

A Study on Patient Satisfaction in Indira Gandhi Co-operative Hospital, Kochi (IGCH)

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Abstract

Healthcare service quality and patient satisfaction are very fundamental concepts that require attention in healthcare services operations. Hospitals are expected to ensure better service quality since it results in higher patient satisfaction, profitability, cost reduction, patient loyalty and retention. The present study analyses Patient satisfaction in Indira Gandhi Co-operative Hospital, Kochi by using SERVQUAL Gap analysis Model to understand the difference between patients' expectations and perceptions. It is one of the best ways to lead an institution not only to improve their processes, but also to recognize which processes need improvement. The service quality gap ranges from -2.10 to 0.63. The gap score is positive in the case of Empathy (0.004). In the case of dimensions namely; Tangibles, Responsibility, Reliability and Assurance, Patient expectations over reached the perceived level of service shown by the perception score. This resulted in a negative gap score. Tangibility Dimension has the highest negative gap with a gap score of -0.422. On the other hand, Assurance (-0.060), Responsibility (-0.094) and Reliability (-0.01) Dimensions have only a negligible negative gap score. Since, better perceptions are close to expectations; the higher is the perceived level of quality in these dimensions. After calculating the paired t-test at <0.05 level of significance for the scores obtained for perception and expectation, it is clear that all means of patients' perception and expectation do not differ significantly. A slight change in hospital's policies and practices could nullify the small gap between patients' expectation and perception of SERVQUAL dimensions.

Keywords: Satisfaction, SERVQUAL, Healthcare Co-operative, Service Quality, Empathy

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Introduction

Health is a condition of physical, mental and social well-being. Good health allows people to enjoy life and to achieve their goals. To achieve and maintain healthiness, people should get proper and well-maintained healthcare services. Kerala features a long history of organized health care. Before the arrival of European medicine, families of practitioners of indigenous system like Ayurveda handed over their traditions from generation to generation. People were acquainted with approaching caregivers once they were sick, instead of turning to self-treatment. When the colonial powers established their presence within the region, they brought their medical system with them. Aside from Ayurveda (both elite and popular forms), Siddha, and Unani many endangered and endemic modes of traditional medicine, including Kalari, Marmachikitsa, and Vishavaidyam, are practiced. The easy accessibility and coverage of medical aid has played a dominant role in shaping the health status of Kerala. Kerala's remarkable achievements in healthcare were to a large extent based on its vast network of public health institutions which enabled the state to earn the fame of "Kerala Model of Health" worth emulating even by advanced countries. The hallmark of this model was the low cost of health care, universal accessibility and availability to the deprived sections of the society. This health model was made possible to improve the socio-economic conditions of people, and it is reflected in attainment of low infant mortality, low birth rate, low death rate and high life expectancy. Estimated birth rate of Kerala is 14.3, while the death rate is 7.6. Kerala is having 75.20 years as expectancy of life at birth while India is showing only 68.34 years (*Health at a Glance, 2018*). According to the NITI Aayog Annual Health Index 2019, Kerala is the top performer among the larger states for overall performance on Health Indicators. The current health status of Kerala is more similar to those of other countries with a much higher level of per-capita income, than to those with comparable levels of income. Not only the vast network of public healthcare system in Kerala, but also the Private and Co-operative healthcare is equally equipped to boost the state's healthcare condition. Even after facing a mighty blow of the floods and spread of deadly Nipah / COVID-19 viruses, Kerala bounced back to life, only because the healthcare system was strong enough to withstand the challenges.

Review of Literature

Some pertinent review of literatures was made to understand the nature of studies carried out in this domain.

Devasoorya & Vallabhan (2016), in their study “Healthcare Co-operatives: possible third realm of healthcare in India” view health co-operatives as a robust infrastructure in the healthcare system. The article throws light on the inadequacy of public and private healthcare institutions in the country to meet the continually increasing healthcare demands of the large population, particularly people residing in rural areas. India’s experience in the co-operative movement in general spans more than a century. Moreover, co-operatives in different health segments (hospitals, health education, training in health work, paramedical, health insurance, etc.) have already been tried in different states (Kerala, Gujarat, Bengal, Punjab, and Tamil Nadu) since 1920s. Thus, the article advocates for establishing ‘the third realm’ in healthcare, the healthcare co-operatives in India. So far the government was not able to invest more on public healthcare and private sector healthcare is particularly more urban-centric, concentrating on curative care and delivered through high cost. There is an urgent need to explore a ‘third route’, and healthcare co-operatives have to re-emerge to meet the need of the hour in India. Article creates a hope for a renewed attempt in health co-operatives. If the lapses and factors for not reaping continuing success in Kerala could be thoroughly studied and eradicated through appropriate remedial actions, healthcare co-operatives can really become the ‘third realm’ of providing healthcare.

