Research Paper Medical Science

Assessing Service Quality in the Doctor's Institute & Hostel to Identify Opportunities for Improvement

Dr Punit Yadav MBBS, MD (Hosp Adm), Dept of Hospital Administration, Armed Forces Medical College, Pune

Dr Alok Kulshrestha MBBS, MHA, Dept of Hospital Administration, Armed Forces Medical College, Pune

ABSTRACT

Introduction: Service quality leading to customer satisfaction has been the subject of study in the latter part of the last century. The service quality model proposed by Parasuram et al introduced the concept of SERVQUAL with 5 dimensions related to service quality; tangibles, reliability, responsiveness, assurance and empathy. The model has been utilised for assessing quality in service industry. A Doctors institute and hostel of a medical training institution provides dining, recreational, hostel and other facilities to its permanent and temporary members.

Aim: Assessing service quality in the Doctor's institute & hostel of a medical institution to identify opportunities for improvement using SERVQUAL dimensions

Material and methods: An observational study was undertaken on a 25 scale Likert questionnaire based on the five dimensions of SERVQUAL. The questionnaire was distributed to the permanent and trainee doctors of the institute. Weightages were assigned to the dimensions of quality. Quality gap was ascertained between the expectations and perceptions of the doctors.

Observations: Significant gap of a score of between 1-2 was observed between the expectation and perception of service quality amongst the doctors. The satisfaction gap was observed to be maximum in the dimensions of Reliability and Responsiveness followed by Assurance. Tangibles and Empathy figure lower in the perception gap. There is a need to close this service gap through improvement in human resource management practices, training programmes & behavioural modifications. Other initiatives include infrastructure improvement and financial management.

KEYWORDS Service Quality, SERVQUAL

Introduction

Quality[1] has a concept initially originated post industrial revolution. Quality control were applied increasingly in the manufacturing sector. The concept of quality techniques gained substantially from the application of statistical control as a result of World War production methods. Quality management systems[2] are the outgrowth of work done by W Edwards Deming, a statistician, after World War II.

The concept of quality management systems was researched and analysed for applicability in the service sector. Unlike the manufacturing sector where the products were physical and could be assessed for quality through objective criterea, the service sector involved abstract outputs like customer satisfaction. As the interpretations evolved so did the concept of service brought in, the definitions by the authors. Customer became a focal point for the delivery of quality services. Customer expectations, customer requirements, customer value were some of the terms that crept in the dictionary of quality definitions.

Interpretation of service quality however continued to elude the workers. Service quality[3] is a perceptual, conditional and somewhat subjective attribute. Customer satisfaction is an output of the service industry and is not easily measurable. The actual manifestation of the state of satisfaction[4] will vary from person to person and service to service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction.

One of the early more comprehensive explanations for customer satisfaction for servce quality was given by N Kano[5] and others(1984). The two dimensional model proposed by N. Kano measures client happiness. The quality has two dimensions: "must-be quality" and "attractive quality". The former is near to the "fitness for use" and the latter is what the customer would love, but has not yet thought about.

Parasuraman, Zeithmal and Berry between 1985 and 1988 proposed "SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality"[6]. They advocated that customer satisfaction from a service could be assessed by using by using the gap between the customer's expectation of performance and their perceived experience of performance. SERVQUAL[7] was originally measured on 10 aspects of service quality. It measured the satisfaction "gap" between customer expectations and experience, which is objective and quantitative in nature. In 1991 Parasuraman, A presented revisions to the original SERVQUAL measure with five constructs;

- Tangibles. Physical facilities, equipment and appearance of personnel.
- Reliability. Ability to perform the promised service dependably and accurately.
- Responsiveness. Willingness to help customers and provide prompt service.
- Assurance (including competence, courtesy, credibility and security). Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Empathy (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customers.

Parsuraman et al[8] proposed that there exist quality gaps, which should be the focus of the service management in order to improve the service. The American Standards institute in 1992 and Curry in 1999 worked the model on service quality gaps. Luk and Layton in 2002[9] further revised it to explain seven major gaps in the service quality concept. The three important gaps, which are more associated with the external customers are customers' expectations versus management perceptions, discrepancy between customer expectations

and their perceptions of the service delivered and discrepancy between customer expectations and employees' perceptions since they have a direct relationship with customers. SERVQUAL has its detractors[10] and is considered overly complex, subjective and statistically unreliable.

