance	Empathy	Courtesy	Communication	Credibility
Tangibles	0.48	0.21	0.128	0.02	0.26	0.033
Reliability	-0.01	0.083	0.21	0.135	0.052	0.086
Competence	-0.348	-0.048	0.256*	0.346**	0.129	0.301*
Access	-0.058	0.199	0.122	0.448***	0.269*	0.051
Security	-0.081	0.069	-0.007	-0.114	0.068	0.025
Understanding	0.879***	0.414**	-0.015	0.125	0.098	0.389**
R square	0.75	0.416	0.225	0.48	0.305	0.442
F	9.019	6.541	2.663	8.449	4.028	7.265

*$p<.05$,   **$p<.01$, ***$p<.001$

Government hospital Results of regression analysis are summarized below in Table 08. 'Responsiveness' has a negative significant relationship with 'understanding', greater the value of these factors lower will be response to service in healthcare. Next variable 'assurance' is negatively dependent on 'reliability' and 'competence' it means greater the values of this variable slower will be the assurance between service provided in healthcare organization. Empathy has a only significant positive relation with 'competence'. 'Courtesy' has a negative significant correlation with 'competence' and 'security', indicating that 'courtesy' may be down by improving the 'competence' and 'access'. 'Communication' is depending on 'security' and 'access' it means lowerr communication with customers gives less access to customers. 'Credibility' may be down by decreasing 'reliability', 'access' and 'security'. R square values ranges from 0.011 to 0.106 which implies that 1.01% to 10.6% of the variation in the dependent variable has been explained by the independent variable. 'F' statistic shows goodness of fit. Higher the value of F the fit is good, and all the values of F are high ranging from 0.351 to 3.839.

7. CONCLUSION AND DISCUSSION

For government hospital mean of twelve SERVQUAL factors is 2.77 and for private hospital mean of this factor is 3.51, which is average of overall SERVQUAL attributes showing satisfactory results on Likert five-point scale. Out of 12 factors 6 are identified as most critical factors with mean ranging from more than 3 which is presents in Table 09. Four other factors are sub critical factors with mean ranging between 2.1 and 3. Remaining two factors with mean less than 2.2 are considered less critical. The results of mean with their ranking are showing in Table 09 below.

Table 08. Multiple Regression analysis between SERVQUAL attributes of Government hospital

Variables	Dependent					
Independent	Responsiveness	Assurance	Empathy	Courtesy	Communication	Credibility
Tangibles	0.065	0.027	0.145	0.01	0.122	0.143
Reliability	0.057	-0.142	-0.025	0.077	0.009	-0.047
Competence	0.067	-0.102	0.281*	-0.002	0.138	0.085
Access	0.105	0.116	-0.005	0.03	-0.032	-0.082
Security	0.088	0.007	0.15	-0.021	-0.145	-0.16
Understanding	-0.088	0.073	-0.119	0.088	-199	0.065
R square	0.026	0.057	0.106	0.011	0.047	0.056
F	0.855	1.951	3.839	0.351	1.596	1.905

*p<.05,   **p<.01, ***p<.001

Table 09. Categorization of variables

Variables	Government hospital	Private hospital
Most Critical	Reliability	tangible, reliability, competence, empathy, assurance, access, communication, responsiveness, courtesy
Sub Critical	access, credibility, assurance, tangible, empathy, communication, competence, responsiveness, security, understanding courtesy	credibility, security, understanding

Result of the correlation shows many significant positive correlations between factors which are presents in Table 10 below.

Table 10. Result of correlation between factors

Factors	Private hospital	Government hospital
Tangible	Responsiveness, Assurance, Empathy, Competence, Courtesy, Credibility, Access, Communication, Security, Understanding	Credibility, Understanding
Reliability	Credibility	
Responsiveness	Empathy, Competence, Courtesy, Communication, Security, Understanding	
Empathy	Assurance, Competence, Access, Courtesy, Communication, Security, Understanding	Competence
Assurance		
Competence	Access, Courtesy, Communication, Security, Understanding	
Access		
Courtesy	Communication, Security, Understanding	
Communication	Security, Understanding	
Credibility	--	
Security	Understanding	Understanding

Table 11. Result of multiple regression between factors

Dependent factors	Private hospital (Positive relation with independent factors)	Government hospital (Positive relation with independent factors)
Responsiveness	Understanding	
Assurance	Understanding	
Empathy	Competence	Competence
Courtesy	Competence, Access	
Communication	Access	
Credibility	Competence, Understanding	

Result of multiple regression analysis showing positive relationship between dependent and independent factors is presents in Table 11. The result obtained from this study shows that level of Servqual is not very good but overall mean of the Servqual attribute is less which shows that service given by the healthcare system is satisfactory. The level of service can be increased by improving various attributes such as attention of nurses, ease of communication and security. These factors can contribute to large extent to improve the Servqual.

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