Nayer & Razum (2003), in their article entitled “Health co-operatives; review of international experiences” reveals the history of health co-operatives in industrialized countries. Later it focuses the experiences in developing countries. It reviewed the Chinese experience and experience of co-operatives in Kerala and Gujarat. The Chinese medical co-operatives are mainly sponsored by a collective community whereas in Gujarat it is NGO sponsored, and in Kerala, it is state sponsored. In Kerala, health co-operatives were developed during the early 1970s in the aftermath of the Indo-Pakistan war. Co-operatives were considered as a viable approach for providing primary medical care. But the decline of medical co-operative started in the 1980s after public sector health service was expanded by ensuring at least one government dispensary with a physician in most of the villages. Private sector also grew significantly during subsequent years. Increased competition, the inadequacy of managerial and technical inputs, membership limitation and lack of incentives were some of the problems faced by the co-

operative sector. Ultimately, only those health co-operatives that were managed like private enterprises could survive. This study gives an insight about the inefficiencies of co-operative in the health care scenario. This indicates the need for assessment of the performance of hospital co-operatives in Kerala by ascertaining the factors by which they are lagging behind the private hospitals and measures to be taken to get a competitive advantage over the private hospitals by analyzing the customer preferences.

Aikins et al. (2014), in their study “Assessing the role of quality service delivery in client choice for healthcare: A case study of bechem government hospital and green hill hospital” investigated the reason for client choice for healthcare in Ghana. It was found out that the private hospital was rated better in terms of the reliability, responsiveness, empathy and tangibility as compared to Bechem Government Hospital. It means that management of the Bechem Government Hospital needs to improve more on these factors. Again, on the factors that affect quality healthcare delivery, the private hospital was ranked higher than the public hospital. This study explains that private hospitals have more significant competitive advantage over the government hospitals in terms of their service quality. The importance of client preference on service quality in terms of multiple parameters is crucial in the healthcare service delivery system. So, identifying the customer expectations and delivering the service accordingly is the necessity in the healthcare system.

Linimol and Nair (2016), in their study “An assessment of service quality and patient satisfaction in healthcare services using SERVQUAL” attempts to analyze the concept of service quality in healthcare settings. This study mainly focuses on an insight on how patients rate the quality of healthcare. The study was conducted as a descriptive research to check the applicability of the SERVQUAL model in the healthcare setting and also to identify how patients perceive service quality in healthcare sectors in Saudi Arabia. 5 dimensions (Tangibles, Reliability, Responsiveness, Assurance and Empathy) were used to measure healthcare quality in healthcare centers of central Saudi Arabia. In the study, it is seen that patients’ perceived healthcare quality offered by two dimensions (Tangibles & Responsiveness) met their expectations (positive mean gaps), but the other three dimensions (Reliability, Assurance & Empathy) reported negative mean gaps which show that the perception of services is less than the expected level of service quality, which suggests that healthcare sectors should improve in

these dimensions to shut gaps to induce enhanced patient satisfaction. The study proves the applicability of SERVQUAL Gap Model in identifying the perceptions and expectations of patients in service quality and thereby the patient satisfaction level. The author, therefore, recommends the use of SERVQUAL model for hospitals to improve upon the gap identified in performing its service and consequently satisfy the patients.

Naskar et al. (2016), in their study “Assessment of patients’ satisfaction regarding the service quality of a rural hospital of Burdwan district, West Bengal, India” identified essential areas where improvement can be done by assessing the patient’s expectation, perception and their gaps through SERVQUAL Model. A cross-sectional study was conducted among 350 patients from OPD and 309 patients from IPD in a rural hospital of Burdwan district. Using a modified form of SERVQUAL questionnaire, service quality gaps were identified across all the 5 dimensions as well as all the 22 items of the survey instrument. The study identified that all those gaps were statistically significant (Except for two items). The highest service quality gap was in the statement no.8 (Provide its services at the time) for OPD and statement no.20 (Readiness for personal attention) for IPD services. This study measured the service quality of a hospital through patients’ perceptions and expectations and identified some areas of improvement while catering health services. The findings help the hospital to plan conceptually in improving health care delivery systems. The study describes the importance of the patient’s expectation and perception gap analysis in identifying the patient satisfaction level in the services provided by the hospital.