Despite the criticisms the SERVQUAL became an accepted measure of customer satisfaction because of its objectivity and application in real time situations. Without any real alternate available the tool continues to be a back bone in assessing the service quality parameters.

A medical training institution undertakes training programmes for doctors in public health and health administration. The institution has permanent doctors posted on the staff. Trainees doctors come to the institution for short term training. The trainees doctors usually come for induction training and advanced training. The institution has an institute for the doctors with messing, recreational activities and hostel accommodation for trainees. Feedback received from the doctors varies greatly in the reactions on the quality of services offered by the institute & hostel. So where is the benchmark of quality for the services rendered? In order to provide the answers to the above question we have to look into the parameters and attributes of quality in the service sector. However a further question arises, can objective assessments be done for something, which is abstract? A study was proposed at the Doctors institute & hostel of a medical training institution to analyse the member perceptions on quality and seeks to identify the service gap & opportunities in order to improve the services in the institute & hostel.

Aim
Assessing service quality in the Doctor's institute & hostel of a medical institution to identify opportunities for improvement using SERVQUAL dimensions

Objectives
The objectives of the study were:-

- Assess the member perception on quality of service offered through a questionnaire.
- Identify and understand where service gaps exist within the organisation and between the organisation and its customers.
- Identify the reasons for the existence of those gaps.

Methodology
The study was an observational descriptive study. The study setting was the Doctors Institute & hostel affiliated to a medical training institution. All doctors of the medical training institution both permanent staff and trainee doctors were included as part of the study. Temporary doctors who stayed for less than 2 weeks were excluded from the study.

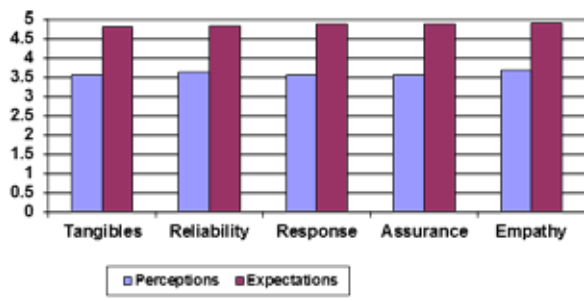
A SERVQUAL study was conducted using a 25-item SERVQUAL Likert scale questionnaire. The dimensions included all areas and service rendered by the hostel to the doctors. Perceptions were compared to expectations to achieve a SERVQUAL score for the five dimensions of service quality. These scores were then averaged to obtain an overall weighted SERVQUAL score for the institute.

Observations & Discussion
The Doctor's institute and hostel is affiliated to a medical training institution. The institute provides mess, dining, recreational and residential facilities to doctors of the institution. Since the institution runs short term training courses a large number of doctors come for attachment for a few weeks.

1. Determining Expectations of the Doctors
The expectations of the doctors were determined on a scale of 1 to 5, for all the areas & dimensions enumerated above. The scale represented the following: 1- Poor, 2- Below Average, 3- Satisfactory, 4- Good & 5-Excellent. A total of 32 responses were received.

The doctors rated the expectations of service quality on all the five dimensions. The doctors held high expectations of over 4.8 (near excellent) in all quality service dimensions. In Tangibles the doctors laid stress on the sitting room, upkeep of the dining hall and trainee hostel rooms. The group mean of 4.80 reflected the doctors expectations on physical facilities. Amongst other dimensions the doctors laid great stress on Reliability (4.84) and Responsiveness (4.89). The doctors expected that a positive response and timeliness of service are important factors. The doctors placed importance on the competence of the mess staff and availability of easy access for grievance redressal. These form a part of the dimensions of Assurance (4.88) and Empathy(4.93).

