Comparative Study on Service Quality in Selected Public and Private Hospitals with Special Reference to Raipur City

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[Abstract] Quality is the differentiator that differentiates a service provider from others. It provides a competitive edge over other providers. Though hospitals offer similar services with varying degrees of quality, it has become one of the differentiating factors that establishes a distinctive advantage. Private or corporate hospitals give much more emphasis to the quality of the services and cost reduction. At the health care delivery system level, the framework provides an overview of health system quality problems. It becomes essential to consider and differentiate the human and technology aspects to develop a broader view of quality care. Favorable health care outcomes, like reducing mortality, decreasing morbidity, increasing life expectancy, and good quality of care are growing more rapidly. When expectations grow, at some point there may be some disappointment, also. Hence, meeting the growing expectations becomes essential. Patients' expectations may differ according to geographical locations, education level, culture, and economies (out-of-pocket expenditure). In this paper, a comparative study has been done between the two major public and private hospitals in Raipur city. The data used in the analysis is primary data, and it was collected from the three stakeholders: in-patients, OPD follow-up patients, and the attendants of the patients.

[Keywords] service quality, patients, attendants, public and private, hospitals,

Introduction

Health is the basic need of every individual's well-being. A hospital is one of the parts of the healthcare industry and is the fundamental pillar of the health care sector. Nowadays, India has a chain of private/corporate hospitals in all major cities, offering specialized care with the latest technology and advanced care techniques all under one roof. Private or corporate hospitals, like Apollo Hospitals, Fortis Hospitals, Max Hospitals, and, Wockhardt hospitals, now have a chain of considerable and tertiary care hospitals in all major cities of India, catering to the huge population of India. It includes a large hub of well-trained medical professionals and expert teams and implies a comparatively low cost.

Now, in recent times, India has become a hub of medical tourism, and it has had a major impact on the economy of our country's GDP. Several private or corporate hospitals are well equipped with a medical facility, providing good, caring patient care. The major focus of today's time is the profitability factor as far as private or corporate hospitals are concerned and cost reduction. In recent times, the public sector, or government hospitals, have been emphasizing quality measures and infrastructure for better treatment and care. The quality of results (patients and the attendants) depends upon many factors and dimensions, and each factor contributes to the growth, success, survival, and performance of these organizations. Involvement of the human factor (health, well-being, treatment, and cure) is of great importance to hospitals and their management. The characteristics of incoming patients and their attendants vary widely with regard

to their emotional , economic, and cultural quotient; if a hospital system aspires to work efficiently, there is no element on which it can compromise. That means the hospital-like organizations have to look for every service and to improve those services to satisfy their patients and the attendants and provide good quality of services.

Literature Review

Lim and Tang (2000), in their study, used a SERVQUAL model. A questionnaire was designed using 22 statements with a few selected as a set of questions to be addressed. A pilot survey was conducted in two hospitals with 20 respondents, 5 in-house patients, 5 outpatients, 5 observers, and 5 CEOs/doctors. A redesigned questionnaire had six dimensions with a set of 25 statements for both expectations and perceptions and an additional question on the overall rating of each dimension for both expectations and perceptions. The scoring system was done. The data collection was done with a convenience sampling method. A sample size of respondents was approached by targeting four general practitioners' clinics with 200 questionnaires and two specialist clinics with 100 questionnaires. Out of 300 responses, 252 were satisfactory, resulting in a response rate of 84%. The data were analyzed by simple statistical methods like mean and standard deviations for computation of a SERVQUAL score.

Sohail (2003) assessed the dimensions of the SERVQUAL model that influenced the perception of patients in Malaysia. The model's usefulness was evaluated in these hospitals. Empirical research was conducted. A questionnaire was designed using the modified version of the SERVQUAL model consisting of the five dimensions with a set of 15 statements for each perception and expectation of the patients. A sample size of 1000 patients discharged from 5 private hospitals within 6 months was designed. A total of 186 responses were received, out of which 150 were complete, resulting in a response rate of 18.6%.

Brahmbhatt et al. (2011) found that communication processes, infrastructure, policies, and procedures in private hospitals were better than in public hospitals. As far as reliability was concerned, it was better for public hospitals, but, overall, S.Q. for government hospitals was poorer than in private hospitals. The study was conducted in the Gandhinagar and Ahmedabad regions of Gujarat state in India. However, it was better in terms of the overall quality of service for the hospital industry.

Sreenivas (2012), responsible for the satisfaction of services among various hospitals, conducted a study among seven hospitals. Interviews were conducted according to the prepared schedule; only one hospital was found to be providing good service quality among the hospitals under study. It was found that all the hospitals needed improvement in service quality. There were the following areas where the quality of services was not up to the expectations of patients: the doctor-patient relationship, timely laboratory reports, the infrastructure of hospitals, mainly building and ambulance services, hospital OPD Pharmacy. It was suggested that hospitals must focus on the needs of customers and try to utilize their resources to improve service quality.