Brahmbhatt et al. (2011), in their study entitled “Adapting the Servqual scale to hospital services-An empirical investigation of patients’ perceptions of service quality” attempts to explore the concept of service quality in a health care setting. Based on Parasuraman et al.’s Modified SERVQUAL variables, they tried to identify the effects of each variable to satisfaction. Data were collected through a survey among 246 patients, and the data were analysed using SPSS and Excel. The results showed that the customers’ perceptions did not exceed their expectations, as they were dissatisfied with the level of healthcare services rendered by both public and private sector hospitals. In 4 dimensions, namely; Physical Aspects, Encounter, Process and Policy, private hospitals performed better than public hospitals while public sector hospitals perform better than the private-sector only in one dimension, namely; Reliability. This

study identifies areas of dissatisfaction that can be remedied and ensures improvement for better satisfaction among patients.

The findings of some pertinent research papers indicate the potential of hospital co-operatives to become a robust infrastructure in the healthcare delivery system. But, to achieve a competitive advantage over others, it is essential to focus on service quality since consumers are more conscious about quality. By delivering high-quality service more than that of their competitors, a service firm can differentiate itself. The studies reveal that the application of the SERVQUAL Model in health care could help us to assess the service quality of hospitals through patient's expectation and perception gap through 5 Dimensions and thereby patient satisfaction level. Moreover, it helps to find out areas for improvement to achieve better performance. Even though all over the world, it is acknowledged that there is a need for understanding impact of service quality of hospitals and its effect on patient satisfaction as it is a critical factor to any health provider, only few research works assessing the service quality or patient satisfaction exists in the case of Co-operative Hospitals in India. Thus, this study attempts to minimize this existing research gap.

Background and Justification

Healthcare service quality and patient satisfaction are very fundamental concepts that require attention in healthcare services operations. Service quality is taken into account very beneficial because it results in higher patient satisfaction, profitability, cost reduction, patient loyalty and retention. Patient satisfaction magnifies the hospital image, which successively renders into increased service use and market share. Measuring the degree of patient satisfaction can help to accelerate hospital service provision and management, also to strengthen and maintain the standard of the service provision. Patient satisfaction is an essential part of the quality of results of medical treatment in hospital. The concept of service quality patient satisfaction studies of quality improvement has become more important year by year in the health care industry. Because in the processes of monitoring and improving the quality of health care services patients' views can serve as an essential tool.

The present study attempts to investigate the concept of service quality in healthcare settings in Indira Gandhi Co-operative Hospital, Kadavanthra. A survey was done using the

SERVQUAL instrument to spot improvement areas. The key findings enable to look out how patients weigh up service quality in healthcare services and find out the dimensions of service quality they are pleased with.

Objective and Methodology

The objective of the study is to understand the level of patient satisfaction in Indira Gandhi Co-operative Hospital.

A sample of 30 inpatients and 30 outpatients were selected through convenience sampling. The details were collected from the patients visiting the hospital through a survey using an interview schedule designed by using SERVQUAL model during the second week of January 2020. SERVQUAL is a multidimensional research instrument, designed to capture consumer expectations and perceptions of a service along the five dimensions that are believed to represent service quality. First SERVQUAL questionnaire was published in 1985 by a team of academic researchers, A. Parasuraman, Valarie Zeithamal and Leonard L. Berry to measure quality in the service sector. The SERVQUAL is measured on five different dimensions of Reliability, Responsibility, Tangibility, Empathy and Assurance. A total of 51 items were analyzed to understand the difference between patients' expectations and perceptions. If expectations are greater than performance, it indicates that perceived quality is less than satisfactory. Paired sample t-test (2 tailed) at < 0.05 level of significance was used to analyse the scores obtained for perception and expectation. A 5 point Likert's scale was used and patients' were ought to rate these items according to their individual meaning and the 51 statements in the questionnaire were weighted and the net weighted average was calculated. The scale ranged from strongly disagrees to strongly agree (1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5 - strongly agree).