To further analyse the problem areas associated with Service quality authors have used weightages to assign relative importance to Service quality dimensions. Parsuraman et all[11] conducted two studies. A similar study was conducted by Bryslan and Curry[9]. The comparative figures of various studies are given in Table 1 below:-



In order to arrive at appropriate weightages in various dimensions applicable for doctors, feedback forms of doctors were analysed. The concerns and points raised by the doctors were tabulated in various categories of dimensions. Accordingly it was observed that the maximum service quality issues raised by the Doctors were on Reliability (33.33%). This was followed by Responsiveness(19.61%) and Assurance (17.65%). Tangibles (15.69%) and Empathy(13.73%) constituted the rest. This has been shown above as a comparative assessment with other studies in Table 1. In order to assess the overall customer expectations for service quality in the institute, relative weightages were assigned to the dimensions and the doctors expectations tabulated for the institute. An overall score of 4.86 (near excellent) was ascertained as the customer expectations on service quality.

2. Determining perceptions of the Doctors on Service quality
Questionnaires were distributed to permanent staff doctors and trainee doctors. Trainee doctors undergoing Sr trainee & Jr trainee course were included in the study. Of a total of 140 questionnaires distributed, 86 responses were received from the trainee doctors. Similarly of 50 questionnaires distributed for the permanent doctors, 32 responses were received.

(a) Permanent Staff Doctors
Service quality perceptions were interpreted and assessed for permanent doctors. The details of the perceptions in each individual area of the five dimensions of service quality alongwith the gap scores between perception and expectations was observed and found to be above one for all areas.

The largest gap score in the Tangibles dimensions was seen in the dining facility, where the perception of service quality was found to be the lowest at 3.38. The gap between perception and expectation was also highest at -1.46 for the dining facility. The main areas where a significant gap was observed were garden, & recreation room. In Reliability the meal service, table layout and coffee shop Reliability showed the greatest difference between expectations and perceptions. The gap scores were significant for food service, layout of table, meal service and coffee shop all featuring around a gap of -1.3. In Respon-

siveness the mess waiters and the staff response were the least appreciated by the permanent doctors with gap scores of around -1.5. Similarly in Assurance the permanent doctors felt that the competence of the cleaning staff was not as per expectations and was the least appreciated by the doctors with a gap score of -1.67. The members felt that the reception should have more information for the doctors (gap score -1.72) and there was a requirement for mess staff courtesies and addressing grievances (gap score -1.27). The perception of the Permanent doctors and expectations on the services offered by the Institute is graphically represented in Figure 1 below:-

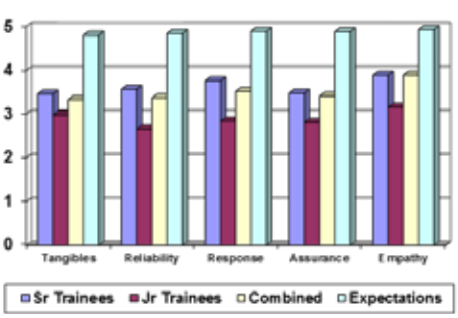
Insert Figure 1 here

In all dimensions the ratings given by the doctors were between 3 (average) to 4 (good). The average perception on the Tangibles dimensions was 3.55, Reliability dimension 3.63, Responsiveness 3.55, Assurance 3.56 and on Empathy aspect was 3.69. It was observed that the weighted average of service quality perceptions in respect of permanent doctors was 3.60, in comparison to the weighted expectation score of 4.86, resulting in a service gap of -1.26. This gap is significant, and requires to be addressed to close the service gaps.

(b) Trainee Doctors

Customer perceptions were also sought from trainee doctors. The trainee doctors who participated in the questionnaire feedback were Jr trainee and Sr trainee doctors. The results of the trainee doctors by and large followed the same trend as permanent doctors.