Methodology

This study discusses a comparative study of public and private hospitals in terms of service quality; quality has been the major concern in today's time as far as health and better treatment and ambiance are concerned. This study explored the quality of services being offered by public and private hospitals. The purpose of this study is to compare the service quality of selected public and private hospitals of Raipur city.
The objectives of the Study are:
1. To identify and measure the determinants of the perceptions among participants selected from public and private hospitals in Raipur city.
2. To identify and measure the determinants of the service delivery among participants selected from public and private hospitals in Raipur city
3. To identify and measure the determinants of the customer satisfaction among participants selected from public and private hospitals in Raipur city
4. To compare the perception, service delivery, customer satisfaction among participants selected from public and private hospitals in Raipur city
The target population of the study is hospital customers, which constitute the indoor patients, attendants,

and outdoor patients of public and private hospitals in Raipur city. The sampling area of study was Raipur, Chhattisgarh and the sampling data draw from local hospitals. The data collection is shown in the table below.

Hospitals	Name of the Hospital	Indoor Patients	Attendants	Outdoor Patients	Total
Public	Dr. Bhim Rao Ambedkar Memorial Hospital, Raipur	50	50	25	125
	All India Institute of Medical Sciences, AIIMS, Raipur.	50	50	25	125
	Total (A)	100	100	25	250
Private	Ramakrishna Care Hospital, Raipur.	50	50	25	125
	Narayana Hridulaya, MMI hospital, Raipur.	50	50	25	125
	Total (B)	100	100	25	250
	grand total (A+B)				500

Results and Discussion

Paired T-Test for a comparative study: In this study, we have compared two means between both groups of hospitals, so here t- the test method applies. If we had more than two means to compare, then the ANOVA method was applied. A total of 22 paired comparisons were tested in our study.

Table 1
T-Test Factors (t-test of perception)

S. No	Variables	Mean±SE	t	df	P value
1.	TanpubS	23.76±0.35	-7.518	249	<0.001
	TanpriS	27.25±0.23			
2.	RpubS	14.23±0.22	-0.489	249	>0.05
	RpriS	14.38±0.15			
3.	AspubS	10.58±0.18	0.148	249	>0.05
	AsPriS	10.54±0.11			
4.	EmPubS	13.84±0.23	- 1.375	249	>0/05
	EmpriS	14.24±0.15			
5	RPpubS	11.02±0.19	- 0.3960	249	<0.001
	RPpriS	11.91±0.10			

The paired t-test of tangibility factor showed the mean value of private hospitals (27.25) was more than the public hospitals (23.76). This shows that people visiting private hospitals were more satisfied with the tangibility factor. The significance level was <0.001. It showed significant values between the public and private results for the tangibility.

The paired t-test of reliability factor showed the mean value of private hospitals (14.38) was more than the public hospitals (14.23). The significance level was >0.05. There were no significant values between the public and private results for the reliability.

The paired t-test of assurance showed the mean value of public hospitals (10.58) was more than the private hospitals (10.54). The significance level was >0.05. There were no significant values between the public and private results for the assurance factor.

The paired t-test of empathy factor showed the mean value of private hospitals (14.24) was more than the public hospitals (13.84). The significance level was >0.05. There were no significant values between the public and private results for the empathy factor

The paired t-test of responsiveness factor showed the mean value of private hospitals (11.91) was more than the public hospitals (11.02). The significance level was <0.001. The paired t-test shows the significant values for the responsiveness factor.

Table 2
t-test for Service Delivery

S.No	Variables	Mean±SE	t	df	P-value
1.	APpubS	14.83±0.024	- 0.5270	249	<0.001
	APpriS	16.40±-0.14			
2.	NSpubS	11.01±0.17	0.801	249	>0.05
	NSpriS	10.83±0.12			
3.	MSpubS	10.73±0.17	- 2.890	249	<0.05
	MSpriS	11.36±0.11			
4.	LDSpubS	13.98±0.22	- 10.779	249	<0.001
	LDSpriS	16.93±0.15			
5.	PCpubS	19.36±0.31	.712	249	>0.05
	PCpriS	19.10±0.81			
6	HKpubS	11.76±0.14	1.490	249	>0.05
	HKpriS	11.46±0.12			
7.	FSpubS	11.40±0.14	-0.565	249	>0.05
	FSPriS	11.52±0.11			
8.	SSpubS	16.06±0.18	-.931	249	>0.05
	SSpriS	16.30±0.16			

The paired t-test of the admission process factor showed the mean value of private hospitals (16.40) was more than the public hospitals (14.83). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for the admission process.