Profile of Indira Gandhi Co-operative Hospital

To create a healthcare co-operative society with the principle of social justice, transparency, and popular approach, a few residents of Cochin started a co-operative society, namely; Cochin Co-operative Hospitals Society Ltd., E-288. Indira Gandhi Co-operative Hospital (IGCH), a unit of Cochin Co-operative Hospitals Society Ltd. No.E.288 is dedicated to

ensure better health to the community. From the very beginning, the motto of IGCH had been to assure “health care to all irrespective of wealth”. Cochin Co-operative Hospitals Society was registered on March 6, 1971 and started its operation on March 19, 1971. The pioneers of the initiative were Shri K.A. Damodaran Menon, Shri R.M. Manakkalath, (Leaders behind Mathrubhumi daily), Dr P.K. Eeppan and Dr C.K.Balan. Later, Shri K.Damodaran Menon was elected as the president of the society and led it to progress. As the hospital expanded its operations, the space in the K.G.X hospital building which was taken over in April 20, 1980 became inadequate. A modern setting has become a necessity for a full-fledged hospital to function properly. Accordingly, the construction of the hospital complex become a reality by taking loans from Kerala State Government & Ernakulum District Co-operative Bank, subsidies from government and donations collected from the public. On 16th September 1986, Shri Rajiv Gandhi, the prime minister of India inaugurated the hospital building. From 15th January 1987, the hospital’s entire operations were moved to the new building. It was named Indira Gandhi Co-operative Hospital in honour of the former Prime Minister of India Smt. Indira Gandhi. The society started the Indira Gandhi School of Nursing in 1996. In 2006, Indira Gandhi College of Nursing was also established.

The area of operation of the Society extends to the Revenue District of Ernakulum. This flagship 250 bedded multi-super speciality hospital is situated in Kadavanthra, Ernakulum. Built-in an area spanning across two acres, it offers an array of facilities. The IGCH nests 23 speciality departments headed by eminent doctors from the respective fields. Cardiology, Orthopedics, Gynecology, Paediatrics, ENT, Ophthalmology, Urology, General Medicine, Pulmonary Medicine, General Surgery, Radiology, Gastroenterology, Diabetology, Neurology, Anesthesia, Dermatology, Plastic Surgery, Ayurveda, Oncology, Dental Surgery, Physiotherapy, Casualty, Psychiatry, Psychology are some of the main departments in the hospital. In addition to this, the hospital is running a Dialysis unit, 24 x 7 Pharmacy, Laboratory with X-ray and Scanning facilities, and also has Ambulance Service and Canteen Service.

Any member of the public (non-medical) with the competency to enter into contract, residing or exercising a profession in the area of operation of the society and possess the other required qualifications prescribed is eligible for ordinary membership in the society. Bodies corporate and institutions functioning in the area of operation of the society or having financial,

professional or business interests in the said area, can also subscribe for institutional shares. In addition to this, members of the profession of modern medicine residing or having professional interests in the area of operation of the society can subscribe for professional shares. During the study period from 2009-10 to 2018-19, the membership position showed only a little variation with a CAGR of 0.01 per cent. A decline in share capital is seen after the year 2009-10 with a CAGR of -3.14%. From 2010-11 onwards, share capital is showing a constant trend. A considerable growth in share capital is not seen afterwards. This is because; the number of ordinary members as per the byelaw is capped at 2000 and it has not been increased by an amendment.

The Revenue for the IGCH can be classified into Hospital income, Sales and Miscellaneous income. Hospital income include Consultation fee collected, Nursing care charges, Professional charges, Registration fee, Room rent, Theatre charges etc. Sales category includes revenue generated from ECG, Pharmacy, Laboratory and X-ray. Major part of miscellaneous income is Tuition fee from Indira Gandhi Nursing College and Nursing School. Total revenue of IGCH is showing an increasing trend over the years with a CAGR of 4.67%. From 2009-10 to 2011-12, gross profit is showing an increasing trend and growth index showed an increase from 100 to 115.9. Later gross profit is decreasing gradually and in 2018-19 it shows a deep decline with a growth index of 18.27. A considerable increase in hospital expenses like outside consultant charges, doctor hiring charges, purchase of hospital equipments, ward expenses, minimum wages scheme implementation etc. resulted in the reduction of gross profit. During the period, the Compound Annual Growth Rate (CAGR) of Net profit was -7.7%. Over the years, Net profit showed the maximum value in the year 2011-12. Afterwards, Net profit decreased gradually. Because of not capitalizing the establishment and construction expenses, the IGCH faced a loss in the year 2017-18. Now, the IGCH is in the path of progress and it is evident from the Net profit earned during the year 2018-19.