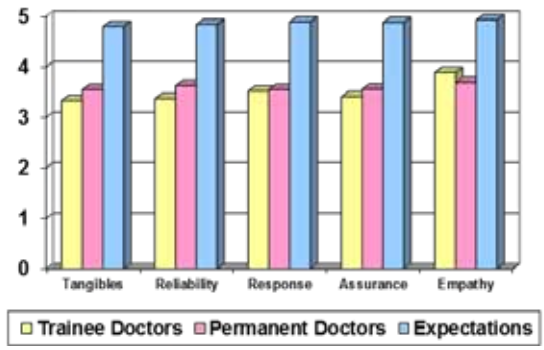
The 'Tangible' gap scores were the highest for the dining facility (-1.76), sitting room (-1.80), and recreation room (-1.59). Recreation room and dining facility was adjudged just average with a score of 3.00 by the course doctors. On the 'Reliability' dimension the cleaning staff service was judged just average but also had the maximum gap score of -1.71, which is highly significant. The trainee doctors also rated the meals, food prepn as just average with gap scores around -1.5. The 'Responsiveness' dimension scored marginally better on perceptions. The significant area identified by the doctors was mess waiters response and mess staff response with gap of -1.5. The competence of the cleaning staff was the only area rated below average by the doctors at 2.88. The gap between perception and expectation was highest here at -2.03 amongst all dimensions assessed. Relatedly the room bearer competence gap was -1.5. The 'Empathy' dimension scored close between 3.5 and 4.00. Figure 2 below diagrammatically shows the perception of service quality on the five dimensions scale.



The perceived satisfaction levels amongst the trainee doctors ranged from Tangibles (3.33) to Empathy (3.89). The gap between service quality perception and expectations were noted as –1.47 for Tangibles and – 1.04 for Empathy. The perceived satisfaction level in the more weighted categories of Reliability was 3.37 with a gap score of –1.47. The highest gap scores were found in the dimension of Responsiveness and 3.52 respectively with a gap score of -1.37. The weighted mean of the trainee doctors perceptions on service quality was 3.47. The overall gap scores between perception and expectation being -1.39. However as seen in Figure above there were significant variations amongst the trainee doctors. In all dimensions of service quality, Jr trainee doctors gave significantly lower marks than Sr trainee doctors. This was more evident in the dimensions of Reliability, Responsiveness of institute services.

3. Comparing Permanent staff doctors and trainee doctors

Figure 3 below shows a comparative chart between the perceptions of trainee doctors and permanent doctors. The differences in the perceptions of the Trainee doctors and Permanent doctors were not significant.



4. Identifying area of weakness

The observations above illustrate the requirement for improving the services in the institute. In several studies carried on Servqual methodology Durdeen[12] interpreted that where gap scores of -1 to -2 is noted, "the relationship is in need of fairly urgent remedial action." Further, he suggests, where a gap of-2.0 to -3.00 is noted, "overall perceived quality and satisfaction is negative. If the client is not captive, then the relationship is in jeopardy. Urgent action is needed to try and recover the situation."

Any significant observations require to be addressed though a suitable management programme to improve the quality of services. As is illustrated, in Tangible dimensions the areas which require emergent intervention and remedial actions are the dining facility, recreation room and the sitting room in that order. Garden also requires attention to come upto customer expectations. In the Reliability dimension attention of the management should immediately focus on improving the coffee shop, cleaning services and quality of food. Additionally the table layout and room waiters and bearers services call for attention. The Responsiveness of the Mess staff and the Mess waiters requires to be focussed on. In the Assurance dimension it is the competence of the cleaning staff which has been called into question in a major way. This requires immediate attention. Additionally focus should also be given on the mess waiters' competence. There is a requirement in Empathy dimensions to address grievance mechanism issues and improve the reception further to provide an interactive platform between the doctors and the mess.

Recommendations

The key recommendations to improve the Service quality dimensions in the Institute can be illustrated as infrastructural, financial and human. Seeing the service gap ratios existing in the SERVQUAL dimensions it can be interpreted that the Human element remains a key constraint for improving the services. The focus therefore should be on developing the human resources in the Institute. A comprehensive programme to improve the services in the Institute and closing the Service gaps will comprise the following key issues; Human Resource development, Long and short term planning, Financial management & Control mechanisms

Human Resource development. Human resources are a key element in improving the services in the institute. The development programme should include:-

Re-training of institute employees- Re-training element to fo-

cus on unlearning of bad practices developed over the years, focusing on behaviour modification, learning new technology and techniques & learning new practices.

Identifying Role models amongst employees- One or two role models will have to be identified from each categories from amongst old employees. A leadership role will have to provided to these employees.

Job descriptions – Job descriptions for all employees of the institute should be clearly spelt out. The day to day functioning should be known to them.