The paired t-test of the nursing services factor showed the mean value of public hospitals (11.01) was more than the private hospitals (10.83). The significance level was >0.05. There were no significant values between the public and private hospitals for the nursing services.

The paired t-test of the medical services factor hospitals showed the mean value of private hospitals (11.36) was more than the public hospitals (10.73). The significance level was <0.05. There were significant values between public and private hospitals for medical services.

The paired t-test of the lab and diagnostic services factor showed the mean value of private hospitals (16.93) was more than the public hospitals (13.98). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for lab and diagnostic factors.

The paired t-test of the patient care services factor showed the mean value of public hospitals (19.36) was more than the private hospitals (19.10). The significance level was >0.05. There were no significant values between the public and private hospitals for the patient care services.

The paired t-test of housekeeping services showed the mean value of public hospitals (11.76) was more than the private hospitals (11.46). The significance level was >0.05. There were no significant values between the public and private hospitals for the housekeeping services.

The paired t-test of food services showed the mean value of private hospitals (11.52) was more than the public hospitals (11.40). The significance level was >0.05. There were no significant values between the public and private results for the food services.

The paired t-test of security services showed the mean value of private hospitals (16.30) was more than the public hospitals (16.06). The significance level was >0.05. There were no significant values between the public and personal results for the security services.

Table 3
 T-test for Customer Satisfaction

S.No	Variables	Mean±SE	t	df	P-value
1.	MCpubS	13.67±0.28	- 9.400	249	<0.001
	MCpriS	16.65±-0.12			
2.	AVpubS	21.58±0.40	- 9.721	249	<0.001
	AVpriS	25.87±0.15			
3.	PFpubS	13.80±0.27	- 9.415	249	<0.001
	PFpriS	16.60±0.11			
4.	HPpubS	10.89±0.21	- 5.077	249	<0.001
	HPpriS	12.05±0.10			
5.	TQpubS	44.63±0.76	- 4.083	249	<0.001
	TQpriS	48.22±0.33			
6	ACpubS	33.38±0.51	-	249	<0.001
	ACpriS	38.82±0.17	10.127		
7.	DpubS	7,34±0.13	- 5.539	249	<0.001
	DPriS	8.21±0.07			
8.	CpubS	15.00±0.24	-.5.463	249	<0.001
	CpriS	16.57±0.16			
9.	IpubS	23.43±0.32	- 7.701	249	<0.001
	IpriS	26.30±0.15			

The paired t-test of medical care showed the mean value of private hospitals (16.65) was more than the public hospitals (13.67). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for medical care services.

The paired t-test of availability factor showed the mean value of private hospitals (25.87) was more than the public hospitals (21.58). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for availability.

The paired t-test of professionalism factor showed the mean value of private hospitals (25.87) was more than the public hospitals (21.58). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for professionalism.

The paired t-test of hospital personnel factor showed the mean value of private hospitals (12.05) was more than the public hospitals (10.89). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for hospital personnel.

The paired t-test of technical quality factor showed the mean value of private hospitals (48.22) was more than the public hospitals (44.63). The significance level was <0.001; The paired t-test shows the significant values between public and private hospitals for technical quality.

The paired t-test of administrative care factor showed the mean value of private hospitals (38.82) was more than the public hospitals (33.38). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for administrative care.

The paired t-test of diagnostic factors showed the mean value of private hospitals (8.21) was more than the public hospitals (7.34). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for lab and diagnostics.

The paired t-test of communication factor showed the mean value of private hospitals (8.21) was more than the public hospitals (7.34). The significance level was <0.001. The paired t-test shows the significant values between public and private hospitals for communication.

The paired t-test of interaction factor showed the mean value of private hospitals (26.30) was more than the public hospitals (23.43). The significance level was <0.001. The paired t-test shows significant values between the public and private results for the interaction factor.

Conclusion

The comparative analysis was done between public and private hospitals to determine the service quality, and various factors were compared. Overall, the patients and the attendants were more satisfied with the private hospitals in most of the parameters. After having studied 200 in-patients, 200 attendants, and 100 OPD patients in private and public hospitals on different parameters, the patients (indoor and OPD) and the attendants of private hospitals are more satisfied with the factor's tangibility, reliability, empathy, responsiveness, admission process, medical services, lab, and diagnostic services, food services, security services, medical care, availability, professionalism, hospital personnel, technical quality, administrative care, diagnostics, communication, and interaction than found in the public hospitals. The patients (indoor and OPD) and the attendants of the public hospitals are more satisfied with the factor's assurance, nursing services, patient care services, housekeeping services than with the private hospitals.

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