Profile of the Respondents

Socio-economic profile of the patients was collected for the study, which includes Gender, Age, Marital Status, Educational Qualification, Occupation and Annual Income. Among the 60 patients surveyed, 32 respondents were female, i.e. 53.33% and male respondents constitute 46.67%. Major portion of respondents, i.e. 30% falls in the age group of 45-55. 36.66

% of them are in the age group 55 - 65 and 35-45. Most of the respondents are married, which accounts to 78.33%. 15% are unmarried and rest 6.67% is widow. 30% of respondents completed degree, 18.33% have primary education, 25% passed SSLC, 10% have higher secondary education and 16.67 % respondents have PG and above qualification. None of the respondents was Illiterate. Occupational status shows that 21.67% of them are engaged in the Business sector. 20% of the respondents are professionals, while 15% are labourers. Category of private sector job, retired and students is 6.67% each. Rest 21.67% respondents are unemployed. Majority of the Respondents are having an annual income below Rs.1,50,000. 35% of the total respondents are coming under this category. 31.67% are coming under the annual income category of Rs.1,50,000- Rs. 2,50,000, 18.33% are under the annual income category of Rs. 2,50,000 – Rs. 3,50,000 and only 15% are having above Rs. 3,50,000 as annual income. Thus, the analysis of the socio-economic profile of the respondents helped to know the status of patients visiting the co-operative hospital.

SERVQUAL-Patient Satisfaction Measurement Method

One of the most popular methods for measuring patient satisfaction called SERVQUAL was developed in 1988 by Parasuraman, Berry et.al. It highlights the major quality demands of delivered service in five proportions, namely; RATER. They are: Reliability, Assurance, Tangibles, Empathy and Responsiveness. The physical service aspects like appearance of employees, equipment and facilities are classified as tangibles. Reliability refers to the accurate, dependable and consistent performance of the service (Service outcome). The remaining three represent, aspects of interaction quality: responsiveness means being prompt and willing to serve the customer, empathy involves caring and personalized attention as well as understanding customer needs and convenient access to the service. Lastly, the dimension of assurance comprises the competence, courtesy and credibility of staff which generates customer trust and confidence. The SERVQUAL has been used by many researchers to measure the quality of health care service. Research has shown that excellent service quality leads to the retention of existing patients and the attraction of new services, reduced costs, enhanced corporate image, positive word-of-mouth and, ultimately enhanced satisfaction. The SERVQUAL approach contains a questionnaire that computes service quality by calculating the difference (gap) between customer expectations and perceptions; $SERVQUAL = P - E$; where; P denotes

perceptions and E denotes expectations of the service. SERVQUAL illustrates service quality as the discrepancy between customers' expectations for a service offering and the customers' perceptions of the service obtained, involving respondents to respond **for** questions about both their expectations and perceptions (Parasuraman, 1988). The expectations of customers are wide open to external factors which are under the influence of the service provider. The gap indicates the difference between customers' expectations and their perceptions which are described as the perceived service quality. The concept of service quality patient satisfaction studies of quality improvement has become more important year by year in the health care industry and the importance of patients' views as an essential tool in the processes of monitoring and improving quality of health care services.

SERVQUAL Gap Score Analysis

Table 1 : Summary of Patients' Expectations, Perceptions as well as Gap Scores

Dimension	Statements	Perception score (P)	Expectation score (E)	Gap score (P-E)	Average
Tangibility	It is convenient to reach to this hospital	4.78	4.15	0.63	-0.422
	This hospital has modern equipments	4.00	4.76	-0.77	
	Hygienic conditions are ensured at this hospital	4.90	4.98	-0.08	
	Visually attractive and comfortable physical facilities are ensured at this hospital.	3.23	3.93	-0.70	
	This Hospital have convenient OPD/wards location	4.15	4.15	0	
	Comfortable waiting facilities for bystanders and patients are ensured in this hospital	4.82	5.00	-0.18	
	Good directional signs are ensured	4.43	4.75	-0.32	
	The infrastructure of this hospital is conducive for physically challenged, elderly & emergency patients.	4.28	5.00	-0.72	
	Hospital is providing	4.40	4.96	-0.57	