Accountability and Responsibility-With clear job descriptions the institute employees will be accountable and responsible for the services performed by them.

Regular updates- Supervisory staff to ensure that regular updates and learning is held to ensure implementation of new practices and to check any deviations.

Retrenchment-Employees with poor job fit and inability to learn and modify behaviour should be retrenched to make way for newer employees with fresh perspectives. Old employees without value addition to the mess services to be released.

Long & Short term planning. The institution should be looking in the long term, medium term and short term.

(a) Long term planning -A master development programme for long term planning incorporating infrastructural development will be helpful in offsetting short term ad hoc decision making.

(b) Medium term planning – should include the implementation of institute project planning eg engineering works, central air conditioning etc for the next 5 years.

(c) Short term planning for the financial year focus on purchase from contingencies for institute facilities etc. Such plans should be projected in the Institute general body meeting for the coming financial year.

Financial management. The institute should increase its assets for the future. A road map for the next 10 years taking in account the expected expenses should be in place. Investment targets should be assigned for each year to improve the finances of the institute and invest in long term securities. The financial management must take in account running expenditures, expenditures for development and finances for investment.

Control mechanisms.

(a) Supervisory staff working in the mess have to exercise control over the mess employees. The controls can best be exercised by right job fits and clear organizational authority. The supervisory staff at all levels should be able to solve 90% of the problems of doctors on their own initiatives. Only 10% problems should be reflected upwards. Adequate authority should be bestowed on the staff to take such decisions.

(b) Institute committee should ensure that channels of communication are open to all doctors. The communication to members to include institute events, development, initiatives etc. This will become easier with the Central information system when the items can be posted on the net.

(c) Institute members must unhesitatingly provide suggestions to the committee in the institute meetings or otherwise to improve mess services.

(d) Trainee doctors feed back form to be improved to include all dimensions of quality.

Conclusion

Service quality of the Institute and Hostel results revealed that the difference in the perception and expectation of the doctors was significant over all dimensions. While there were no significant variations between the trainee doctors and permanent doctors. In order to improve the quality service a comprehensive programme has to be taken up by the management. Since items like infrastructure are overt and easily identifiable as Tangibles they come to ready notice. However to bring a significant difference stress will have to be laid on the human element through unlearning and learning exercises and proper supervisory control and improve the dimensions of Reliability, Responsiveness, Assurance and Empathy.

Table 1 : Relative Weight of Service Dimensions

	Dimensions	Parasuraman Study 1[11]	Parasuraman Study 2[11]	Bryslan and Curry[9]	Feedback forms
(a)	Tangibles	11	14	19.8	15.69
(b)	Reliability	32	32	29.6	33.33
(c)	Responsiveness	22	21	19.9	19.61
(d)	Assurance	19	18	15.2	17.65
(e)	Empathy	16	15	15.7	13.73

References

1. http://en.wikipedia.org/wiki/Quality
2. http://en.wikipedia.org/wiki/Quality_Management_System
3. http://en.wikipedia.org/wiki/Customer_satisfaction
4. Hayes BE. Measuring Customer Satisfaction: Survey Design, Use, and Statistical Analysis Methods. Retrieved from internet.
5. http://en.wikipedia.org/wiki/Kano_model
6. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1986), "SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality", Report No. 86-108, Marketing Science Institute, Cambridge, MA.
7. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multi-item scale for measuring consumer perceptions of the service quality", Journal of Retailing, Vol. 64, No. 1, pp. 12-40.
8. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1993), "Research note: more on improving service quality measurement", Journal of Retailing, Vol. 69, No. 1, pp. 140-147.
9. SERVQUAL and Model of Service Quality Gaps: A Framework for Determining and Prioritizing Critical Factors in Delivering Quality Services Dr. Arash Shahin Department of Management, University of Isfahan, Iran
10. http://en.wikipedia.org/wiki/SERVQUAL
11. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1991), "Refinement and reassessment of the SERVQUAL scale|", Journal of Retailing, Vol. 67, pp. 420-450.
12. http://findarticles.com/Perspectives on User Satisfaction Surveys - Academic libraries Library Trends, Spring, 2001 by Rowena Cullen