	proper safety and comfort measures (e.g., handrails in aisles, rooms and bathrooms, ramps suitably designed for wheelchairs and stretchers, elevators and spacious corridors).				
	Wards, beds, operation theatres, intensive/post-operative care units and resident rooms are adequately available for patients	4.82	5.00	-0.18	
	The beds, pillows and mattresses are comfortable and clean	4.82	5.00	-0.18	
	wards are well furnished, decorated, well ventilated and clean all the time	4.82	5.00	-0.18	
	Diagnostic facilities like CT scans, MRI scans, X-rays and ultrasound; telemedicine, patient information and billing, operation theatres, labs, etc. are adequately and effectively available in hospital.	4.70	5.00	-0.30	
	Amenities such as continuous electricity and water supply, housekeeping and sanitation facilities, comfortable conditions such as temperature, ventilation, noise and odour are available in hospital.	4.50	5.00	-0.50	
	Availability of required medicines in the pharmacy is ensured.	4.533	4.70	-0.17	
	Availability of the desired blood group in the blood bank is ensured in the hospital	2.87	4.96	-2.10	
	Ambulance services are made available to patients with minimal	4.93	4.98	-0.05	

	costs in hospital				
	The canteen of this hospital offers food which is suitable for the patients.	3.40	5.00	-1.60	
	Employees of hospital are neat appearing	4.10	4.15	-0.05	
Reliability	Employees are professional and competent.	4.93	5.00	-0.07	-0.010
	Hospital medical records system is keeping records safely.	5.00	5.00	0	
	This Hospital keeps an eye on the quality and accuracy of the reports delivered.	4.97	4.98	-0.02	
	Medical and paramedical diagnosis are of high standard and affordable	4.58	5.00	-0.42	
	The allergy or reactions to drugs are taken care of by the hospital.	4.97	5.00	-0.03	
	Employees of hospital tell patients exactly when services will be performed	4.97	5.00	-0.03	
	The patient's bystanders keep informed about the patient's condition.	4.97	4.98	-0.02	
	Patients are observed according to appointment	4.97	5.00	-0.07	
	Staffs are able to inspire trust and confidence in patients	4.95	4.86	0.08	
	Prescription of affordable medicines are ensured	4.20	3.73	0.47	
Responsibility	The attitude of the front office is friendly and service-oriented	4.95	5.00	-0.05	-0.094
	Hospital is providing all the required information and instructions regarding admission, treatment, and discharge clearly to patients and attendants	4.60	5.00	-0.40	
	Hospital grievance redress system is	4.93	5.00	-0.07	

	working promptly				
	Good Feedback mechanism is ensured in the hospital	3.58	4.36	-0.78	
	Staffs are making use of safety and security precautions cautiously.	4.98	4.98	0	
	On-time delivery of reports/services are ensured	4.92	4.98	-0.07	
	Speed and ease is ensured in admissions	4.433	3.92	0.52	
	Doctors/staffs are efficiently responding to the patients	4.95	4.91	0.03	
	Availability of sufficient staffs is ensured in hospital	4.97	5.00	-0.03	
Empathy	Employees of the hospital are curious to know & solve patient's problems.	4.92	5	-0.08	0.004
	Employees are not rude in conveying the rules of the hospital (i.e. asking bystanders of patients to maintain peace).	5	5	0	
	Staffs are consistently well mannered.	4.97	5	-0.03	
	Hospital has their patient's best interests at heart.	4.93	5	-0.07	
	Staffs give individual attention to each patient	4.82	4.85	-0.03	
	Staffs involve and answer queries by patients related to health.	4.82	4.83	-0.02	
	Staff are never too busy to respond to requests	4.62	4.3	0.32	
	Doctors have genuine concern about patients	4.95	5	-0.05	
Assurance	Patients feel confidence and trust in doctors treating them.	4.8	5	-0.20	-0.060
	Maintenance of patient confidentiality is ensured	4.45	4.45	0	
	Patients feel secure in using services provided by the hospital	4.93	5	-0.07	
	Patients are treated with	4.97	5	-0.03	

	dignity and respect				
	Special attention is provided to emergency patients	5	5	0	

Source: Researcher Compliance.

Table 1 reveals the Summary of patients' expectations, perceptions as well as gap scores for all the 51 items. Expectations and perceptions were both evaluated using 5-point Likert's scale, whereby the higher numbers reveal a higher level of expectation or perception. The service quality gap ranges from -2.10 to 0.63.

Positive Gap Score (Perception > Expectation)

A higher positive gap i.e. 0.63 is seen in the statement regarding the Convenience to reach to this hospital. Other statements which showed higher perception than expectation among patients are Speed and ease in Admissions (0.52), Prescription of affordable medicines (0.47), and Never too busy to respond to requests from patients by the staffs (0.32), Ability of staffs to inspire trust and confidence in patients (0.08) and Efficiency in responding to the patients by the doctors/staffs (0.03).

0 (Zero) Gap Score (Perception = Expectation)

The statements which showed equivalence between Expectation and Perception include convenient OPD/wards location, safe record-keeping by the Hospital medical records system, use of safety and security precautions cautiously by the Doctors/staffs, employee's polite behaviour in conveying the rules of the hospital (i.e. asking bystanders of patients to maintain peace), proper maintenance of patient confidentiality and special attention provided to the emergency patients.

Negative Gap Score (Perception < Expectation)

Highest negative gap is observed in the expectation and perception of patients regarding the availability of the desired blood group in the blood bank in the hospital. It showed a gap score of -2.10. Some of the other major statements which showed high negative gap are Canteen offers food which is suitable to patients (-1.60), Good feedback mechanism is ensured in the hospital (-0.78), the hospital has modern equipments (-0.77), Infrastructure is conducive for

physically challenged, elderly & emergency patients (-0.72), visually attractive and comfortable physical facilities are ensured at this hospital (-0.70) etc.

Dimension-wise Gap Score Analysis

In the analysis, the average gap score of each dimension is calculated to identify which dimension of service quality measurement is showing more negative gap score and positive gap score. The gap score is positive in the case of Empathy (0.004). This implies that the patient's perception about the services in the hospital is more than their expectations. In the case of dimensions Tangibles, Responsibility, Reliability and Assurance, patient expectations overreached the perceived level of service shown by the perception score. This resulted in a negative gap score. Tangibility Dimension has the highest negative gap with a gap score of -0.422. On the other hand, Assurance (-0.060), Responsibility (-0.094) and Reliability (-0.01) dimensions have only a negligible negative gap score. Since, better perceptions are close to expectations; the higher is the perceived level of quality in these dimensions. After calculating the paired t-test at < 0.05 level of significance for the scores obtained for perception and expectation, it is clear that all means of patient perception and expectation do not differ significantly. This meant that even though there are gaps between expectation and perception in most of the statements, these gaps are not significant. A slight change in hospital's policies and practices could nullify the small gap between patient expectation and perception of SERVQUAL dimensions.

Recommendations

The analysis leads us to recommend the following action plan for IGCH:

- Ensure good feedback mechanism in hospital;
- Ensure availability of the desired blood group in the blood bank of the hospital;
- Necessary improvements should be ensured in the canteen facility offered by the Hospital;
- Adopt modern equipments and treatments in the hospital; and
- Visually attractive and comfortable physical facilities are needed for the Hospital.

Conclusion

Thus from the results, we can conclude that patient's perceived healthcare quality offered by dimension Empathy met their expectations (positive mean gap), but the other four dimensions (Tangibles, Responsibility, Reliability and Assurance) reported negative mean gaps which show that perception of services is less than the expected level of service quality. Tangibility dimension has the highest negative gap and negligible gaps are found in the dimensions Assurance (-0.060), Responsibility (-0.094) and Reliability (-0.01). These negligible negative gaps indicate that perceptions are closely nearer to expectations.

According to Parasuraman, 1998, "it is however habitual for consumer's expectation to exceed the actual service perceived and this proclaims that there is always want for improvement". The gap scores measure healthcare service quality and consequently, patient satisfaction. Negative gaps in 4 dimensions indicate that IGCH needs to improve in these dimensions in order to close gaps that could induce enhanced patient satisfaction. By adopting better strategies and policies based on the areas that require improvement, IGCH could ensure better satisfaction among patients.

Notwithstanding of the results, the present management team has dedicated totally to the development of the co-operative hospital and to serve the needy members and community at large.

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Comments:

1. Yellow color letters or words indicate the correction made by me
2. Align as per CP Journal Norms both body and references
3. It is better to insert profile of the respondents in the form of table also.